


## Dear City Colleges Students,

I applaud the decision you have made to invest in your future by furthering your education at the City Colleges of Chicago.

You will be studying during a time of momentous change at City Colleges. We are reinventing our institution to ensure we offer outstanding and affordable educational programs to prepare you for the 21st century's most promising careers and to transfer to four-year institutions.

We are well aware of the sacrifices you are making to achieve your educational and professional dreams. In return for your hard work and dedication, our team of faculty and staff pledges to support you throughout your education. As you research your courses, be sure to take advantage of our advisors to plan out your path, and consider visiting the career and transfer centers to understand what you will need to accomplish at City Colleges to reach your long-term goals.

As a proud graduate of Olive-Harvey College, my experience as a City Colleges student changed my life forever and it can do the same for you. The support I received from talented and passionate instructors was crucial. By sharing their knowledge and filling me with hope, they inspired me to secure a strong educational foundation upon which to build a successful life and career. I know the same opportunity awaits you.

Again, congratulations on embarking on the next phase of your education. You should feel confident that you are in the right place to learn exactly what's needed to reach your goals - whether you are headed to further education or immediately into the workforce. There's never been a better time to be at City Colleges of Chicago.

Sincerely,
Cheryl L. Hyman
Chancellor

## TABLE OF CONTENTS

Mission Statement ..... 2
Board of Trustees/ ..... 3
Officers of the Community College District
Compliance Statement ..... 4
History of City Colleges of Chicago ..... 5
Map of Campuses ..... 6
Campus Information ..... $7-14$
Students Services ..... $15-22$
Programs of Study ..... $23-142$
Other Programs of Study ..... $143-160$
Course Descriptions ..... $161-306$
Index ..... $307-317$

## Mission STATEMENT

The City Colleges of Chicago delivers exceptional learning opportunities and educational services for diverse student populations in Chicago.

We enhance knowledge, understanding, skills, collaboration, community service and life-long learning by providing a broad range of quality, affordable courses, programs, and services to prepare students for success in a technologically advanced and increasingly interdependent global society.

We work proactively to eliminate barriers to employment and to address and overcome casual factors underlying socio-economic disparities and inequities of access and graduation in higher education.

CITY COLLEGES ${ }^{\circ}$

## Board of Trustees/Officers of the District

## COMmUNITY COLLEGE DISTRICT NO. 508 COOK COUNTY State of Illinois

## BOARD OF TRUSTEES

## Paula Wolff <br> Chair

## Ellen Alberding

Vice Chair

## Larry R. Rogers, Sr.

Secretary
Pastor Charles Jenkins
Trustee

## Marisela Lawson

Trustee

## Everett Rand

Trustee

## Susan Santiago

Trustee

## Student Member

From one campus of CCC each year

## CHANCELLOR

Cheryl L. Hyman
Chancellor

## OFFICERS OF THE DISTRICT

## Jose Aybar

President, Richard J. Daley

## Joyce Carson

Vice Chancellor, Business Enterprise

## Joseph DeLopez

Vice Chancellor, Safety \& Security

## Joyce Ester

President, Kennedy-King College

## Craig Follins

President, Olive-Harvey College
James T. Frankenbach
Chief Operating Officer

## John Gasiorowski

Inspector General

## Olga Gutierrez

Chief Advisory - Board of Trustees
Donald Laackman
President, Harold Washington College
Interim President, Wilbur Wright College
Willa Lang
Vice Chancellor, Workforce \& Economic Development
Craig Lynch
Chief of Staff \& Enterprise Services

## Rasmus Lynnerup

Vice Chancellor, Strategy, Research \& Organizational Effectiveness

Diane Minor
Vice Chancellor, Administrative Services \& Procurement

## Anthony Munroe

President, Malcolm X College
Laurent Pernot
Vice Chancellor, Institutional Advancement
Kojo Quartey
Provost \& Chief Academic Officer
James Reilly
General Counsel
Reagan Romali
President, Harry S Truman College
Melanie Shaker
Vice Chancellor, Finance, CFO
Arshele Stevens
Vice Chancellor, Information Technology, CIO
Stephanie Tomino
Vice Chancellor, Human Resources \& Staff Development

# The City Colleges of Chicago COMPLIANCE STATEMENT 

## Compliance Statement

## Non-discrimination Policies and Procedures

Equal Opportunity in Programs, Services and Activities Policy
The Board of Trustees of the City Colleges of Chicago (CCC) prohibits discrimination by any person with respect to hiring, terms and conditions of employment, continued employment, admissions or participation in Board programs, services and activities based upon race, national origin, ethnicity, gender, age, religion, citizenship, sexual orientation, marital status, disability or handicap, veteran status, membership or lawful participation in the activities of any organization, or the exercise of rights guaranteed by local, state or federal law situations.
"Discrimination" includes harassment or the creation of a hostile working or learning environment based upon race, national origin, ethnicity, gender, age, religion, citizenship, sexual orientation, marital status, disability or handicap, veteran status or the exercise of rights guaranteed by local, state or federal law. Prohibited harassment under this policy includes, but is not limited to, unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature, where the conduct is made a condition of employment or participation in a Board program, service, or activity. Prohibited harassment also includes where submission to or rejection of such conduct is the basis for an employment or educational decision, or where such conduct interferes with the individual's work or academic performance or creates an intimidating, hostile, or offensive working or learning environment.

Pursuant to its policy and applicable local, state and federal laws, the Board of Trustees has adopted specific policies that prohibit Sexual Harassment, violations of Title IX of the Education Amendments of 1972 [link: http://www.dol.gov/oasam/regs/statutes/titleix.htm] (concerning gender discrimination in education), and disability discrimination.

## Discrimination and Harassment Complaint Procedures

Students who believe that they have suffered from a violation of CCC's equal opportunity policies with respect to non-discrimination or sexual harassment may file a complaint with the District's EEO Officer who is charged with investigating complaints of this nature. The EEO Officer or designee addresses all equal opportunity concerns of CCC employees, applicants for employment, students or applicants for admission or any other person including complaints of discrimination, harassment or hostile work environment, retaliation, intimidation and requests for accommodation due to religion or disability. With respect to students or other persons, complaints of discrimination may concern admissions, participation, application of academic policies, educational or learning environment, or any other term or of participation in Board programs, services and activities. Students who file such complaints are protected from retaliation.

Students may contact the EEO Officer by direct number at (312) 553-2639, through the Office of Human Resources at (312) 5532900, via e-mail to eeofficer@ccc.edu or by mail to the City Colleges of Chicago, Attention: EEO Officer, 226 West Jackson Blvd., 12th Floor, Chicago, Illinois 60606.

The complete text of the District's non-discrimination policies are contained in the Student Policy Manual. Copies of the City Colleges of Chicago Equal Opportunity Complaint Procedures and the Discrimination Complaint Form are available in the District Office, Office of Human Resources at the above address, and in the Personnel Office at each of the seven City Colleges of Chicago locations. CCC's non-discrimination policies and complaint procedures and form are also available on the CCC website at http://ccc.edu/studentpolicy.

## Prohibition Against Retaliation and Intimidation

Retaliation against and/or intimidation of employees, students, program participants, witnesses or any other persons who make complaints or who cooperate in EEO investigations is strictly prohibited.
Anyone who feels he or she is the victim of retaliation or intimidation should contact the EEO Officer to report such incidents immediately.

## Smoke Free Workplace

City Colleges of Chicago is a smoke-free environment.

## Prohibition On Unlawful Drug and Alcohol Use

The City Colleges of Chicago prohibits the use or distribution of alcoholic beverages in or on college property, or in conjunction with any college activities, except as authorized by state law and specifically approved by the college president or the chancellor. The unlawful manufacture, distribution, dispensation, use or possession of controlled substances (as defined in the Controlled Substances Act, 21 U.S.C. 812, section 202, schedules I through V) in or on college property is strictly prohibited.
The Board of Trustees of the Community College District No. 508, is governed by the Illinois Public Community College Act, (110 ILCX 805/1-1, et seq.) and the Rules for the Management and Government of the City Colleges of Chicago, with any amendments enacted or thereafter.
A student or employee who is found to be in violation of the abovestated prohibitions will be subject to disciplinary action, up to and including expulsion and/or dismissal from employment.

## Privacy Of Educational Records

Pursuant to the Family Educational Rights and Privacy Act, the Board of Trustees has adopted a policy with respect to students' rights of access to their educational records, and the disclosure of educational records to third parties. The policy is published in the Student Policy Manual [link: http://ccc.edu/studentpolicy].

## Disclaimer

Information contained in this catalog is for informational purposes only and is subject to change by the Board of Trustees of Community College District No. 508 (City Colleges of Chicago).
The catalog contains information regarding City Colleges of Chicago, which is current as the time of publication. It is not intended to be a complete description of all City Colleges of Chicago policies and procedures, nor is it intended to be a contract. This catalog and its provisions are subject to change at any time without advance notice.

## City Colleges of Chicago



## History of the City Colleges of Chicago

Community college education has existed in Chicago since 1911, when Crane Technical High School opened its doors to $\mathbf{2 8}$ adults seeking higher education.

This led to the establishment of Crane Junior College (now Malcolm X College). From this modest beginning, the City Colleges of Chicago (CCC) has grown to a system of seven (7) individually accredited colleges and seven (7) satellite centers.

Clarence Darrow, the renowned Chicago lawyer, argued in the defense of the City Colleges of Chicago when, during the Depression, its existence was threatened by a financially strapped Board of Education. Darrow stated that higher education in the form of the then "junior college, had to endure" because the City Colleges of Chicago were "for the people."

As a result of state legislative action in the late 1960's, the City Colleges of Chicago's status as a junior college changed to that of a comprehensive community college.

The City Colleges of Chicago, Community College District 508 , today reaches more than 200,000 people annually, through the 14 facilities of the City College system, programs conducted in local community centers, public and parochial high schools, social service centers, and branches of the Chicago Public Library. Students can also take internet based courses via television through CCC's Public Broadcast Station, WYCC-TV Channel 20, and the Center for Distance Learning.

The district offers a variety of Associate Degree Programs that prepare students for transfer with junior level standing to four year institutions. A comprehensive offering of certificate programs also prepares students for immediate entry into their chosen careers.

City Colleges of Chicago provides specialized training for many workforce development programs, and tuition-free Adult Education courses including English as a Second Language (ESL), Adult Basic Education (ABE), and General Education Equivalency (GED), as well as Continuing Education (CE) programs that add value to the quality of life.

City Colleges of Chicago continues to serve its community, offering highly qualified faculty, a sustained commitment to affordable tuition and excellence in higher education for all citizens of Chicago. Please visit the City Colleges of Chicago at http://www.ccc.edu for additional information.

## Map of City Colleges of Chicago



DISTRICT OFFICE
226 W. Jackson Boulevard


## Satellite Locations

- Lake View Learning Center 3310 North Clark Street Chicago, IL 60657
- West Side Learning Center 4624 W. Madison Street Chicago, IL 60644
- Arturo Velasques Institute 2800 S. Western Chicago, IL 60608


## - Dawson Technical Institute

3901 South State Street Chicago, IL 60609

## - South Chicago Learning Center 3055 E. 92 Street

Chicago, IL 60617

Richard J. Daley Kennedy-King Malcolm X Olive-Harvey Harry S Truman
Harold Washington Wilbur Wright

## COLLEGE PROGRAMS

## Richard J. Daley College

# RICHARD J. DALEY COLLEGE 



## About Richard J. Daley College

Richard J. Daley College was first established as the Southwest Side College in 1960 on the Bogan High School campus. The program enrolled mostly part-time evening students and evidenced rapid growth. In 1970, the Southwest College opened its doors in a set of pre-fabricated buildings and trailers designed to accommodate 1,000 students.

The current college site was purchased by the City of Chicago and opened in 1981. It was named after Richard J. Daley, the former Mayor of the City of Chicago. The College has expanded its sites to meet the increased needs of the population in the service area. In 1997, it opened a technical training center, the West Side Technical Institute on Western Avenue and $28^{\text {th }}$ Street, which was renamed the Arturo Velasquez Institute in 2009.

## Daley College Locations

The Daley College campus is located on the Southwest Side on South Pulaski Road. The Arturo Velasquez Institute in located at 2800 S. Western Avenue. The College also offers courses at the Cantu Center, the Orozco School, the Perez School, the Reyes Center, and Piotrowski Park.

## Mission Statement

Richard J. Daley College provides a broad based educational experience that reflects a 100 year commitment to the Chicago community for fostering lifelong learning. The college's hallmark is creating an academic environment encouraging the development of values, technological understanding, critical thinking, and cultural awareness that helps students to think clearly, communicate effectively and analyze carefully everyday issues associated with local, national and global life.

## Regional Accreditation

Richard J. Daley College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1413, (800) 621-7440.

## Specialized Accreditation

Child Development program and the Child Development Lab at Daley College are accredited by the National Association for the Education of Young Children (NAEYC).

Nursing (RN) program is accredited by the National League for Nursing Accrediting Commission (NLNAC).

## Licensure

Basic Nursing Assistant (BNA) program is licensed by the Illinois Department of Public Health (IDPH).

Certified Nursing Assistant (CNA) program is licensed by the Illinois Department of Public Health (IDPH).

The Nursing (RN) program is licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).
Child Development Lab Center is licensed by the Illinois Department of Children and Family Services (IDCFS).

The Real Estate program is licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).

## Certification

None

## Workforce Development Program Overview

Students completing Daley College's nationally accredited and state-licensed Child Development program can obtain state licensure for the Illinois Director Credential Level I in addition to the A.A.S. degree. Through its Manufacturing Technology and Logistics Institute, Daley College offers programs in precision metalworking, industrial automation, industrial maintenance, electrical construction technology, and transportation and logistics. Additionally, Daley College offers programs in A+ Certified Computer Technician, Criminal Justice, Computer Numerical Control, Nursing, and Pharmacy Technician.

## Kennedy-King COLLEGE



## About Kennedy-King College

Kennedy-King College, formerly known as Woodrow Wilson Junior College, was established in the fall of 1935 at 6800 South Stewart Street. In 1966, the College's status was changed from that of a junior college to that of a comprehensive community college. In July 1969, the name was officially changed from Woodrow Wilson Junior College to Kennedy-King College in honor of Robert F. Kennedy and Martin Luther King, Jr.

Situated on 30 acres, the new Kennedy-King College campus facility was completed in 2007. Kennedy-King College's new multibuilding educational complex includes state-of-the-art classrooms, a natatorium with balcony seating, a day care center, a 300-seat theatre, banquet and catering accommodations, WYCC Television studio, WKKC FM radio station, a restaurant and bakery, and a world-class chef's kitchen and baking facility.

## Kennedy-King College Locations

The Kennedy-King College campus is located at the corner of Halsted and $63{ }^{\text {rd }}$ Streets. Courses are also offered at Dawson Technical Institute at 3901 South State Street, Washburne Culinary Institute at 740 West $63{ }^{\text {rd }}$ Street, the Parrot Cage Restaurant at the South Shore Cultural Center, the French Pastry School at 226 West Jackson, Sikia Restaurant at 740 W. 63 ${ }^{\text {rd }}$ Street, and the Child Development Lab School at 710 West $65^{\text {th }}$ Street.

## Mission Statement

Kennedy-King College is dedicated to providing high quality, comprehensive, accessible education and training opportunities that respond to changing community needs and that enable individuals to reach their full potential and successfully complete in the global marketplace.

## Regional Accreditation

Kennedy-King College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1413, (800) 621-7440.

## Specialized Accreditation

Child Development program is accredited by the National Association for the Education of Young Children (NAEYC).

Dental Hygiene Assistant program at Kennedy-King College is accredited by the Commission on Dental Accreditation (CODA).

## Licensure

The Addiction Studies (Mental Health) program is licensed to provide advanced and preparatory alcohol and other drug abuse counselor training by the Illinois Alcohol and Other Drug Abuse Professional Certification Association, Inc. (IAODAPCA).
Basic Nursing Assistant (BNA) program is licensed by the Illinois Department of Public Health (IDPH).

Child Development Lab Center is licensed by the Illinois Department of Children and Family Services (IDCFS).

## Certification

Automotive Technology program is certified by the National Automotive Technicians Education Foundation, Inc. (NATEF). The program's students are certified by the Automotive Service Excellence (ASE).

## Workforce Development Program Overview

Practical, hands-on skills are the focus of Kennedy-King College's A.A.S. degree programs in Air Conditioning and Refrigeration, Addictions Studies, Automotive Technology, Accounting, Child Development, Dental Hygiene, and Media and Visual Media Communications. Kennedy-King College's Washburne Culinary Institute offers both certificates and the A.A.S. degree in Culinary Arts and Baking and Pastry Arts. Its Dawson Technical Institute features Certificate programs in Construction Technology (Cement Masonry, Carpentry, and Painting), Overhead Electrical Line Worker, Plumbing, and Fire Protection.

## COLLEGE PROGRAMS <br> malcolm X College

MALCOLM X COLLEGE



## About Malcolm X College

The first of the City Colleges of Chicago, Malcolm X College was founded as Crane Junior College in 1911. Initially, the College was housed in and served the graduates of Crane High School. In 1933 the College was closed due to the Great Depression. As a consequence of the advocacy of Hull House founder, Jane Addams, and noted attorney, Clarence Darrow, the College reopened the following year. At the request of students and the community, in 1969, the College was renamed in honor of civil rights advocate and orator, Malcolm X, also known as El-Hajj Malik El-Shabazz.
Malcolm $X$ College is a major provider of training for allied health care professionals in Chicago, offering the largest selection of Health Science Degrees and Certificate programs in Cook County. Adjacent to one of the nation's largest medical centers, the College offers students a unique opportunity for clinical affiliations.

## Malcolm X College Locations

Malcolm X College is located on the West Side on 20 acres on West Van Buren Street. The four-story building houses a modern Academic Support Center; a 430-seat, acoustically perfect Bruce K. Hayden Performing Arts Center; the newly renovated Carter G. Woodson Library; and a large physical education center with a gymnasium, swimming pool, dance studios, and weight training center.

## Mission Statement

Malcolm X College, a learning and assessment-centered community college, empowers students of diverse backgrounds and abilities to achieve academic, career, and personal success.

## Regional Accreditation

Malcolm X College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1413, (800) 621-7440.

## Specialized Accreditation

Child Development program and the Child Development Lab Center are accredited by the National Association for the Education of Young Children (NAEYC).
Mortuary Science program is accredited by the American Board of Funeral Service Education (ABFSE).

Pharmacy Technology is accredited by the American Society of Health-System Pharmacists ${ }^{\circledR}$ (ASHP).

Physician Assistant program is accredited on probation by the Accreditation Review Commission for Physician Assistant (ARCPA) Education.

Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRC/ERT).

Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care (COARC).

Surgical Technology is accredited by the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

## Licensure

The Basic Nursing Assistant (BNA) program, Emergency Medical Technician (EMT) program, and Paramedic Technology program are licensed by the Illinois Department of Public Health (IDPH).

Child Development Lab Center is licensed by the Illinois Department of Children and Family Services (IDCFS).

Nursing (LPN/RN) program is licensed by Illinois Department of Financial and Professional Regulation (IDFPR).

## Certification

Nephrology/Renal Technology program is certified by the Board of Nephrology Examiners for Nursing and Technology (BONENT).

## Workforce Development Program Overview

Malcolm X College offers programs in Emergency Medical Technology, Mortuary Science, Nephrology, Nursing, Paramedic, Pharmacy Technology, Phlebotomy, Physician Assistant, Radiography, Respiratory Care, Sterile Processing Technology, and Surgical Technology.

## Olive-Harvey College



## About Olive-Harvey College

Olive-Harvey College began its service to residents of the South Side in the late 1950's with the opening of the Fenger and Southeast campuses of the City Colleges of Chicago. These two campuses were consolidated and renamed Olive-Harvey College in 1970. The main campus of Olive-Harvey College was completed with the opening of a four-level building at $101^{\text {st }}$ Street and Woodlawn Avenue in 1981. The building houses special instructional areas, new state-of-the-art laboratories and computer labs, and a Learning Resource Center, which contains the College's largest open computer laboratory. Physical education facilities include an indoor swimming pool and gymnasium, weight and exercise room, and a newly constructed baseball field, all located on a landscaped campus.
The College is named in honor of Private First Class Milton Lee Olive, III (1946-1965), who was posthumously awarded the Congressional Medal of Honor by President Lyndon Johnson and Specialist Four Carmel Bernon Harvey, Jr. (1946-1967) who was awarded the Congressional Medal of Honor by President Richard Nixon. Both Olive and Harvey exhibited exceptional valor during combat in Vietnam.

## Olive-Harvey College Locations

The Olive-Harvey College campus is on 67 acres at 10001 South Woodlawn Avenue. Courses are also offered at the South Chicago Learning Center, which is located at 3055 East $92^{\text {nd }}$ Street.

## Mission Statement

Olive-Harvey College provides high quality educational programs and support services and is dedicated to student learning and academic and career success through instructional excellence and responsiveness to student, business, and community needs.

## Regional Accreditation

Olive-Harvey College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1413, (800) 621-7440.

## Specialized Accreditation

Child Development program and the Child Development Lab Center are accredited by the National Association for the Education of Young Children (NAEYC).

Middle College Alternative High School is accredited by the North Central Association, Commission on Accreditation and School Improvement (NCA/CASI).

## Licensure

Basic Nursing Assistant (BNA) program is licensed by the Illinois Department of Public Health (IDPH).
The Real Estate program is licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).

Child Development Lab Center is licensed by the Illinois
Department of Children and Family Services (IDCFS).

## Certification

The Commercial Truck Driver License (CDL) training program is certified by the Professional Truck Driver Institute.

## Training Partnership

Public Chauffeur Training Institute is a partnership training program with the City of Chicago, Department of Business Affairs and Consumer Protection.

## Workforce Development Program Overview

Olive-Harvey College offers the Supply Chain Management program, which prepares students for employment in warehouse and distribution. (The Supply Chain Management program is one of the Greater Chicago Workforce Board's targeted Critical Skills Shortage career clusters.) Olive-Harvey College also offers certificate programs in Basic Nursing Assistant, Emergency Medical Technician (EMT), Computerized Medical Billing and Coding, Pharmacy Technician, and Truck Driver Training (CDL). Olive-Harvey College's Public Chauffeur Training Institute is the largest job-generating program in the City, training all prospective taxi and limousine drivers for the city's licensing exams.

## COLLEGE PROGRAMS <br> harry S Truman College

## Harry S Truman College



## About Harry S Truman College

In 2011, Truman College celebrates its 55th anniversary. The college began in 1956 as an unnamed "evening college" at Amundsen High School on the northwest side of Chicago. In 1961, it moved to its own building, a former elementary school, and was named Mayfair College after the school and the surrounding neighborhood. In 1976, the college moved to its current Uptown location and was going to be called Northeast Community College until Frank Sullivan, Mayor Richard J. Daley's press secretary, suggested naming it after the $33^{\text {rd }}$ president, whose 1947 Commission on Higher Education greatly expanded the concept of the community college. Local residents, afraid the college would attract outsiders and offer them nothing, painted a mural on the wall of the 'L' station facing the college. It depicts an array of faces from all races and includes the words: "This college must be for everyone." Those words guide the college to this day.

In the fall of 2010, the College completed construction on the new Larry McKeon Administrative Building. It includes a new Student Services Center, which is energy efficient, and a new nine-level Parking Deck, which will accommodate 1,100 parking spaces.

## Harry S Truman College Locations

The Truman College campus is located at 1145 West Wilson Avenue. Courses and programs are also offered at the Truman Technical Center, the Lakeview Learning Center, and the Truman Middle College Alternative High School.

## Mission Statement

Truman College is dedicated to delivering high quality, innovative, affordable, and accessible educational opportunities and services that prepare students for a rapidly changing and diverse global economy.

## Regional Accreditation

Truman College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 606041413, (800) 621-7440.

## Specialized Accreditation

Child Development program at Truman College is accredited by the National Association for the Education of Young Children (NAEYC).

Middle College Alternative High School is accredited by the North Central Association, Commission on Accreditation and School Improvement (NCA/CASI).

The Nursing (LPN/RN) program is accredited by the National League for Nursing Accrediting Commission (NLNAC).

## Licensure

Basic Nursing Assistant (BNA) program is licensed by the Illinois Department of Public Health (IDPH).

Child Development Lab Center is licensed by the Illinois Department of Children and Family Services (IDCFS).

Cosmetology program and the Nursing (RN) program are licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).

The Real Estate program is licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).

## Certification

Automotive technology program is certified by the National Automotive Technicians Education Foundation, Inc. (NATEF). The program's students are certified by the Automotive Service Excellence (ASE).

## Workforce Development Program Overview

Founded in 1964, Truman College's Nursing program is the oldest associate-degree granting nursing program in the State of Illinois. Over the last eight years, the nursing program's NCLEX (National Council for Licensing Examination) pass rates have exceeded state and national NCLEX exam score averages. About 14,000 students annually enroll in Truman College's Adult Education program, the largest in Illinois. Truman College has the only A.A.S. Biotechnology program in the State. Other career programs include Automotive Technology, Child Development, Cosmetology, and Networking Systems and Technologies.

# COLLEGE PROGRAMS harold Washington College 

## Harold WashingTon College



About Harold Washington College
Harold Washington College was first established as Loop College in fall 1962. It was located on East Lake on the $11^{\text {th }}$ floor of the former University of Chicago/DePaul Center and opened its doors to 250 students. In January 1983, the College obtained its own building at the Wabash and Lake site. Constructed with local funds, the new building served as the home of the City Colleges of Chicago's District Office, the Chicago City-Wide College, and Loop College for many years.
Loop College was renamed Harold Washington College in 1987 to honor Chicago's first African-American mayor, Harold Washington. On April 19, 1988, the College was officially dedicated in memory of Mayor Harold Washington. Mayor Washington was a City Colleges of Chicago alumnus and was a strong advocate of the importance of community. That advocacy was illustrated in his commencement address at Loop College on May 10, 1984: "It is from the diversity of city life and the variety of cultures and backgrounds it offers, that we find the common threads that bring us together to form a college community." A major renovation of the building in 2003-2005 provided eleven floors of space for state-of-the art classrooms, community rooms, and science and computer labs to accommodate Harold Washington College's enrollment of over 19,000 students.

## Harold Washington College Locations

Harold Washington College is located in the heart of Chicago's downtown loop between State and Wabash at 30 E . Lake Street. It is accessible by bus and all CTA trains.

## Mission Statement

Harold Washington College is a learning-centered urban institution of higher education offering accessible and affordable opportunities for academic advancement, career development, and personal enrichment. The College is committed to upholding high institutional and academic standards and to understanding and improving student learning.

## Regional Accreditation

Harold Washington College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South Lasalle Street, Suite 7-500, Chicago, IL 60604-1413 (800) 621-7440

## Specialized Accreditation

The Accounting, Business Administration, Hospitality Management, and Management and Marketing programs are accredited by the Association of Collegiate Business Schools and Programs (ACBSP).
The Child Development programs are accredited by the National Association for the Education of Young Children (NAEYC).

## Licensure

Food Service Sanitation is licensed by the llinois, Department of Public Health.

Professional DevelopmentforSocial Workers is licensed bythe lllinois Department of Financial and Professional Regulations (IDFPR).

## Certification

Addiction Studies (Mental Health) program is certified by the Illinois Alcohol and Other Drug Abuse Professional Certification Association (IAODAPCA).

## Workforce Development Program Overview

Harold Washington College offers the Advance Certificate and A.A.S. degree program in Hospitality for careers in management of foods and beverages, front office/rooms division, business front office, housekeeping, and employee training.

## CAMPUS PROGRAMS <br> Wilbur Wright College

## WILBUR WRIGHT COLLEGE



## About Wilbur Wright College

Wilbur Wright College was established in 1934 at 3400 North Austin and moved to its present location at North Narragansett in 1993. Wright's 22-acre, park-like campus features five architecturally significant, interconnected buildings designed by Bertrand Goldberg, an award winning architect whose work includes the Marina Towers in downtown Chicago.

The College is named for Wilbur Wright who "along with his brother Orville, launched into both history books and legend with the first ever manned powered flight... in 1903. In 1965 he was selected for the Hall of Fame for Great Americans" (http://wright.nasa.gov/ wilbur.htm).

## Wilbur Wright College Locations

Located on Chicago's Northwest Side, Wilbur Wright College is located at 4300 Narragansett Avenue at the corner of Montrose Avenue and Narragansett Street. Since 1995, Wright College's Humboldt Park Vocational Education Center, which is located at 1645 North California Street, has offered job training and educational programs for the Humboldt Park and West Town communities.

## Mission Statement

Wilbur Wright College is learning-centered multi-campus institution of higher education offering students of diverse backgrounds, talents, and abilities a quality education leading to baccalaureate transfer, career advancement, and personal development.

## Regional Accreditation

Wilbur Wright College is accredited by The Higher Learning Commission and is a member of the North Central Association, which is located at 230 South LaSalle Street, Suite 7-500, Chicago, Illinois 60604-1413, (800) 621-7440, www.ncahlc.org.

## Specialized Accreditation

Accounting, Computer Information Systems, and Management/ Marketing are accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

Computerized Numerical Control program at Humboldt Park is Accredited by the National Institute for Metalworking Skills, Inc. (NIMS).

Occupational Therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE ${ }^{\circledR}$ ).

Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRC/ERT).

## Licensure

Basic Nursing Assistant (BNA) program is licensed by the Illinois Department of Public Health (IDPH).
Nursing (LPN/RN) program is licensed by the Illinois Department of Financial and Professional Regulation (IDFPR).

## Certification

Paralegal program is approved by the American Bar Association (ABA).

## Workforce Development Program Overview

Wilbur Wright College offers the A.A.S. degree in such highdemand jobs as Architectural Drafting, Criminal Justice, Emergency Management, Environmental Technology, Occupational Therapy, Paralegal, and Radiography. In addition to Adult Education and Continuing Education programs, Wilbur Wright College's Humboldt Park Vocational Education Center offers Certificate programs in Computerized Numerical Control, Industrial Maintenance, Information Processing, Basic Nursing Assistant, and Practical Nursing.


## 2012 / 2013 ACADEmic Calendar

| City Colleges of Chicago - College Credit Academic Calendar 2012 / $2013{ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| FALL 2012 TERM | REGULAR 16 WEEK SESSION | 12 WEEK SESSION² | 8 WEEK SESSION ${ }^{2}$ |
| Online registration ${ }^{3,4}$ | ---------- April 9, 2012 (Mon.) ---------- |  |  |
| Open registration | Aug 6 (Mon.) | Sept 3 (Mon.) | Oct 1 (Mon.) |
| First day of class | Aug 20 (Mon.) | Sept 17 (Mon.) | Oct 15 (Mon.) |
| Labor Day Holiday | ----------- September 3, 2012 (Mon.) ---------- |  |  |
| Mid-term | Oct 17 (Wed.) | Oct 31 (Wed.) | Nov 14 (Wed.) |
| Last day for student initiated withdrawals | Nov 12 (Mon.) | Nov 19 (Mon.) | Nov 28 (Wed.) |
| Thanksgiving Holiday (Thursday \& Friday) | November 22-23, 2012 (Thur.-Fri.)--------- |  |  |
| Last day of fall classes | ---------- December 8, 2012 (Sat.)---------- |  |  |
| Fall 2012 session ends | ----------- December 15, 2012 (Sat.)---------- |  |  |


| SPRING 2013 TERM | REGULAR 16 WEEK SESSION | 12 WEEK SESSION² | 8 WEEK SESSION² |
| :---: | :---: | :---: | :---: |
| Online registration ${ }^{3,4}$ | Nov 5, 2012 - Jan 14, 2013 | Nov 5, 2012 - Feb 11, 2013 | Nov 5, 2012 - Mar 11, 2013 |
| On-campus registration ${ }^{3,4}$ | Nov 19, 2012 - Jan 14, 2013 | Nov 19, 2012 - Feb 11, 2013 | Nov 19, 2012 - Mar 11, 2013 |
| First day of class | Jan 14, 2013 (Mon) | Feb 11, 2013 (Mon) | Mar 11, 2013 (Mon) |
| Martin Luther King Holiday | ---------- Jan 21, 2013 (Mon)---------- |  |  |
| President's Day Holiday | ---------- Feb 18, 2013 (Mon)---------- |  |  |
| Complete financial aid application for next academic year ${ }^{5}$ | $\qquad$ NO LATER THAN Mar 1, 2013 (Fri)---------- |  |  |
| Mid-term | Mar 13, 2013 (Wed) | Mar 27, 2013 (Wed) | Apr 10, 2013 (Wed) |
| Spring Break | ---------- Mar 25-31, 2013 (Mon-Sun)---------- |  |  |
| Last day for student initiated withdrawals | Apr 8, 2013 (Mon) | Apr 15, 2013 (Mon) | Apr 24, 2013 (Wed) |
| Spring 2013 session ends | May 11, 2013 |  |  |


| SUMMER 2013 TERM | REGULAR SESSION |
| :---: | :---: |
| Online registration ${ }^{3,4}$ | Apr 8, 2013 - Jun 5, 2013 |
| On-campus registration ${ }^{3,4}$ | Apr 22, 2013 - Jun 5, 2013 |
| First day of class | ---------- Jun 5, 2013 (Wed) ---------- |
| Independence Day Holiday | ---------- Jul 4, 2013 (Thu)---------- |
| Mid-term | Jul 3, 2013 (Wed) |
| Last day for student initiated withdrawal | Jul 17, 2013 (Wed) |
| Summer 2013 session ends | Jul 27, 2013 (Sat) |


| FALL 2013 TERM | REGULAR 16 WEEK SESSION | 12 WEEK SESSION² | 8 WEEK SESSION² |
| :---: | :---: | :---: | :---: |
| Online registration ${ }^{3,4}$ | Apr 8, 2013 - Aug 26, 2013 | Apr 8, 2013 - Sep 23, 2013 | Apr 8, 2013 - Oct 21, 2013 |
| On-campus registration ${ }^{3,4}$ | Apr 22, 2013 - Aug 26, 2013 | Apr 22, 2013 - Sep 23, 2013 | Apr 22, 2013 - Oct 21, 2013 |
| First day of class | Aug 26, 2013 (Mon) | Sep 23, 2013 (Mon) | Oct 21, 2013 (Mon) |
| Labor Day Holiday | ---------- Sep 2, 2013 (Mon) ---------- |  |  |
| Mid-term | Oct 23, 2013 (Wed) | Nov 6, 2013 (Wed) | Nov 20, 2013 (Wed) |
| Last day for student initiated withdrawals | Nov 18, 2013 (Mon) | Nov 25, 2013 (Mon) | Dec 2, 2013 (Mon) |
| Thanksgiving Holiday (Thursday \& Friday) | ---------- Nov 28-29, 2013(Thu-Fri)---------- |  |  |
| Last day of fall classes | Dec 14, 2013 (Sat) |  |  |

## 2014 ACADEMIC CALENDAR

| City Colleges of Chicago - College Credit Academic Calendar $2014{ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| SPRING 2014 TERM | REGULAR 16 WEEK SESSION | 12 WEEK SESSION2 | 8 WEEK SESSION2 |
| Online registration ${ }^{3,4}$ | Nov 4, 2013 - Jan 13, 2014 | Nov 4, 2013 - Feb 10, 2014 | Nov 4, 2013 - Mar 10, 2014 |
| On-campus registration ${ }^{3.4}$ | Nov 18, 2013 - Jan 13, 2014 | Nov 18, 2013 - Feb 10, 2014 | Nov 18, 2013 - Mar 10, 2014 |
| First day of class | Jan 13, 2014 (Mon) | Feb 10, 2014 (Mon) | Mar 10, 2014 (Mon) |
| Martin Luther King Holiday | ---------- Jan 20, 2014 (Mon)---------- |  |  |
| President's Day Holiday | ----------- Feb 17, 2014 (Mon)---------- |  |  |
| Complete financial aid application for next academic year ${ }^{5}$ | NO LATER THAN Feb 28, 2014 (Fri) |  |  |
| Mid-term | Mar 12, 2014 (Wed) | Mar 26, 2014 (Wed) | Apr 9, 2014 (Wed) |
| Spring Break | ---------- Apr 14-20, 2014 (Mon-Sun)---------- |  |  |
| Last day for student initiated withdrawals | Apr 7, 2014 (Mon) | Apr 21, 2014 (Mon) | Apr 23, 2014 (Wed) |
| Spring 2013 session ends | May 10, 2014 |  |  |


| SUMMER 2014 TERM | REGULAR SESSION |
| :---: | :---: |
| Online registration ${ }^{3,4}$ | ----------- Apr 7, 2014 - Jun 4, 2014 ----------- |
| On-campus registration ${ }^{3,4}$ | ---------- Apr 21, 2014 - Jun 4, 2014 ----------- |
| First day of class | ---------- Jun 4, 2014 (Wed) ---------- |
| Independence Day Holiday | ---------- Jul 4, 2014 (Fri)---------- |
| Mid-term | Jul 2, 2014 (Thu) |
| Last day for student initiated withdrawal | Jul 16, 2014 (Wed) |
| Summer 2013 session ends | Jul 26, 2014 (Sat) |


| FALL 2014 TERM | REGULAR 16 WEEK SESSION | 12 WEEK SESSION2 | 8 WEEK SESSION2 |
| :---: | :---: | :---: | :---: |
| Online registration ${ }^{3,4}$ | Apr 7, 2014 - Aug 25, 2014 | Apr 7, 2014 - Sep 22, 2014 | Apr 7, 2014 - Oct 20, 2014 |
| On-campus registration ${ }^{3,4}$ | Apr 21, 2014 - Aug 25, 2014 | Apr 21, 2014 - Sep 22, 2014 | Apr 21, 2014 - Oct 20, 2014 |
| First day of class | Aug 25, 2014 (Mon) | Sept 22, 2014 (Mon) | Oct 20, 2014 (Mon) |
| Labor Day Holiday | ----------- Sep1, 2014 (Mon) ---------- |  |  |
| Mid-term | Oct 22, 2014 (Wed) | Nov 5, 2014 (Wed) | Nov 19, 2014 (Wed) |
| Last day for student initiated withdrawals | Nov 17, 2014 (Mon) | Nov 24, 2014 (Mon) | Dec 1, 2014 (Mon) |
| Thanksgiving Holiday (Thursday \& Friday) | ----------- Nov 27-28, 2014 (Thu-Fri)---------- |  |  |
| Last day of fall classes | Dec 13, 2014 (Sat) |  |  |

NOTES:

1. College Credit Academic Calendar is subject to change. Please contact the college for details.
2. Sessions and course offerings: not all courses are offered each session, nor are all sessions offered at each college. Please contact the college for details.
3. New Students: all new students are strongly encouraged to complete the registration process as early as possible, preferably prior to end of Summer for fall entering students. The registration process for new students includes placement testing, college orientation, financial aid processing, career advising and academic program selection, and initial course selection. Please see your College Advisor to begin.
4. Continuing Students: : continuing students are strongly encouraged to complete the registration process as early as possible to ensure the best course and schedule availability. Please see your College Advisor prior to registering to discuss your career and education goals, academic program, graduation requirements and your progress toward graduation, course selection, and, if applicable, transfer.
5. Financial aid: students are strongly urged to apply for financial aid (www.fafsa.gov) as early as possible (preferably by March 1st) for the academic year beginning in the fall. Please contact the financial aid office for details.

## Student Services

The Student Services team at your college provides a broad range of services to support the achievement of students' academic, career, and life goals. They can also refer students to external support agencies when needed. More information may be found at www.ccc.edu/studentservices. Some of the many services offered by your Student Services team are listed below, and are subject to change.

## ACADEMIC SUPPORT SERVICES

## First Year Experience

The First Year Experience (FYE) is a year-long program designed specifically to promote the academic and personal success of first year students. FYE includes the College Success Seminar (CSS), an introduction to learning resources, education and career planning and goal setting, academic advising, learning communities, and a series of engaging programs. Visit www.ccc.edu/FYE for more information.

## Tutoring

Tutoring Centers offer one-on-one tutoring, study groups, and computerized tutorial sessions. Students can attend workshops to learn how to improve study skills, time management, test taking, or note taking. More information may be found at www.ccc.edu/tutoring.

## Academic Advising

Each of our colleges provides a team of professional Academic Advisors who assist students in exploring their career interests, setting clear educational and career goals, selecting an academic program (major), creating an academic plan, and enrolling in the right courses in the right sequence to successfully meet all program completion requirements for graduation. Academic Advisors also guide students in accessing various services at the college or in the surrounding community to support their academic success. Visit www.ccc.edu/advising for more information.

## CTA U-Pass

Through a partnership with the Chicago Transit Authority (CTA), CCC offers all full-time credit students a CTA U-Pass, which enables unlimited rides on any CTA bus or train for the duration of an academic term. Students MUST maintain full-time enrollment status in order to retain their U-Pass privileges. A new U-Pass is issued each term. Contact the Office of the Dean of Student Services for more information.

## Credit for Prior Learning or Life Experiences

College credit may be granted for specialized courses, general education courses, or elective courses through the evaluation and/or assessment of appropriate prior learning or life experiences. CCC may grant credit for college-level knowledge or skills acquired outside the classroom through Credit by Examination or Credit by Evaluation. Grades
will not be awarded and credit earned will not factor into Grade Point Average (GPA). For more information, see your Academic Advisor or refer to the Student Policy Manual: www.ccc.edu/studentpolicymanual.

## Students with Disabilities

Disability Access Centers (DAC) are dedicated to meeting the needs of students with disabilities and assisting them in their academic pursuits.

No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of DAC services, programs or activities, or be subjected to discrimination. CCC's goal is to promote equality of opportunity and full participation in our services, programs and activities. We endeavor to provide reasonable modifications and/or accommodations to qualified individuals in accordance with the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, the ADA Amendment Act of 2008, and all pertinent federal, state and local anti-discrimination laws.

Studentswhoneeddisabilityaccommodationsormodifications are responsible for requesting such accommodation or modification, and must provide all requisite documentation to verify eligibility to the Disability Access Centers. DACs will make every effort to accommodate qualified students with disabilities as required by law. Visit www.ccc.edu/DAC for more information.

## Disability Access Centers

Daley College: 773-838-7578
Harold Washington College: 312-553-3050
Kennedy-King College: 773-602-5278
Malcolm X College: 312-850-7128
Olive-Harvey College: 773-291-6345
Truman College: 773-907-4725
Wright College: 773-481-8016

## Wellness Centers

The Wellness Center at each of our colleges provides personal and practical assistance to support and enrich your personal life so that you can focus on your academic success. All services are free and confidential. Students can receive personal counseling and referrals to community resources for life's basic needs, such as supportive housing, employment support, low-cost health care, child care, and food pantries. Visit www.ccc.edu/wellness for more information.

## FINANCIAL AID

The purpose of CCC's financial aid program is to provide financial assistance to students to help them achieve their educational goals. The program is committed to the philosophy that eligible students should not be denied access to higher education because of a lack of financial resources.

CCC offers a variety of programs to assist students in meeting the costs of their education. Students are encouraged to visit www.ccc.edu/financialaid or the Financial Aid Office to obtain information on the eligibility requirements for financial aid programs.

## Apply for Financial Assistance

Students are required to complete the Free Application for Federal Student Aid (FAFSA) online by visiting www.fafsa. gov. Filing online is fast and convenient. As you apply, most errors will be revealed and highlighted so you can make corrections. If you complete the FAFSA online, we will generally receive your information in 3-5 business days.

## Federal Pell Grant

The FAFSA is the application for all need-based grant programs. CCC offers grants which are not subject to repayment, such as Federal Pell Grants. The Pell Grant program is funded and administered by the U.S. Department of Education. To qualify for a Pell Grant, students must demonstrate significant financial need. The U.S. Department of Education determines students' eligibility for the Pell Grant based on the information provided on their FAFSA. Note: all students are limited to a maximum of the equivalent of 12 full-time semesters of Pell Grant funding.

Federal Supplemental Educational Opportunity Grant (FSEOG) The FSEOG is a federally funded, campus-based program. Students with exceptional financial need are given priority for these limited funds. FSEOG is awarded to eligible students on a first-come, first-served basis.

## State of Illinois Monetary Award Program (MAP) Grant

MAP grants are awarded to Illinois residents attending instate colleges. Illinois residents apply for the MAP grant by submitting a FAFSA. MAP grants are restricted to tuition and mandatory fees. Students are encouraged to apply early to increase eligibility to receive these funds.

## Student Employment Program

The Federal Work Study (FWS) program is a federally funded, campus-based program offering employment to students demonstrating financial need. FWS employees are paid at least the current federal minimum wage and receive a paycheck every two weeks. FWS is awarded to eligible students on a first-come, first-served basis.

## Federal Loan Program

CCC participates in the William D. Ford Federal Direct Student Loan (Direct Loan) Program.

Direct Loans are low-interest loans for students and parents to help finance the cost of education at the post-secondary level. Under the Direct Loan Program, students work with the Financial Aid Office to obtain Federal Direct Loans or PLUS Loans (for parents) from the U.S. Department of Education rather than from private banks and credit unions.

If a financial need is demonstrated, the government will pay the interest on a student's subsidized loan. Students who do not demonstrate financial need will be responsible for interest from the day the unsubsidized loan is disbursed. Both subsidized and unsubsidized loans are eligible for deferred payment while the student is enrolled at least halftime.

Students are strongly encouraged to consult with a Financial Aid Advisor. The Financial Aid Office staff will help coordinate grants and scholarships available to students based on academic excellence and other criteria to ensure that students are maximizing their financial assistance.

## Scholarships

A wide variety of scholarships are available by visiting www. ccc.edu/scholarships.

## ACADEMIC POLICIES

## Grade Designations

Credit and skills coursework - grades are issued to degreeseeking students to apply towards graduation and are recorded on students' permanent academic record, or transcript, and are used to calculate students' grade point average (GPA). Grades awarded are: $\mathrm{A}=$ excellent; $\mathrm{B}=$ good; C = average; D = minimum passing; and F = failure.

Foundational Studies and Continuing Education coursework - grades awarded are: $S=$ satisfactory and $F=$ failure.

Adult Education coursework - grades awarded are: P = completed all course and level requirements and can take next course at next level; $\mathrm{R}=$ completed all course requirements, however more work is need at this level; and $F=$ failed to meet the requirements of the course.

## Graduation Requirements

To be eligible to graduate from any credit degree or certificate program, students must earn a grade of "C" or better in all courses used to satisfy core curriculum and/or general education requirements and hold a minimum Graduation Grade Point Average of 2.0 or higher. Elective courses with a "D" final grade may count towards graduation. Students who graduated prior to August 1, 2013 must hold either a minimum Graduation GPA or Cumulative GPA of 2.0 or higher.

## Graduation Campus

The Graduation Campus is the college where the majority of a student's Graduation Credit Hours were earned and the academic program is offered. If not, then the Graduation Campus is the college that offers the program where the most Graduation Credit Hours were earned. In case of a tie between two colleges, the student can choose his/her Graduation Campus.

## Student Services

## Human Diversity Requirement

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion (Refer to page 32).

## Residency Requirement

All students must complete at least 21 credit hours of residency at the City Colleges of Chicago. The student's degree will be awarded by the college where the student has earned the majority of credits providing the college offers that degree and program.

## World Language Requirement for the Associate in Arts Degree

 EFFECTIVE FALL 2009: Newly enrolled students, or returning students who have not been enrolled for six consecutive semesters, seeking an Associate in Arts degree must complete with a grade of "C" or better at least two courses of the same world language or demonstrate competency. Students should meet with an Academic Advisor to determine course selection or how to demonstrate competency in a world language offered at CCC.http://www.ccc.edu/departments/Documents/INDEX NUMBER 1.10A.pdf

## INTERNATIONAL STUDENTS

International students are warmly welcomed to continue their studies at the City Colleges of Chicago. Whether you decide to seek a Liberal Arts Education or pursue a career program to acquire work skills, the City Colleges of Chicago can meet your educational needs.

In addition to completing an application to City Colleges of Chicago and providing required transcripts or test scores, International students must also submit the necessary documents for the U.S. Citizenship \& Immigration Services (USCIS).

Please note: the application review and processing take time, so it is essential that students apply early. Please allow a minimum of 30 days for review/evaluation.

International (F-1 holders) must identify themselves early in the application process for proper advisement of the Immigration \& Naturalization Services transfer procedures. To complete the transfer procedure an International student must provide:

- \$100.00 non-refundable charge for I-20 application processing for regular college-level enrollments. (Upon registration, $\$ 50.00$ will be credited toward tuition.)
- TOEFL SCORE 61 (internet-based), 173 (computerbased), 500 (paper based). (If you are already in the United States, you can take a placement exam at the City Colleges in place of the TOEFL.)
- A transfer permission letter from the last school attended in the U.S. (If applicable)
- An Affidavit of Support (Form l-134) from sponsor, guardian or parent
- Bank and tax documents proving availability of funds.
- Passport and recent photo
- l-94 departure record
- Student Visa
- Proof of Medical Insurance (required each semester)
- Provide a copy of I-20 that Homeland Security stamped and approved, if applicable

For more information contact the Office of Student Affairs - International Students: 312-553-3441 orvisit ourwebsite at: http://ccc.edu/isa/index.shtml.

## PLACEMENT EXAMINATIONS

CCC utilizes the computerized COMPASS exams (reading, writing, math \& e-Write), paper \& pencil ASSET, and ACT scores for appropriate placement into courses to support students' academic success. All students new to CCC are required to take the complete battery of placement exams, unless they show proof of having successfully completed appropriate college level courses, or opt to use ACT scores that are less than two years old. Visit http://www.ccc.edu/placement for more information.

## STUDENT ACTIVITIES

There are a wide variety of opportunities for students to become engaged in college life at CCC, including honor societies such as Phi Theta Kappa, Psi Beta, and Sigma Kappa Delta.

## Student Clubs, Groups \& Organizations

Students are encouraged to seek out student organizations to enhance their college experience.
Visit http://www.ccc.edu/studentorganizations for more information.

## Student Government Association

Student Government Association (SGA) is the main vehicle for student input regarding CCC policies and college activities that impact students. The purpose of the SGA members (officers, senators, and appointed representatives) is to represent themselves and the CCC student body in the most positive and professional manner possible, recognizing that they are always working in the best interest of the CCC community.

Student government officers and members are elected each Spring and remain in office for one year (May 31 May 30), provided they are enrolled in a minimum of six (6) credit hours each semester and maintain a 2.3 cumulative

## Student Services

grade point average. SGA officers and members may serve consecutive years, provided they meet the eligibility criteria.

To best represent all CCC student governments, each SGA president should attend each regularly scheduled and special SGA meeting called by the CCC District SGA Council (DSGAC) chairperson. All SGA officers and members are welcome to attend DSGAC meetings; however, only the President or their proxies are eligible to vote.
Visit http://www.ccc.edu/SGA for more information.

## TEXTBOOK RENTAL

CCC has an agreement with Follett and Beck's bookstores to offer rental textbook programs to assist students with offsetting the costs of textbooks. Financial Aid book vouchers may be used toward the down payment required for book rentals. For more information, students should contact the Office of Student Services.

## VETERANS SERVICES

CCC has a long history of providing education to Veterans who are seeking to gain new skills and transform skills learned in the military for use in the civilian world. CCC is committed to making the college educational experience rewarding for our Veterans. More information may be found at http://www.ccc.edu/veterans.

If you are a Veteran and/or dependent of a Veteran, you may be eligible for grants and/or scholarships, such as the Illinois Veteran Grant, Illinois National Guard Grant, Missing in Action/Prison of War Scholarship and many other educational benefits. Consult with the Financial Aid staff at your campus.

## RESIDENCY

Enrollment of students is classified, for the purpose of determining fees and tuition, as in-district, out-of-district, out-of-state, or international students. Preferred documents which can be used for residency verification include:

- Valid driver's license or State-issued ID card
- Voter's registration card
- Utility bill: gas, light, or home phone (cell phone bills are not accepted)
- Current apartment lease (dependent students may present an apartment lease in parents' name)
- Mexican Consular ID card


## In-District Students

To qualify as in-district, students must reside within the City of Chicago for at least 30 days immediately prior to the date established by the District for classes to begin for the term.

## Out-of-District Students

Students who reside in Illinois but outside Chicago for at least 30 days prior to the date established by the District for classes to begin, are considered out-of-district students. Students will be required to furnish legal evidence proving residency.

Out-of-district students seeking a degree or certificate offered by CCC, but not their own district community college, should refer to the Tuition Chargeback policy below and at: www.ccc.edu/studentpolicymanual.

## Out-of-State Students

Students who legally reside outside of Illinois are considered out-of-state students.

## FEES AND CHARGES

1. Miscellaneous fees: Fees that are assessed to students are determined by each college.
2. Required fees: The following fees associated with course registration are required. They include, but are not limited to:

- Registration fees
- Activity fees
- Partial payment fees
- CDL licensing fees
- Lab fees

3. Non-refundable fees: The following fees associated with course registration are non-refundable. They include, but are not limited to:

- Registration fees
- Partial payment fees
- Activity fees (activity fees may be refunded if courses are dropped before the term begins)


## Financial Obligation

Students are expected to pay when enrolling. Acceptable payment includes cash, check, credit/debit cards, or enrollment in NBS e-Cashier or a Financial Aid Deferment. Failure to make appropriate payment arrangements within two business days of enrollment will result in the initiation of drop processing of all enrolled classes. Whenever possible, students who are dropped for non-payment will be notified by email.

## Transcript Charges

Students may order official transcripts online.
Visit http://www.ccc.edu/transcripts for more information and associated charges.

## Other Charges

- \$100.00 non-refundable charge for I-20 application processing for regular college-level enrollments
- $\$ 40.00$ per check returned for non-sufficient funds.
- $\$ 5.00$ for student I.D. card replacement.


## Student Services

## Tuition and Fee Charges

Tuition and fees are subject to change. Please refer to www.ccc.edu/tuition for current tuition and fee information.

## Tuition Chargeback

Chicago residents who wish to enroll in a degree program not available at CCC may apply for tuition assistance to attend another public community college in Illinois where the desired certificate or degree program is offered. Please visit http://www.ccc.edu/chargeback for more information and to apply. Applications must be received by CCC at least 30 days prior to the beginning date of the semester or term of enrollment at the college the student plans to attend.

Non-Chicago residents who plan to enroll in a college program at CCC which is not available at a community college in their district, should apply for tuition assistance at their local community college. If no community college exists in their district, residents should go to their high school district to apply.

## Tuition Waivers

Senior citizens ( 65 years of age or older) may be eligible for a tuition waiver for the first six regular college credits during open registration, if seats are available. Proof of senior citizen status is a birth certificate, driver's license, or RTA Special Users' Pass, and must be presented at time of registration. Credit hours beyond six will be paid by the enrolled senior citizen student at the regular tuition rate.

## Public Aid Recipients

Public Aid recipients [categories beginning with (0)] may apply for tuition waivers only after they apply for Financial Aid and have been determined as Financial Aid ineligible. Public Aid recipients may be eligible for a tuition waiver of up to six credit hours. All hours above six will be paid by the enrolled public aid recipient at the regular tuition rate per semester/term.

## WITHDRAWALS AND REFUNDS

## Refunds for Dropped Classes Within First Seven Days

Students may drop courses during the first seven days from the start date of class for regular sessions (or equitable time period for special sessions) without incurring a penalty. If processed during the first seven days from the start of class in a regular session during the fall and spring terms, drop refunds for student-initiated withdrawals (WTH) are available at one hundred percent of tuition and applicable fees only. 100\% REFUND WITHIN FIRST 7 DAYS OF A REGULAR SESSION.

THERE WILL BE NO REFUNDS ALLOWED AFTER THE FIRST SEVEN DAYS OF THE START OF CLASSES FOR A REGULAR SESSION.

Failure to withdraw may result in mandatory payment of tuition/fees and/or a failing grade.

## Refunds - No-Show Withdrawal (NSW)

Students who do not attend the first two class sessions will be withdrawn from the class by the instructor and issued a No-Show Withdrawals (NSW). No refunds of tuition and/ or fees will be issued for classes with (NSW). Students will be held accountable for the payment of tuition and fees of NSW courses. Federal financial aid cannot be used to cover the cost of NSW classes.

Students who do not attend the first class session of a course which meets only once per week will be considered a No-Show (NSW).

## Refunds - Center for Distance Learning Online with Video Component Courses (TW)

Center for Distance Learning (CDL) courses combine Internet-based instruction with video and are accessed on WYCC-TV Channel 20. Refunds will not be issued for lack of access to WYCC Channel 20.

NOTE: Some areas of Chicago and surrounding suburbs DO NOT have access to WYCC Channel 20.

Please refer to http://www.ccc.edu/student/Tuition.asp for the most current refund policies prior to enrolling in CDL/ WYCC courses.

## PROCRAMS of STUDY <br> © <br> © <br> (ㄷ) <br> (A) <br> (ㄸ)

むヨLSคTD גG SNVTd/WFEDOUd

## Programs of Study

Program/Plans by CLUSTER a.a.s. (associate appled science) ac. (advanced certificate) b.c. (Basic certificate)

| BACCALAUREATE/TRANSFER \& GENERAL STUDIES |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0210 | Associate in Arts | AA | 62 | x | x | x | x | $x$ | x | x |
| 0211 | Associate in Science | AS | 64 | x | x | x | x | x | x | x |
| 0100 | Associate in Engineering Science | AES | 64 | x | x |  |  |  | x | x |
| 0217 | Associate in Fine Arts-Art (Education) | AFA | 60 |  | x |  |  |  |  |  |
| 0216 | Associate in Fine Arts-Art (Studio) | AFA | 61 |  | $x$ |  |  |  | x |  |
| 0208 | Associate in Fine Arts - Music Education | AFA | 63 |  | x |  |  |  |  |  |
| 0205 | Associate in Fine Arts - Music Performance | AFA | 68 |  | x |  |  |  |  | x |
| 0212 | Associate of Arts in Teaching - Secondary Math | AAT | 62 |  |  |  |  |  | x |  |
| 0203 | Associate in General Studies | AGS | 60 | x | x | x | x | x | x | x |
| AGRICULTURE, FOOD \& NATURAL RESOURCES |  |  |  |  |  |  |  |  |  |  |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0160 | Environmental Technology | AAS | 68 |  |  |  |  |  |  | x |
| 0161 | Environmental Technology | BC | 18 |  |  |  |  |  |  | x |
| 0241 | Horticulture | AAS | 63 |  | x |  |  |  |  |  |
| 0320 | Horticulture | BC | 18 |  | x |  |  |  |  |  |
| 0828 | Horticulture (Sustainable Urban) | AC | 31 | x |  |  |  |  |  |  |
| ARCHITECTURE \& CONSTRUCTION |  |  |  |  |  |  |  |  |  |  |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0117 | Air Conditioning \& Refrigeration | AAS | 62 |  |  | $x$ |  |  |  |  |
| 0118 | Air Conditioning \& Refrigeration | AC | 36 |  |  | x |  |  |  |  |
| 0153 | Air Conditioning - Commercial Refrigeration | BC | 17 |  |  | $x$ |  |  |  |  |
| 0177 | Air Conditioning - Domestic Refrigeration | BC | 17 |  |  | x |  |  |  |  |
| 0178 | Air Conditioning - Heating | BC | 18 |  |  | x |  |  |  |  |
| 0132 | Architectural CAD | BC | 9 |  |  |  |  |  |  | x |
| 0122 | Architectural Drafting | AAS | 63 |  | x |  |  |  |  | x |
| 0124 | Architectural Drafting | BC | 16 |  | x |  |  |  |  | x |
| 0760 | Bricklayer | BC | 16 |  |  | x |  |  |  |  |
| 0159 | Building Energy Technologies | BC | 21 |  |  |  |  |  |  | x |
| 0144 | CAD Technology | AAS | 60 |  |  |  |  |  | x |  |
| 0138 | CAD Technology | AC | 34 |  |  |  |  |  | x |  |
| 0139 | CAD Technology | BC | 16 |  |  |  |  |  | x |  |
| 0750 | Communications Technology | AAS | 65 | x |  |  |  |  |  |  |
| 0759 | Concrete Masonry | BC | 16 |  |  | $x$ |  |  |  |  |
| 0775 | Construction Carpentry | BC | 16 |  |  | x |  |  |  |  |
| 0375 | Construction Management | AAS | 65 |  |  | x |  |  |  |  |
| 0752 | Electrical Construction Technology | AAS | 65 | x |  |  |  |  |  |  |
| 0766 | Electrical Line Worker (Overhead) | AC | 30 |  |  | x |  |  |  |  |
| 0749 | Gas Utility Worker | AC | 50 |  |  | x |  |  |  |  |
| 0163 | Mechanical Technology CAD | BC | 9 |  |  |  |  |  |  | x |
| 0753 | Plumbing \& Fire Protection | BC | 16 |  |  | x |  |  |  |  |
| 0758 | Welder (Combination) | BC | 16 |  |  | x |  |  |  |  |
| 0827 | Welding (Industrial Technology) | BC | 13 | x |  |  |  |  |  |  |

## Programs of Study

 a.as. (Associate applied science) A.c. (advanced certificate) b.c. (Basic certificate) PROGRAM/PLANS BY CLUSTER| ARTS, A/V TECHNOLOGY \& COMMUNICATIONS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0350 | Digital Multimedia Design | AAS | 67 |  | x |  |  |  |  |  |
| 0351 | Digital Multimedia Design | AC | 36 |  | x |  |  |  |  |  |
| 0352 | Digital Multimedia - Video \& Sound | BC | 18 |  | x |  |  |  |  |  |
| 0353 | Digital Multimedia - 3D Graphics | BC | 21 |  | x |  |  |  |  |  |
| 0354 | Digital Multimedia - Interactive Media | BC | 18 |  | x |  |  |  |  |  |
| 0083 | Media Communications | AAS | 63 |  |  | x |  |  |  |  |
| 0093 | Music Business | BC | 21 |  | x |  |  |  |  |  |
| 0094 | Music Technology | BC | 26 |  | x |  |  |  |  |  |
| 0165 | Visual Media Communications | AAS | 61 |  |  | x |  |  |  |  |
| 0166 | Visual Media Communications | AC | 30 |  |  | x |  |  |  |  |
| 0192 | Vis Med Com-Page Layout | BC | 15 |  |  | x |  |  |  |  |
| 0193 | Vis Med Com-Web Page Design | BC | 15 |  |  | x |  |  |  |  |


| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0001 | Accounting | AAS | 60 | x | x | x |  | x | x | x |
| 0002 | Accounting | BC | 17 | x | x | x |  | x | x | x |
| 0003 | Accounting | AC | 30 | x | x | x |  | x | x | x |
| 0042 | Business Admin - General Business | AC | 30 | x |  |  |  |  | x |  |
| 0303 | Library Technical Assistant | AAS | 60 |  |  |  |  |  |  | x |
| 0330 | Library Technical Assistant | BC | 12 |  |  |  |  |  |  | x |
| 0021 | Management/Marketing | AAS | 62 | x | x | x |  | x | x | x |
| 0022 | Management/Marketing | AC | 35 | x | x | x |  | x | x | x |
| 0023 | Management/Marketing | BC | 18 | x | x | x |  | x | x | x |
| 0833 | Real Estate Broker Pre-Licensure | BC | 7 | x |  |  |  |  |  |  |

EDUCATION \& TRAINING

| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0276 | Child Development - Bilingual Teacher Aide | AAS | 61 |  | X |  |  |  |  |  |
| 0280 | Child Development - Elementary Education | AAS | 61 |  | X |  |  |  |  |  |
| 0284 | Child Development - Elementary Education | AC | 34 |  | X |  |  |  |  |  |
| 0278 | Child Development - Pre-School Education | AAS | 62 | x | X | X | X | X | X |  |
| 0282 | Child Development - Pre-School Education | AC | 32 | x | X | x | x | x | $x$ |  |
| 0277 | Child Development - Pre-School Education | BC | 10 |  |  |  |  | X | X |  |
| 0286 | Child Development - Pre-School Educ/Infant Toddler | AC | 32 |  | x |  |  |  |  |  |
| 0275 | Child Development - School Age Child Care | AAS | 61 |  | x |  |  |  |  |  |
| 0831 | Family Child Care Business | BC | 1.5 |  |  |  |  |  | x |  |
| 0055 | Teaching, Leadership \& Support Professionals | AAS | 63 |  | X |  |  |  |  |  |
| 0057 | Teaching, Leadership \& Support Professionals | AC | 35 |  | X |  |  |  |  |  |

## Programs of Study

Program/Plans by Cluster a.as. (associate appled science) ac. (advanced certificate) b.c. (basic certificate)

| HEALTH SCIENCE |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0215 | Biotechnology | AAS | 67 |  |  |  |  |  | x |  |
| 0868 | Dental Assistant | BC | 4 |  |  |  |  |  |  | x |
| 0222 | Dental Hygiene | AAS | 72 |  |  | x |  |  |  |  |
| 0830 | EKG Technician | BC | 2 |  |  |  |  |  | x |  |
| 0867 | Emergency Medical Technician (EMT) | BC | 9 |  |  |  |  |  |  | x |
| 0252 | Emergency Medical Technician - Basic | BC | 8 |  | x |  | x |  |  | x |
| 0265 | EMT II Paramedic | AC | 34 |  |  |  | x |  |  |  |
| 0263 | EMT II Paramedic | AAS | 61 |  |  |  | x |  |  |  |
| 0359 | Medical Assistant (Basic) | AC | 33 |  |  |  |  |  |  | x |
| 0386 | Medical Assisting | BC | 26 |  |  |  |  |  | x |  |
| 0862 | Medical Billing/Coding (Computerized) | BC | 15 | x | x | x | x |  | x |  |
| 0257 | Mortuary Science | AAS | 62 |  |  |  | $x$ |  |  |  |
| 0247 | Nephrology/Renal Technology | AAS | 65 |  |  |  | x |  |  |  |
| 0239 | Nursing | AAS | 69 | $x$ |  |  | x |  | x |  |
| 0801 | Nursing Assistant (Basic) | BC | 10 | x |  | x | x | x | x | x |
| 0240 | Nursing - Practical | AC | 49 |  |  |  |  |  |  | x |
| 0381 | Nursing (RN Completion) | AAS | 70 |  |  |  |  |  |  | x |
| 0221 | Obstetrics \& Gynecologic Technology | BC | 11 |  |  |  | x |  |  |  |
| 0259 | Occupational Therapy Assistant (CER) | AAS | 75 |  |  |  |  |  |  | x |
| 0382 | Ophthalmic Technology | AAS | 65 |  |  |  |  | x |  |  |
| 0896 | Personal Trainer Preparation | BC | 1.5 |  |  |  | x |  |  |  |
| 0802 | Pharmacy Technician | BC | 8.5 | X | x | X |  | x | x | x |
| 0254 | Pharmacy Technology | AC | 33 |  |  |  | x |  |  |  |
| 0219 | Phlebotomy | BC | 11 |  |  |  | x |  |  |  |
| 0866 | Phlebotomy (Accelerated) | BC | 15 |  |  |  |  |  |  | x |
| 0803 | Phlebotomy Technician | BC | 12 | x |  | x |  | x | x |  |
| 0262 | Physician Assistant | AAS | 78 |  |  |  | x |  |  |  |
| 0246 | Radiography | AAS | 75 |  |  |  | x |  |  | x |
| 0248 | Renal Dialysis Technology | AC | 36 |  |  |  | x |  |  |  |
| 0234 | Respiratory Care | AAS | 71 |  |  |  | x |  |  |  |
| 0269 | Sterile Processing Clinical | BC | 11 |  |  |  | x |  |  |  |
| 0267 | Surgical Technology | AAS | 61 |  |  |  | x |  |  |  |

HOSPITALITY \& CULINARY

| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0365 | Baking \& Pastry Arts | AAS | 62 |  |  | X |  |  |  |  |
| 0366 | Baking \& Pastry Arts | AC | 38 |  |  | X |  |  |  |  |
| 0367 | Baking \& Pastry Arts | BC | 15 |  |  | X |  |  |  |  |
| 0392 | Cake Decorating \& Baking (L'Art Du Gateau) | BC | 16 |  |  | X |  |  |  |  |
| 0362 | Culinary Arts | AAS | 63 |  |  | x |  |  |  |  |
| 0363 | Culinary Arts | AC | 41 |  |  | x |  |  |  |  |
| 0364 | Culinary Arts | BC | 13 |  |  | X |  |  |  |  |
| 0253 | Food Sanitation | BC | 2 |  | x | X | x |  |  |  |
| 0891 | Food Service Sanitation - Recertification | BC | 1 |  |  |  | x |  |  |  |
| 0061 | Hospitality | AAS | 63 |  | X |  |  |  |  |  |
| 0062 | Hospitality Front Office | AC | 32 |  | X |  |  |  |  |  |
| 0746 | Pastry \& Baking (L'Art de la Patisserie) | BC | 24 |  |  | X |  |  |  |  |

## PROGRAMS OF STUDY

af.s. (Associate applied science) a.c. (Advanced certificate) b.c. (Basic certificate) PROGRAM/PLANS BY CLUSTER

| HUMAN SERVICES |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0344 | Addictions Studies | AAS | 64 |  | $x$ | x |  |  |  |  |
| 0343 | Addictions Studies | AC | 37 |  | x | x |  |  |  |  |
| 0345 | Addictions Studies | BC | 18 |  | x | x |  |  |  | x |
| 0349 | Cosmetology | AC | 36 |  |  |  |  |  | x |  |
| 0716 | Community Health Care Worker* | AAS | 63 |  |  |  | x |  |  |  |
| 0717 | Community Health Care Worker* | AC | 47 |  |  |  | x |  |  |  |
| 0718 | Community Health Care Worker* | BC | 19 |  |  |  | x |  |  |  |
| 0339 | Gerontology Aide | BC | 12 |  |  |  |  |  |  | x |
| 0340 | Gerontology Specialist | AAS | 61 |  |  |  |  |  |  | x |
| 0895 | Homemaker/Home Health Aide | BC | 4.5 |  |  |  | x |  |  |  |
| 0391 | Human Development \& Family Studies | AAS | 60 |  |  |  |  | x |  |  |
| 0341 | Nursing Home Administration | BC | 12 |  |  |  |  |  |  | $x$ |
| 0258 | Psychiatric Rehabilitation | BC | 15 |  |  |  |  |  |  | x |
| 0313 | Social Work - Generalist | AAS | 66 |  | $x$ | x |  |  |  |  |
| 0317 | Social Work - Generalist | AC | 37 |  | x |  |  |  |  |  |
| 0370 | Social Work-Youth Work | AAS | 63 |  | x |  |  |  |  |  |
| 0371 | Social Work-Youth Work | AC | 31 |  | x |  |  |  |  |  |
| 0372 | Social Work-Youth Work | BC | 15 |  | x |  |  |  |  |  |
| INFORMATION TECHNOLOGY |  |  |  |  |  |  |  |  |  |  |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0806 | A+ Certified Computer Technician | BC | 6 | x |  |  |  |  |  | x |
| 0011 | Computer Information Systems | AAS | 60 | x | $x$ | x | x | x | x | x |
| 0012 | Computer Information Systems | BC | 12 | x | x | x | x | x | x | x |
| 0013 | Computer Information Systems | AC | 30 | x | x | x | x | x | x | x |
| 0852 | Computer Literacy | BC | 7 |  |  |  |  |  |  | x |
| 0297 | Computer Security \& Forensic Investigation | BC | 20 |  |  |  |  |  |  | x |
| 0264 | Environmental GIS (Basic) (Geographic Information Systems) | BC | 21 |  | x |  |  |  |  |  |
| 0719 | Information Processing | BC | 26 |  |  |  |  |  |  | x |
| 0141 | Networking Systems \& Technologies | AAS | 60 | x |  |  |  |  | x |  |
| 0142 | Networking Systems \& Technologies | AC | 30 | x |  |  |  |  | x |  |
| 0143 | Networking Systems \& Technologies | BC | 18 | x |  |  |  |  | x |  |
| 0811 | Web Design | BC | 5 |  |  |  |  |  | x |  |
| 0155 | Web Development | AC | 31 |  |  |  |  |  | x |  |
| 0152 | Web Development | BC | 16 |  |  |  |  |  | x |  |

## Programs of Study

Program/Plans by CLUSTER a.a.s. (assoclate appled science) ac. (Advanced certificate) b.c. (Basic certificate)

| LAW, PUBLIC SAFETY, CORRECTIONS \& SECURITY |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0319 | Criminal Justice - Private Police Services | AC | 30 | x |  |  |  |  |  |  |
| 0326 | Criminal Justice - Private Police Services | BC | 18 | x |  |  |  |  |  |  |
| 0294 | Criminal Justice - Public Police Services | AAS | 60 | x | x | x |  | x | x | x |
| 0295 | Criminal Justice - Public Police Services | AC | 30 | x | x | x |  | x | x | x |
| 0296 | Criminal Justice - Public Police Services | BC | 15 | x | x | x |  | x | x | x |
| 0355 | Emergency Management | AAS | 64 |  |  |  |  | x |  | x |
| 0358 | Emergency Preparedness | BC | 18 |  |  |  |  | x |  | x |
| 0336 | Fire Science \& Technology | AAS | 60 |  | x |  |  |  |  |  |
| 0356 | Homeland Security | BC | 18 |  |  |  |  | x |  | x |
| 0357 | Incident Command | BC | 18 |  |  |  |  | x |  | x |
| 0304 | Paralegal | AAS | 63 |  |  |  |  |  |  | x |
| 0829 | Paralegal | BC | 11.5 |  |  |  |  |  | x |  |
| 0898 | Unarmed Security Guard | BC | 2 | x |  |  |  |  |  |  |
| MANUFACTURING |  |  |  |  |  |  |  |  |  |  |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0826 | Computer Numeric Control Technician | BC | 15 | x |  |  |  |  |  |  |
| 0724 | Computer Numerical Control Machining | BC | 19 | x |  |  |  |  |  |  |
| 0725 | Computer Numerical Control Machining* | AC | 37 | x |  |  |  |  |  |  |
| 0748 | Computerized Numerical Control (CNC) | AC | 41 |  |  |  |  |  |  | x |
| 0726 | Factory Automation | BC | 20 | x |  |  |  |  |  |  |
| 0727 | Factory Automation* | AC | 37 | x |  |  |  |  |  |  |
| 0790 | Industrial Maintenance | AC | 36 |  |  |  |  |  |  | x |
| 0825 | Manufacturing (Basic) | BC | 14.5 | x |  |  |  |  |  |  |
| 0770 | Manufacturing Tech - Maintenance Mechanic | AAS | 62 | x |  |  |  |  |  |  |
| 0835 | Precision Sheet Metal Technician | BC | 18 |  |  |  |  | $x$ |  |  |
| 0789 | Process Technology | AAS | 63 |  |  |  |  | x |  |  |
| 0754 | Process Technology | AC | 38 |  |  |  |  | x |  |  |
| 0729 | Quality Assurance | BC | 16 | x |  |  |  |  |  |  |
| SCIENCE, TECHNOLOGY, ENGINEERING \& MATHEMATICS |  |  |  |  |  |  |  |  |  |  |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0389 | Agricultural Biotechnology | AC | 31 |  | x |  |  |  |  |  |
| 0137 | Chemical Laboratory Technology | AAS | 63 |  |  |  |  |  | x |  |


| TRANSPORTATION, DISTRIBUTION \& LOGISTICS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# | Program/Plan | Award | Hrs | DA | HW | KK | MX | OH | TR | WR |
| 0125 | Automotive Technology | AAS | 66 |  |  | x |  |  | x |  |
| 0130 | Automotive Technology | AC | 46 |  |  | x |  |  | x |  |
| 0116 | Automotive Technology | BC | 20 |  |  |  |  |  | x |  |
| 0112 | Auto Body Reconstruction Technology | BC | 25 |  |  | x |  |  |  |  |
| 0111 | Auto Body Repainting Technology | BC | 26 |  |  | x |  |  |  |  |
| 0134 | Automotive Chassis Maintenance | BC | 19 |  |  | $x$ |  |  |  |  |
| 0133 | Automotive Collision Technology | AC | 44 |  |  | x |  |  |  |  |
| 0136 | Automotive Fuel Management Technology | BC | 27 |  |  | x |  |  |  |  |
| 0128 | Automotive Maintenance | BC | 27 |  |  | x |  |  |  |  |
| 0876 | Commercial Driver Training | BC | 12 |  |  |  |  | x |  |  |
| 0875 | Commercial Passenger Driver - Class B | BC | 9 |  |  |  |  | x |  |  |
| 0890 | Defensive Driving - Attitudinal | BC | 1 |  |  |  |  | X |  |  |
| 0848 | Forklift Operation \& Safety | BC | 2 |  |  |  |  | x |  |  |
| 0889 | Limousine - Residential Chauffeur Training | BC | 1 |  |  |  |  | x |  |  |
| 0715 | Public Passenger Vehicle Training - Taxi | BC | 6 |  |  |  |  | x |  |  |
| 0832 | Supply Chain Management (Fundamentals of) | BC | 4 |  |  | x |  | x |  |  |
| 0385 | Supply Chain Management (SCM) | BC | 18 |  |  |  |  | x |  |  |
| 0390 | Supply Chain Management (SCM) | AC | 38 |  |  |  |  | x |  |  |

## ILLINOIS ARTICULATION INITIATIVE (IAI)

## Models for Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Arts in Teaching (A.A.T.) Transfer Degrees and General Education

City Colleges of Chicago participates in the Illinois Articulation Initiative (IAI), which is a comprehensive statewide effort among more than 100 colleges and universities in Illinois to facilitate the transfer of students. IAI became effective Summer 1998 for students entering a participating college or university as first-time, first-year students. Benefits for students are as follows:

- Students who complete the A.A., A.S., or A.A.T. degree at the City Colleges of Chicago, and who meet the admission requirements of an IAI participating baccalaureate degree granting institution to which they transfer, will have completed the lower-division general education requirements for an associate or baccalaureate degree in lieu of the receiving institution's general education requirements.
- Students who complete the IAI General Education Core Curriculum (GECC) at City Colleges of Chicago fulfilling all of the GECC requirements with IAI approved General Education courses and transfer to participating institutions have the assurance that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and the GECC will transfer.

A participating/receiving institution may require transfer students to complete an institution-wide and/or mission-related graduation requirement beyond the scope of the Illinois General Education Core Curriculum.

The IAI Website http://www.itransfer.org includes information on requirements for general education and specific majors, course descriptions, and a student planning worksheet. (See IAI equivalency course grids in this section for general education and majors.)

Due to the increasing number of students fulfilling degree requirements at more than one City College, district-wide models for A.A. and A.S. Transfer Degrees showing minimum general education requirements have been designed. The models facilitate the need for a smooth transition for the student's path to degree completion.

Important notes about transfer courses: although IAI approved courses are the most widely accepted, baccalaureate transfer courses need not be IAI approved and may be articulated for transfer via written articulation agreements or transfer equivalency documents. Such documents apply only to those institutions covered by those documents. Transfer acceptance conditions may apply. Institutions which have not signed such documents may or may not accept non-IAI approved courses for transfer credit and if they do, may accept them as Gen Ed or major or elective credit. Transfer documents do not guarantee acceptance of transfer credit. Ultimately, it is at the discretion of the receiving institution whether or not and under what conditions transfer credits may be accepted, which may change without notice. See your Academic Advisor for more information.

## Programs of Study <br> Baccalaureate Transfer - IAI

## Human Diversity Requirements for Associate Degrees

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion.

Students may select either a course that is IAI approved or a general education course that has not been IAI approved. A student who wants to complete the General Education Core Curriculum (GECC), should select an IAI approved HD course.

- IAI approved Human Diversity courses have an IAI No. that ends with either the letter ' $N$ ' or ' $D$ '. For example:

| LIT | 150 | Women's Literature |
| :---: | :---: | :---: |
| MUSIC | 183 | H 911D |

(Refer to pages 32-33 for courses with IAI numbers that end in N or D .)

- Human Diversity courses that are not IAI approved are listed below.

| Course Prefix | Course No. | Course Title |
| :---: | :---: | :---: |
| Fine Arts (0042) | 106 | African Art |
| HUM (0041) | 145 | Intro to Diversity/Ethnic Studies |
| HUM (0041) | 210 | Comparative Mythology |
| HUM (0041) | 213 | Hispanic-American Arts and Literature |
| HUM (0041) | 214 | Hispanic-American Arts and Literature II |
| LING (0132) | 104 | Cross-Cultural/Multi-Cultural Education |
| LIT (0036) | 125 | Psychology in Black Literature |
| LIT (0036) | 132 | Native American Literature |
| LIT (0036) | 137 | The Black Woman in Black Fiction |
| LIT (0036) | 153 | Gay and Lesbian Literature |
| MUSIC (0060) | 200 | Black Music Workshop |
| HISTORY (0085) | 114 | The Afro-American in American History |
| HISTORY (0085) | 115 | Afro-American History Since 1865 |
| HISTORY (0085) | 116 | Women in History |
| HISTORY (0085) | 118 | Women in American History |
| HISTORY (0085) | 170 | Native American History |
| HISTORY (0085) | 212 | History and Culture of China |
| HISTORY (0085) | 216 | History of Latin America in the U.S. |
| POL SCI (0086) | 211 | Analysis of White Racism |
| PSYCH (0087) | 209 | Black Psychology |
| SOC SCI (0088) | 110 | Intro to Global Studies |
| SOC SCI (0088) | 221 | Black Economics |
| SOC SER (0091) | 204 | Cross Cultural Studies in Gerontology |
| SOC (0089) | 209 | The Black Man in the United States |
| SOC (0089) | 210 | Diverse Cultures in a Global Age |
| SOC (0089) | 241 | Institutional Racism |
| SOC (0089) | 280 | Human Relations |

## Programs of Study

baccalaureate Transfer - IAI General Education

| IAI APPROVED GRIDS FOR GENERAL EDUCATION COURSES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| AFRICAN AMERICAN STUDIES (0117) |  |  |  |  |  |  |  |  |  |  |  |
| AFRO AM | 101 | Intro to African-American Studies | HF 906D | 3 |  |  |  |  | x |  |  |
| AFRO AM | 101 | Intro to African-American Studies | H2 909D |  |  |  |  | x |  |  |  |
| ANTHROPOLOGY (0081) |  |  |  |  |  |  |  |  |  |  |  |
| ANTHRO | 201 | Intro, Biol \& Cult Evol-Human | S1 900N | 3 | x |  | x |  |  | x |  |
| ANTHRO | 201 | Intro, Biol \& Cult Evol-Human | S1 902 | 3 |  |  |  | $x$ |  |  | $x$ |
| ANTHRO | 202 | Cultural Anthropology | S1 901N | 3 | x | x | x | x | x | x | x |
| ART (0010) |  |  |  |  |  |  |  |  |  |  |  |
| ART | 103 | Art Appreciation | F2 900 | 3 | x | x |  |  | x | x | x |
| ASTRONOMY (0071) |  |  |  |  |  |  |  |  |  |  |  |
| ASTROMY | 201 | Descriptive Astronomy | P1906 | 3 | x | x |  | x |  | x | x |
| BIOLOGY (0023) |  |  |  |  |  |  |  |  |  |  |  |
| BIOLOGY | 107 | Nutrition-Consumer Education | L1 904 | 3 |  |  |  | x |  |  |  |
| BIOLOGY | 109 | Human Genetics and Evolution | L1 907 | 3 |  | x |  |  |  |  |  |
| BIOLOGY | 114 | General Education Biology | L1 900L | 4 | x | x | x | x | x | x | x |
| BIOLOGY | 115 | Human Biology | L1 904L | 4 | x | x | x | x | x | x | x |
| BIOLOGY | 116 | Anatomy and Physiology | L1 904L | 4 |  |  |  | x |  |  |  |
| BIOLOGY | 119 | Environmental Biology | L1 905L | 4 |  |  |  |  |  |  | x |
| BIOLOGY | 242-1 | Evolution | L1 907 | 3 | x |  | x |  |  |  |  |
| BOTANY (0025) |  |  |  |  |  |  |  |  |  |  |  |
| BOTANY | 201 | General Botany I | L1 901L | 4 | x |  |  |  |  | x | x |
| CHEMISTRY (0073) |  |  |  |  |  |  |  |  |  |  |  |
| CHEM | 121 | Basic Chemistry I | P1 902L | 4 | x | x | x | x | x | x | x |
| CHEM | 201 | General Chemistry I | P1 902L | 5 | x | x | x | x | x | x | x |
| COMMUNICATION MEDIA (0004) |  |  |  |  |  |  |  |  |  |  |  |
| CMMEDIA | 110 | History of Photography | F2 904 | 3 |  |  |  |  |  |  | x |
| CMMEDIA | 163 | Film Rhetoric | F2 909 | 3 |  |  |  |  |  | x |  |
| ECONOMICS (0082) |  |  |  |  |  |  |  |  |  |  |  |
| ECON | 201 | Principles of Economics I | S3 901 | 3 | x | x | x | x | x | x | x |
| ECON | 202 | Principles of Economics II | S3 902 | 3 | x | x | x | x | x | x | x |
| ENGLISH (0035) |  |  |  |  |  |  |  |  |  |  |  |
| ENGLISH | 101 | Composition | C1 900 | 3 | x | x | x | x | x | x | x |
| ENGLISH | 102 | Composition | C1 901R | 3 | x | x | x | x | $x$ | x | x |
| ENVIRONMENTAL TECHNOLOGY (0027) |  |  |  |  |  |  |  |  |  |  |  |
| ENVR TC | 105 | Introduction to Atmospheric Sciences | P1 905 | 3 |  |  |  |  |  |  | x |
| FINE ARTS (0042) |  |  |  |  |  |  |  |  |  |  |  |
| FIN ART | 104 | The World of the Cinema | F2 908 | 3 |  | x |  | x |  | x |  |
| FIN ART | 105 | History of Paint Sculp Arc | F2 900 | 3 | x | x |  |  |  | x |  |
| FIN ART | 107 | Hist of Arch Paint Sculp I | F2 901 | 3 | x | x | x | x |  | x | x |
| FIN ART | 108 | Hist of Arch Paint Sculp II | F2 902 | 3 | x | x | x | x |  | x | x |
| FIN ART | 109 | History of Cinema | F2 909 | 3 |  | x |  |  |  |  |  |
| FIN ART | 110 | Opera and the Humanities | F1 910 | 3 |  | x |  |  |  | x |  |

D and $N$ indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## Programs of Study

## baccalaureate Transfer - IAI General Education

| IAI APPROVED GRIDS FOR GENERAL EDUCATION COURSES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| FRENCH (0051) |  |  |  |  |  |  |  |  |  |  |  |
| FRENCH | 104 | Fourth Course French | H1 900 | 4 |  | x |  |  |  | x | x |
| FRENCH | 213 | Intro to Moder Lit French | H3 916 | 3 |  | x |  |  |  |  |  |
| FRENCH | 214 | Readings in Lit French | H3 916 | 3 |  | x |  |  |  | x |  |
| GEOLOGY (0075) |  |  |  |  |  |  |  |  |  |  |  |
| GEOLOGY | 201 | Physical Geology | P1 907L | 3 | x | x |  |  |  | x |  |
| HISTORY (0085) |  |  |  |  |  |  |  |  |  |  |  |
| HISTORY | 111 | Hist Amer People to 1865 | S2 900 | 3 | x | x | x | $x$ | $x$ | x | $x$ |
| HISTORY | 112 | Hist Amer People From 1865 | S2 901 | 3 | x | x | x | x | x | x | $x$ |
| HISTORY | 141 | Hist World Civilization to 1500 | S2 912N | 3 | $x$ | x | x | $x$ | x | x | $x$ |
| HISTORY | 142 | Hist World Civilization From 1500 | S2 913N | 3 | x | x | x | x | x | x | x |
| HISTORY | 215 | History of Latin America | S2 910N | 3 | x | x | x |  | x | x | $x$ |
| HISTORY | 225 | Modern Middle East History | S2 919N | 3 |  | x |  |  |  |  | x |
| HISTORY | 243 | Far East in the Modern World | S2 909N | 3 |  |  | x |  |  | x | $x$ |
| HISTORY | 247 | African Hist to Col Period | S2 906N | 3 | x | x |  | x | x | x | x |
| HISTORY | 248 | African Hist - Modern World | S2 907N | 3 |  | x | x | x |  |  |  |
| HUMANITIES (0041) |  |  |  |  |  |  |  |  |  |  |  |
| HUM | 123 | Intro to Arts and Ideas | HF 900 | 3 | x | x |  |  |  |  | x |
| HUM | 143 | Intro to Latin American/Latino | HF 906D | 3 |  | x |  |  |  |  |  |
| HUM | 145 | Intro to Diversity/Ethnic Studies | HF 906D | 3 |  | x |  |  |  |  |  |
| HUM | 201 | General Course I Hum | HF900 | 3 | x | x | x | x | x | x | x |
| HUM | 202 | General Course II Hum | HF 901 | 3 | x | x | x | x | x | x | x |
| HUM | 203 | Arts of Cont America | HF 900 | 3 |  | x |  |  |  |  |  |
| HUM | 205 | World Literature I | H3 906 | 3 | $x$ | x | x | x | x | x | x |
| HUM | 207 | The Great Books | H3 907 | 3 | x | $x$ | x | x |  |  |  |
| HUM | 208 | Women in Creative and Performing Arts | HF 907D | 3 |  | x |  |  |  |  | x |
| HUM | 210 | Comparative Mythology | H9 901 | 3 |  | x | x | x |  | x | $x$ |
| HUM | 212 | Non-Western Humanities | HF 904N | 3 |  | x | x | x |  | x | x |
| HUM | 215 | Art \& Phil of African Cont | HF 904N | 3 |  | x |  |  | x |  |  |
| ITALIAN (0052) |  |  |  |  |  |  |  |  |  |  |  |
| ITALIAN | 104 | Fourth Course Italian | H1900 | 4 |  | x |  |  |  |  |  |
| JAPANESE (0054) |  |  |  |  |  |  |  |  |  |  |  |
| JAPANES | 104 | Fourth Course Japanese | H1 900 | 4 |  | x |  |  |  |  |  |

D and $N$ indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## Programs of Study

baccalaureate Transfer - IAI General Education

## IAI APPROVED GRIDS FOR GENERAL EDUCATION COURSES

| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LITERATURE (0036) |  |  |  |  |  |  |  |  |  |  |  |
| LIT | 110 | Introduction to Literature | H3 900 | 3 | x | x | x | x | x | x | x |
| LIT | 111 | Poetry | H3 903 | 3 | x | x | x | x | x | x | x |
| LIT | 112 | Drama | H3 902 | 3 | x | x | x | x | x | x | x |
| LIT | 113 | Fiction | H3 901 | 3 | x | x | x | x | x | x | x |
| LIT | 114 | Ideas in Prose | H3 904 | 3 | x |  |  | x |  |  |  |
| LIT | 116 | Amer Lit Col Days-Civil War | H3 914 | 3 |  | x | x | x |  |  | $x$ |
| LIT | 117 | Amer Lit Civ War-20th Cent | H3 915 | 3 | x | x | x |  |  | x | $x$ |
| LIT | 118 | English Lit Begin to Johnson | H3 912 | 3 |  | x |  |  |  |  | x |
| LIT | 119 | English Literature Rom Rev-20th Cent | H3 913 | 3 |  | x | x | x |  |  | x |
| LIT | 121 | Contemporary Afro-American Literature | H3 910D | 3 |  | x | x | x | x |  | x |
| LIT | 122 | Perspectives in Black Lit | H3 910D | 3 |  | x |  | x |  |  |  |
| LIT | 123 | Lit/ US from Civil War to Present | H3 915 | 3 |  |  |  |  | x |  |  |
| LIT | 126 | Contemporary American Literature | H3 915 | 3 |  |  |  |  |  |  | x |
| LIT | 127 | Contemporary British Literature | H3 913 | 3 |  |  |  |  |  |  | $x$ |
| LIT | 128 | Latin American Literature | H3 908N | 3 |  | x |  | x |  | x | $x$ |
| LIT | 129 | U.S. Latino (A) Literature | H3 910D | 3 |  | x |  |  |  |  | x |
| LIT | 131 | Survey of Afro-Amer Poetry | H3 910D | 3 |  | x |  | x |  |  |  |
| LIT | 133 | African American Fiction | H3 910D | 3 |  |  |  | x |  |  |  |
| LIT | 150 | Women's Literature | H3 911D | 3 | x | x | x | x | x | x | x |
| LIT | 155 | Literature and Film | F2 905 | 3 |  |  |  |  |  | x | x |
| LIT | 156 | Creative Nonfiction | H3 904 | 3 |  |  |  |  |  |  | x |
| LIT | 211 | Shakespeare | H3 905 | 3 | x | x | x | x |  | x | x |
| LIT | 220 | World Literature | H3 906 | 3 | x |  |  |  |  |  |  |
| LIT | 221 | Topics in Literature: Romanticism in British and Am Lit | H3 907 | 3 | x |  |  |  |  |  |  |
| MATH (0045) |  |  |  |  |  |  |  |  |  |  |  |
| MATH | 118 | General Education Math | M1 904 | 4 | $x$ | x | x | x | x | $x$ | $x$ |
| MATH | 122 | Math for Elementary Teachers I | M1 903 | 4 | x | x | x | x | x | x | x |
| MATH | 125-1 | Introductory Statistics | M1 902 | 4 | x | x | x | x | x | x | x |
| MATH | 144 | Finite Mathematics | M1 906 | 4 | x | x | x | x |  | x | x |
| MATH | 146 | Discrete Mathematics | M1 905 | 4 | x | x |  |  |  |  |  |
| MATH | 204-1 | Calculus for Business and Social Science | M1 900-B | 5 | x | x | x | x | x | x | x |
| MATH | 207 | Calculus and Analytic Geometry I | M1 900-1 | 5 | x | x | x | x | $x$ | x | x |
| MATH | 208 | Calculus and Analytic Geometry II | M1 900-2 | 5 | x | x | x | x | x | x | x |
| MATH | 209 | Calculus and Analytic Geometry III | M1 900-3 | 5 | x | x | x | x | x | x | x |
| MUSIC (0060) |  |  |  |  |  |  |  |  |  |  |  |
| MUSIC | 121 | Introduction to Music | F1 900 | 3 | x | $x$ | x | x | x | x | x |
| MUSIC | 124 | Trends in Modern American Music | F1 904 | 3 |  | x |  |  |  |  |  |
| MUSIC | 183 | World Music | F1 903N | 3 |  | x |  |  |  |  |  |
| MUSIC | 221 | Music Literature and History | F1 901 | 3 |  | x |  |  |  |  |  |
| MUSIC | 223 | Music History to 1750 | F1 901 | 3 |  |  | x | x |  | x |  |
| OCEANOGRAPHY (0070) |  |  |  |  |  |  |  |  |  |  |  |
| OCEAN | 101 | Introduction Oceanography | P1 905 | 3 |  |  |  |  |  | x |  |

D and $N$ indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## Programs of Study

## baccalaureate Transfer - IAI General Education

| IAI APPROVED GRIDS FOR GENERAL EDUCATION COURSES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | NO | COURSE DESCRIPTION | IA No. | CR. | DA | HW | KK | MX | OH | TR | WR |
| PHILOSOPHY (0043) |  |  |  |  |  |  |  |  |  |  |  |
| PHIL | 105 | Logic | H4 906 | 3 | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ |
| PHIL | 106 | Introduction to Philosophy | H4 900 | 3 | x | $x$ | x | x | x | x | $x$ |
| PHIL | 107 | Ethics | H4 904 | 3 | x | x | x | x | x | x | $x$ |
| PHIL | 108 | Philosophy of Religion | H4 905 | 3 | x | $x$ | x | x |  | x | x |
| PHIL | 201 | Greek Philosophy to Renaissance | H4 901 | 3 |  | x |  |  |  |  |  |
| PHIL | 202 | Enlightenment to Present | H4 902 | 3 |  | x |  |  |  |  |  |
| PHIL | 215 | Problems in Philosophy | H4900 | 3 |  |  |  |  |  | x |  |
| PHIL | 216 | Critical Thinking | H4906 | 3 | x |  |  |  |  |  |  |
| PHYSICAL SCIENCE (0076) |  |  |  |  |  |  |  |  |  |  |  |
| PHY SCI | 101 | General Course Phy Sci | P9 900 | 3 | $x$ |  | x | x |  | x | x |
| PHY SCI | 102 | General Course Phy Sci | P9 900 | 3 | x |  |  | x |  | x | x |
| PHY SCl | 107 | Current Public Issues in Phy Sci | P9 900 | 3 |  | x |  |  | x | x |  |
| PHY SCI | 111 | General Course I w/Lab Phy Sci | P9 900L | 4 |  |  | x | x | x | x | x |
| PHY SCl | 111 | General Course I w/Lab Phy Sci | P1 905L | 4 |  | x |  |  |  |  |  |
| PHY SCI | 112 | General Course II w/Lab Phy Sci | P9 900L | 4 |  |  | x | x | x | x | x |
| PHY SCl | 118 | Introduction to Meteorology | P1 905L | 4 |  | x |  |  |  |  |  |
| PHYSICS (0077) |  |  |  |  |  |  |  |  |  |  |  |
| PHYSICS | 220 | Physics Calculation and Practice | P1 900L | 2 |  |  |  |  |  | x |  |
| PHYSICS | 221 | Mechanics and Heat | P1 900L | 5 | x | x | x | x | x | x | x |
| PHYSICS | 231 | General Physics I: Mechanics and Wave Motion | P1 900L | 4 |  |  |  |  |  | x |  |
| POLITICAL SCIENCE (0086) |  |  |  |  |  |  |  |  |  |  |  |
| POL SCI | 200 | Principles of Political Science | S5 903 | 3 | x |  |  |  |  |  |  |
| POL SCI | 201 | The National Government | S5 900 | 3 | x | x | x | x | x | x | x |
| POL SCI | 203 | Comparative Government | S5 905 | 3 | x |  | x | x |  | x | x |
| POL SCI | 204 | International Relations | S5 904 | 3 | x |  | x | x |  | x | x |
| POL SCI | 207 | U.S. State and Local Government | S5 902 | 3 | x | x | x | x |  | x |  |
| POLISH (0046) |  |  |  |  |  |  |  |  |  |  |  |
| POLISH | 104 | Fourth Course Polish | H1 900 | 4 |  |  |  |  |  |  | x |
| POLISH | 214 | Readings in Literature Polish | H3 916 | 3 |  |  |  |  |  |  | x |
| PSYCHOLOGY (0087) |  |  |  |  |  |  |  |  |  |  |  |
| PSYCH | 201 | General Psychology | S6 900 | 3 | x | x | x | x | x | x | x |
| PSYCH | 207 | Child Psychology | S6 903 | 3 | $x$ | $x$ | x | x | x | x | $x$ |
| PSYCH | 211 | Social Psychology | S8 900 | 3 | x | x | x |  |  | x | x |
| PSYCH | 214 | Adolescent Psychology | S6 904 | 3 |  |  | x |  |  |  | x |
| PSYCH | 222 | Adult Development and Aging | S6 905 | 3 |  |  | x |  |  | x | x |
| PSYCH | 224 | Life Span Developmental Psychology | S6 902 | 3 |  |  |  |  |  |  | x |

D and $N$ indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

# Programs of Study <br> baccalaureate Transfer - IAI General Education 

| IAI APPROVED GRIDS FOR GENERAL EDUCATION COURSES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| COMPARATIVE RELIGION (0133) |  |  |  |  |  |  |  |  |  |  |  |
| RELIGN | 101 | Introduction to Religion | H5 900 | 3 |  |  | x |  |  | x |  |
| RELIGN | 102 | The Bible - Hebrew Old Testament | H5 901 | 3 |  |  | x |  |  | x |  |
| RELIGN | 103 | The Bible - New Testament | H5 901 | 3 |  |  | x |  |  | x |  |
| RELIGN | 106 | Comparative Religion I / Eastern Religion | H5 904N | 3 | x |  | x | x |  | x | x |
| RELIGN | 107 | Comparative Religion II / Western Religion | H5 904N | 3 |  |  | x |  |  | x |  |
| SOCIOLOGY (0089) |  |  |  |  |  |  |  |  |  |  |  |
| SOC | 201 | Introduction to Study of Society | S7 900 | 3 | x | x | x | x | x | x | x |
| SOC | 203 | Marriage and the Family | S7 902 | 3 | $x$ | x | x | x | x | x | x |
| SOC | 205 | Social Problems | S7 901 | 3 | x | x | x | x |  | x | x |
| SOC | 207 | The Sociology of Sex and Gender | S7 904D | 3 | x | x |  |  |  |  | $x$ |
| SOC | 211 | Race and Ethnic Relations | S7 903D | 3 |  |  |  |  |  | x | x |
| SOCIAL SCIENCE (0088) |  |  |  |  |  |  |  |  |  |  |  |
| SOC SCI | 101 | General Course I Soc Sci | S9 900 | 3 | x | x | x | x | x | x | x |
| SOC SCI | 102 | General Course II Soc Sci | S9 901 | 3 | x | x | x | x | x | x | x |
| SPANISH (0057) |  |  |  |  |  |  |  |  |  |  |  |
| SPANISH | 104 | Fourth Course Spanish | H1 900 | 4 | x | x | x |  | x | x | x |
| SPANISH | 111 | Spanish for Hispanos | H1 900 | 3 | x |  |  |  |  |  |  |
| SPANISH | 210 | Modern Civilization and Culture Spanish | H1900 | 3 | x |  |  |  |  |  |  |
| SPANISH | 213 | Introduction to Mod Lit Spanish | H3 916 | 3 |  | x |  |  |  |  |  |
| SPANISH | 214 | Readings in Literature Spanish | H3 916 | 3 | x | x |  |  |  |  | x |
| SPEECH (0095) |  |  |  |  |  |  |  |  |  |  |  |
| SPEECH | 101-1 | Fundamentals of Speech Communication | C2 900 | 3 | x | x | x | x | x | x | x |
| SPEECH | 131 | Introduction to the Theatre | F1 907 | 3 |  |  |  |  |  |  | x |
| THEATER ART (0099) |  |  |  |  |  |  |  |  |  |  |  |
| THR ART | 131 | Introduction to Theatre | F1 907 | 3 |  | x | x |  |  |  |  |
| THR ART | 133 | Acting I | TA 941 |  |  |  |  | x |  |  |  |
| THR ART | 134 | Theater in Modern World | F1 907 | 3 | x | x | x |  |  | x | x |
| ZOOLOGY (0029) |  |  |  |  |  |  |  |  |  |  |  |
| ZOOLOGY | 211 | General Zoology | L1 902L | 4 | x |  |  |  |  | x | $x$ |

D and N indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## Programs of Study

## baccalaureate Transfer - IAI Majors

IAI APPROVED GRIDS FOR MAJOR COURSES

| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOLOGY (0023) |  |  |  |  |  |  |  |  |  |  |  |
| BIOLOGY | 121 | Biology I | BIO910 | 5 | x | x | x | x | x | x | $x$ |
| BIOLOGY | 122 | Biology II | BIO910 | 5 | x | x | x | x | x | x | x |
| BUSINESS (0030) |  |  |  |  |  |  |  |  |  |  |  |
| BUSINES | 181 | Financial Accounting | BUS903 | 4 | x | $x$ | x | x | x | x | x |
| BUSINES | 182 | Managerial Accounting | BUS904 | 4 | x | x | x | x | x | x | x |
| BUSINES | 236 | Advertising | MC912 | 3 |  | x |  |  |  |  |  |
| CHEMISTRY (0073) |  |  |  |  |  |  |  |  |  |  |  |
| CHEM | 201 | General Chemistry I | CHM911 | 5 |  | $x$ | $x$ | x | x | x | x |
| CHEM | 203 | General Chemistry II | CHM912 | 5 |  | x | x | x | x | x | $x$ |
| CHEM | 205 | Organic Chemistry I | CHM913 | 6 | x | x | x | x | x | x | x |
| CHEM | 207 | Organic Chemistry II | CHM914 | 6 | x | x | x | x | x | x | x |
| COMPUTER INFORMATION SYSTEMS (0032) |  |  |  |  |  |  |  |  |  |  |  |
| CIS | 120 | Introduction to Microcomputers | BUS902 | 3 | x | x | x | x | x | x | x |
| CIS | 142 | Introduction to C or C++ Language | CS911 | 3 | x | x | x |  | x | x | $x$ |
| CIS | 144 | Introduction to JAVA Programming Lang | CS911 | 3 | x | x | x | x | x | x | x |
| CIS | 242 | Advanced C or C++ Language | CS912 | 3 | x | x | x | x |  | x |  |
| CIS | 244 | Advanced Java Programming Language | CS912 | 3 | x | x | x | x | x | x | x |
| CRIMINAL JUSTICE (0080) |  |  |  |  |  |  |  |  |  |  |  |
| CRM JUS | 102 | Administration Criminal Justice | CRJ901 | 3 | x | x | x | x | x | x | x |
| CRM JUS | 114 | Administration Juvenile Justice | CRJ914 | 3 | x | x | x | x | x | x | x |
| CRM JUS | 155 | Introduction to Corrections | CRJ911 | 3 | x | x |  |  |  | x | x |
| CRM JUS | 250 | Introduction to Criminology | CRJ912 | 3 | x | x | x |  |  | x | x |
| DIGITAL MULTIMEDIA (0138) |  |  |  |  |  |  |  |  |  |  |  |
| DMD | 105 | Animation | MC924 | 3 |  | x |  |  |  |  |  |
| DMD | 131 | Multimedia I | MC923 | 3 |  | x |  |  |  |  |  |
| ELECTRONICS (0033) |  |  |  |  |  |  |  |  |  |  |  |
| ELECTRN | 206 | Digital Circuits and Systems | EGR932L | 5 | x | x |  |  |  | x | x |
| ENGINEERING (0034) |  |  |  |  |  |  |  |  |  |  |  |
| ENGR | 215 | Electrical Circuit Analysis | EGR93IL | 5 | x | x |  |  |  | x | x |
| ENGINEERING \& INDUSTRIAL (0332) |  |  |  |  |  |  |  |  |  |  |  |
| $332 E N G R$ | 300 | Introduction to Computer Aided Design | IND911 | 3 |  |  |  |  |  |  | x |
| ENGLISH (0035) |  |  |  |  |  |  |  |  |  |  |  |
| ENGLISH | 151 | News Reporting and Writing | MC919 | 3 |  |  |  |  |  |  | $x$ |
| ENGLISH | 152 | Introduction to Mass Communication | MC911 | 3 |  | x |  |  |  |  | x |
| MATH (0045) |  |  |  |  |  |  |  |  |  |  |  |
| MATH | 125 | Introductory Statistics | BUS901 | 4 | x | x | x | x | x | x | x |
| MATH | 146 | Discrete Mathematics | CS915 | 4 | x | x |  |  |  | x | x |
| MATH | 207 | Calculus \& Analytic Geometry I | MTH901 | 5 | x |  |  | x | x | x | $x$ |
| MATH | 208 | Calculus \& Analytic Geometry II | MTH902 | 5 | x |  |  | x | x | x | x |
| MATH | 209 | Calculus \& Analytic Geometry III | MTH903 | 5 | x |  |  | x | x | x | $x$ |
| MATH | 210 | Differential Equations | MTH911 | 3 | x |  |  |  | x | x | x |
| MATH | 212 | Linear Algebra | MTH911 | 3 | x |  |  |  |  | x | x |
| MATH | 216 | Statistics for Business | BUS901 | 4 | x | x | x |  | x | x | x |

D and N indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## Programs of Study <br> Baccalaureate Transfer - IAI Majors

| IAI APPROVED GRIDS FOR MAJOR COURSES |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUBJECT | NO | COURSE DESCRIPTION | IAI NO. | CR. | DA | HW | KK | MX | OH | TR | WR |
| MEDIA COMMUNICATION (0011) |  |  |  |  |  |  |  |  |  |  |  |
| MEDIACM | 102 | Announcing | MC918 | 3 |  |  | x |  |  |  |  |
| MEDIACM | 203 | Media Writing | MC917 | 3 |  |  | x |  |  |  |  |
| MEDIACM | 221 | Radio Production I | MC915 | 3 |  |  | x |  |  |  |  |
| MEDIACM | 231 | TV Production I | MC916 | 3 |  |  | x |  |  |  |  |
| PHYSICS (0077) |  |  |  |  |  |  |  |  |  |  |  |
| PHYSICS | 215 | Statics | EGR942 | 3 | $x$ | $x$ |  |  |  | $x$ | x |
| PHYSICS | 216 | Dynamics | EGR943 | 3 | x | x |  |  |  | x | x |
| PHYSICS | 217 | Mechanics of Materials | EGR945 | 3 | x | x |  |  |  | x | x |
| PHILOSOPHY (0043) |  |  |  |  |  |  |  |  |  |  |  |
| PHIL | 110 | Social and Political Philosophy | PLS913 | 3 |  |  |  |  |  |  | x |
| PSYCHOLOGY (0087) |  |  |  |  |  |  |  |  |  |  |  |
| PSYCH | 213 | Abnormal Psychology | PSY905 | 3 | x |  |  | x |  | x | x |
| SPEECH (0095) |  |  |  |  |  |  |  |  |  |  |  |
| SPEECH | 144 | Oral Reading and Interpretation | TA916 | 3 |  | x |  |  |  |  | x |
| THEATER ART (0099) |  |  |  |  |  |  |  |  |  |  |  |
| THR ART | 130 | Stagecraft | TA911 | 3 |  |  | x |  |  |  | x |
| THR ART | 133 | Acting | TA914 | 3 |  | x |  | x | x | x | x |

D and N indicate Human Diversity courses; see page 32 for State of Illinois Human Diversity requirement.

## PROGRAMS OF STUDY

## Baccalaureate Transfer - Associate in Arts

The Associate in Arts (A.A.) degree is intended for students planning to transfer to a four-year college or university to complete a baccalaureate degree. The 62 credit hour degree comprises a minimum of 38 credit hours in general education, 16 elective credit hours, and 8 credit hours in a World Language and is designed so that students may choose from a broad selection of liberal arts courses.* Completion of the A.A. degree prepares students to transfer with junior standing.

## Illinois Articulation Initiative (IAI)

City Colleges of Chicago (CCC) participates in the Illinois Articulation Initiative (IAI) which is a comprehensive statewide effort among more than 100 colleges and universities in Illinois to facilitate the transfer of students. Benefits for students include:

- Students who complete the A.A. degree at the CCC, and who meet the admission requirements of the IAI participating baccalaureate degree granting institution to which they transfer, will have completed the lower-division general education requirements for an associate or baccalaureate degree in lieu of the receiving institutions general education requirements.
- Students who complete the IAI General Education Core Curriculum (GECC) at the CCC fulfiling all of the GECC requirements with IAI approved General Education courses and transfer to participating institutions have the assurance that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and the GECC will transfer.

The IAI website http://www.itransfer.org/ includes information on requirements for general education and specific major course descriptions, and a student planning worksheet. Also, see CCC general education and majors IAI equivalency charts on pages 33-39, in addition to the State of Illinois Human Diversity requirement on the Illinois Articulation Initiative page 32 .

## World Language Requirement for the Associate in Arts Degree

Effective fall 2009, students must complete with a grade of "C" or better two courses in the same World Language (formerly Foreign Language) offered at the City Colleges of Chicago (CCC) or demonstrate competency equivalent to the stated outcomes of a second semester course. See competency guidelines:
www.ccc.edu/departments/Documents/INDEX NUMBER 1.10A.pdf
Students intending to major in communications, humanities, social sciences, or other related professional fields should pursue the A.A. degree. Within the A.A. degree, students can choose from among various focus areas listed below. However, the focus areas offered for the A.A. degree are not separate degrees and will not show on transcripts as the specific focus, but simply as the Associate in Arts degree. Specific course requirements within each focus will be determined by the individual college during student advisement. Students are encouraged to select courses that will transfer to the baccalaureate degree granting institution they plan to attend: either IAI approved courses, or when applicable, courses that have signed form 13 articulation agreements on file, or articulation through the U Select system https://www.transfer.org/uselect/, or satisfy course equivalency status. (See A.A . 210 degree model in this section which provides transfer definitions in end notes.)

## Focus Areas

See IAI approved majors in Business, Criminal Justice, English, History, Communications, Political Science, Psychology, Sociology, and Theater Arts - see IAI Majors Grid, or visit the IAI website at
http://itransfer.org/IAI/majors/default.aspx?file=iai\&section=students.
Additionally, other focus areas include: Afro-American Studies, Cinema/Media Studies, Diversity/Ethnic Studies, World Language, Humanities, Journalism, Latin American/Latino Studies, Law (pre), Literature, Philosophy, Physical Education, Public Safety, Religion, Social Science, Social Work, Speech, and Women's Studies.

Note: Students should meet with their Academic Advisors regularly to ensure they are pursuing the appropriate educational plan.


ASSOCIATE IN ARTS DEGREE (A.A.) 210 minimum 62 CH

## A. ELECTIVES

B. WORLD LANGUAGE**

Students must complete with a grade of "C" or better two courses in a world language (formerly known as foreign language) offered at the City Colleges of Chicago or demonstrate competency equivalent to the stated outcomes of a second semester course.

See competency guidelines:
http://www.ccc.edu/departments/Documents/INDEX NUMBER 1.10A.pdf

Students should meet regularly with their Academic Advisor to ensure they are pursuing an appropriate educational plan to support their education and transfer goals.

* Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http://www.ccc.edu.
** Effective Fall 2009


## Programs of Study

## baccalaureate Transfer - Associate in Science

The Associate in Science (A.S.) degree is intended for students planning to transfer to a four-year college or university to complete a baccalaureate degree. The 64 credit hour degree comprises a minimum of 39 credit hours in general education, 14 additional credit hours in Mathematics and Physical/Life Sciences, and 11 elective credit hours and is designed so that students may choose from a broad selection of science courses.* Completion of the A.S. degree prepares students to transfer with junior standing.

## Illinois Articulation Initiative (IAI)

City Colleges of Chicago (CCC) participates in the Illinois Articulation Initiative (IAI) which is a comprehensive statewide effort among more than 100 colleges and universities in Illinois to facilitate the transfer of students. Benefits for students include:

- Students who complete the A.S. degree at the CCC, and who meet the admission requirements of the IAI participating baccalaureate degree granting institution to which they transfer, will have completed the lower-division general education requirements for an associate or baccalaureate degree in lieu of the receiving institutions general education requirements.
- Students who complete the IAI General Education Core Curriculum (GECC) at the CCC fulfilling all of the GECC requirements with IAI approved General Education courses and transfer to participating institutions have the assurance that lower-division general education requirements for an associate or baccalaureate degree have been satisfied and the GECC will transfer.

The IAI website http://www.itransfer.org includes information on requirements for general education and specific majors, course descriptions, and a student planning worksheet. Also, see CCC general education and majors IAI equivalency charts on pages 32-38, in addition to the State of Illinois Human Diversity requirement on page 32.

## Focus Areas

Students intending to major in mathematics, science, or other related professional fields should pursue the A.S. degree. Within the A.S. degree, students can choose from among various focus areas listed below. However, the focus areas offered for the A.S. degree are not separate degrees and will not show on transcripts as the specific focus, but simply as the Associate in Science degree. Specific course requirements within each focus will be determined by the individual college during student advisement. Students are encouraged to select courses that will transfer to the baccalaureate degree granting institution they plan to attend: either IAI approved courses, or when applicable, courses that have signed form 13 articulation agreements on file, or articulation through the U Select system (https://www.transfer.org/uselect/), or satisfy course equivalency status.

See IAI approved majors in Agriculture, Biological Sciences, Chemistry, Computer Science, Engineering, Industrial Technology, Mathematics, and Physics - see IAI Majors Grid, or visit the IAI website at: http://www.itransfer.org/iai/majors/ default.aspx?file=iai\&section=students

Additionally, other Focus areas include: Earth Sciences, Environmental Science, Health Sciences, Natural Science, Physical Science, Science/Pre-Professional (Architecture, Engineering, Medicine, and Pharmacy).

Note: Students should meet with their Academic Advisors regularly to ensure they are pursuing the appropriate educational plan.

## Programs of Study

Baccalaureate Transfer - Associate in Science

## ASSOCIATE IN SCIENCE DEGREE (A.S.) 211

minimum 64 CH
I. GENERAL EDUCATION
APPROVED CORE*
A. COMMUNICATIONS

English 101, English 102, Speech 101
B. MATHEMATICS

Mathematics 207 - or above
C. PHYSICAL/LIFE SCIENCES*

Minimum of one course each in
Physical Science \& Life Sciences (Group A \& B)
One of the courses from Group A or B must be a lab.
Group A (Physical Sciences):
Astronomy 201 (no lab)
Chemistry
Geology 201
Physical Sciences
Physics
Group B (Life Sciences):
Biology
Botany 201
Oceanography 101 (no lab)
Zoology 211
D. HUMANITIES/FINE ARTS* 9 CH

Minimum of one course each in
Humanities \& Fine Arts (Group A \& B)
Group A (Humanities):
Afro American Studies 101
Humanities
Literature
Philosophy
Religion
World Languages (104 or above)

| Arabic | French | Japanese | Polish |
| :--- | :--- | :--- | :--- |
| Chinese | Italian | Latin | Spanish |

Group B (Fine Arts):
Art 103 Music
Fine Arts Theater Art

| E. SOCIAL/BEHAVIORAL SCIENCES* | 9 CH |  |
| :--- | :--- | :--- |
| Anthropology 201, 202 | Political Science |  |
| Economics 201, 202 | Psychology |  |
| Geography | Social Science 101, 102 |  |
| History | Sociology |  |

9 CH

5 CH

7 CH

## Human Diversity

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required
II. ADDITIONAL HOURS IN MATHEMATICS AND PHYSICAL/LIFE SCIENCES REQUIREMENTS*

Astronomy 201
Biology
Botany 201
Chemistry
Geology 201
III.ELECTIVES*

Students should meet regularly with their Academic Advisor to ensure they are pursuing an appropriate educational plan to support their education and transfer goals.

* Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http:// www.ccc.edu.



## ASSOCIATE IN ENGINEERING SCIENCE 100 (A.E.S.) 64 Credit Hours (CH)

The Associate in Engineering Science (A.E.S.) degree offers courses required for transfer to a four-year college or university for students majoring in engineering sciences. (Completion of the A.E.S. degree does not fulfill the requirements of the IAI General Education Core Curriculum (IAI GECC). A student must complete the general education requirements of the college or university to which she/he transfers.)

## I. GENERAL EDUCATION*

(minimum) 20 CH
A. COMMUNICATIONS

English (035)
101: Composition I
B. FINE ARTS AND HUMANITIES*

6 CH
Select any two courses from the following disciplines:
Afro-American Studies, Art, Fine Arts, World
Language, Humanities, Literature, Music,
Philosophy, Religion, Theater Art
C. MATHEMATICS AND SCIENCE*

6-8 CH
Select any two courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Oceanography, Physical Science, Physics, Zoology
D. SOCIAL AND BEHAVIORAL SCIENCES*

Select any two courses from the following disciplines:
Anthropology, Economics, Geography,
History, Political Science, Psychology,
Social Science, Sociology
II. REQUIRED PROGRAM CORE*

44 CH
Chemistry (073)
201 General Chemistry I 5

Engineering (034)
190 Computer Applications in Engineering 3
Mathematics (045)
207, 208, and 209 Calculus and 15
Analytical Geometry I, II, III
210 Differential Equations
Physics (077)
215 Statics
216 Dynamics 3
235 Engineering Physics I Mechanics \& Wave Motion 4
236 Engineering Physics II Electricity \& Magnetism 4
237 Engineering Physics III Heat Light 4
\& Modern Physics

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## III. ELECTIVES*

(Additional courses recommended for various fields of engineering.)
CAD Technology (049)
170 Computer Aided Design I (CAD) (3)
Chemistry (073)
203 General Chemistry II (5)
Engineering (034)
111 Introduction to Engineering Profession (2)
131 Engineering Graphics \& Introduction to Design (3)
Physics (077)
217 Mechanics of Materials (3)
224 Physics Calculations and Practice (2)

## Human Diversity

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion. (Refer to page 32)

Students should meet regularly with their Academic Advisor to ensure they are pursuing an appropriate educational plan to support their education and transfer goals.

* Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http://www.ccc.edu.



# Programs of Study <br> Baccalaureate Transfer - Associate in Fine Arts 

## ASSOCIATE IN FINE ARTS (A.F.A.) <br> 60-68 Credit Hours (CH)

Art (Studio) 216; Art Education 217 and Music Performance 205; Music Education 208

The Associate in Fine Arts (A.F.A.) degree offers courses required for transfer to a four-year college or university for students majoring in art (studio), art education, music education, or music performance. (Completion of the A.F.A. degree does not fulfill the requirements of the Illinois Transferable General Education Core Curriculum (IAI GECC). A student must complete the general education requirements of the college or university to which she/he transfers.)

## REQUIRED PROGRAM A.F.A. DEGREE

## Range from 60-68 CH

## I. GENERAL EDUCATION* <br> (minimum) 29-35 CH

A. COMMUNICATIONS

English (035)
101 Composition I
102 Composition II
Speech (095)
101 Fundamentals of Speech Communication
B. FINE ARTS AND HUMANITIES by MAJOR*

Art (Studio) (216) - select two courses
Art Education (217) - select three courses
Music Education (208) - select two courses
Music Performance (205) - select two courses
Select any two or three courses from the following disciplines:
Afro-American Studies, Art, Fine Arts, World Language, Humanities, Literature, Music, Philosophy, Religion, Theater Art
C. MATHEMATICS

118 General Education Math or
4
125 Introductory Statistics
D. PHYSICAL AND LIFE SCIENCES* 7-8 CH

Select any two courses from the following disciplines; at least one course must be a lab course: Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Oceanography, Physical Science, Physics, Zoology
E. SOCIAL AND BEHAVIORAL SCIENCES by MAJOR*

Art (Studio) (216) - select two courses 6
Art Education (217) - select two courses 6
Music Education (208) - select three courses 9
Music Performance (205) - select one course
II. Required Credit Hours for Core by MAJOR
Art (Studio) (216) ..... 30
Art Education (217) ..... 12
Music Education (208) ..... 26
Music Performance (205) ..... 35
Consult with a college Academic Advisor for selection of required core courses by Major.
III. Required Elective Credit Hours by MAJOR Art Education (217) ..... 13
Music Education (208) ..... 2
Music Performance (205) ..... 4

## Human Diversity

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion. (Refer to page 32)

Students should meet regularly with their Academic Advisor to ensure they are pursuing an appropriate educational plan to support their education and transfer goals.

[^0]Select any one to three courses from the following disciplines:
Anthropology, Economics, Geography,
History, Political Science, Psychology,
Social Science, Sociology

## Programs of Study <br> baccalaureate Transfer - Associate of Arts in Teaching

## ASSOCIATE OF ARTS IN TEACHING (A.A.T.) <br> 61-63 Credit Hours (CH)

## Secondary Mathematics 212

The Associate of Arts in Teaching (A.A.T.) degree offers courses required for transfer to a four-year college or university for students majoring in teaching secondary mathematics or early-childhood education. The A.A.T. degree is based on the Illinois Professional Teaching Standards and includes the IAI General Education Core Curriculum (IAI GECC). Degree requirements include a 2.5 GPA , successful completion of the Illinois Test of Basic Skills, initiation of standards-based professional portfolio and evidence of appropriate professional dispositions. The general principles of the A.A.T. majors can be found on the ICCB website http:// www.iccb.org/index.html

## REQUIRED PROGRAM A.A.T. DEGREE Range from 61-63 CH <br> I. GENERAL EDUCATION REQUIREMENTS* 39-42 CH

## A. COMMUNICATIONS

English (035)
101 Composition I
102 Composition II
Speech (095)
Speech 101 Fundamentals of Speech Communication

## B. FINE ARTS AND HUMANITIES*

Select at least one course from Humanities and at least one course from Fine Arts.
C. PHYSICAL AND LIFE SCIENCES

Select one course from Life Sciences and one course from Physical Sciences. At least one of the courses must be a laboratory course.
D. SOCIAL AND BEHAVIORAL SCIENCES*

Select three courses from at least two different disciplines:
Anthropology, Economics, Geography,
History, Political Science, Psychology,
Social Science, Sociology
E. MATHEMATICS by Major*

Secondary Mathematics (212)
Mathematics (045)
207 Calculus I

## II. PROFESSIONAL EDUCATION COMPONENT by MAJOR* <br> Secondary Mathematics (212) <br> Education (083) <br> 101 Introduction to Education <br> (includes at least 15 contact hours of field experience) <br> Select at least two courses from among the following: <br> Education (083) <br> 102 Technology in the Classroom (3) <br> 103 Students with Disabilities (3) <br> Psychology (087) <br> 203 Educational Psychology (3) <br> 207 Child Psychology (3)

## III.REQUIRED AREA OF FOCUS HOURS

by MAJOR*
Secondary Mathematics (212)
Mathematics (045)
208 Calculus II and 5
209 Calculus III and 5
212 Linear Algebra 3

## Human Diversity

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion. (Refer to page 32)

Students should meet regularly with their Academic Advisor to ensure they are pursuing an appropriate educational plan to support their education and transfer goals.

* Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http://www.ccc.edu.


## PROGRAMS of STUDY <br> （a）® ® ®（®）® ® ®

$(S \cdot D \cdot \forall)$ ヨヨyĐヨa Sヨianls TVYヨNAD
NI ヨLVIDOSSV

## Programs of Study

Associate in general studies degree (a.g.s)

## ASSOCIATE IN GENERAL STUDIES DEGREE 203

A.G.S. 60 Credit Hours (CH)

The Associate in General Studies (AGS) degree provides students the ability to explore a broad range of collegelevel courses to develop new skills or investigate a personal interest. Courses may transfer individually to a four-year university, but the degree as a whole is not designed for transfer or as an occupational degree. Students should work closely with an advisor to determine if the AGS is the right degree program to reach their individual goals.

## I. GENERAL EDUCATION REQUIREMENTS

20 CH
(minimum)

## A. COMMUNICATIONS <br> English 101 Required

## B. FINE ARTS AND HUMANITIES

Select any two courses from the following disciplines: Afro-American Studies, Art, Fine Arts, World Language, Humanities, Literature, Music, Philosophy, Religion, Theater Art
C. MATHEMATICS AND SCIENCE

Select any two courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Geology, Mathematics, Oceanography, Physical Science, Physics, Zoology
D. SOCIAL AND BEHAVIORAL SCIENCES

Select any two courses from the following disciplines:
Anthropology, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology
II. REQUIRED PROGRAM ELECTIVES

40 CH

Minimum Total Credit Hours Required for A.G.S. 60 CH

## Human Diversity

To graduate from City Colleges of Chicago with any Associates Degree, at least one course must meet the State of Illinois Human Diversity Requirement. The Human Diversity (HD) course must be included in the total number of credits required to earn the degree and should not increase the total number of credits needed for degree completion. (Refer to page 32)

## http://www.itransfer.org/iai/others/faq.aspx?section=student s\#Diversity

http://itransfer.org/IAl/gened/default.aspx?section=students
Note: Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http://www.ccc.edu

## PROGRAMS of STUDY <br> (®) ® <br> (1x) <br> © <br> (ri) <br> (®)

# Programs of Study 

The Associate in Applied Science Degrees (A.A.s.) and Certificates


#### Abstract

Associate in Applied Science Degrees (A.A.S.) are occupational programs that are structured for students primarily interested in acquiring Career Technical Education (CTE) skills in order to enter the job market. However, a number of four-year institutions offer baccalaureate degrees designed to accommodate A.A.S. degree graduates. Students planning to transfer to a four-year institution should meet with an Advisor from the institution to which he/she plans to attend to discuss transferability of the A.A.S. degree and individual courses. (See pages 33-39 for Illinois Articulation Initiative (IAI) approved general education and major courses.)


Students seeking an A.A.S. degree must select a program of study, (e.g., Child Development, Criminal Justice, Nursing) in order to determine the specific general education courses, the program core courses, and electives that are required to complete the program. An A.A.S. degree is comprised of 50 to 75 percent (\%) of required technical core and specialty course work. Additionally, the A.A.S. degree requires a minimum of 15 credit hours of general education instruction. (See pages 24-29 for A.A.S. degree selection by Program/Plan Cluster.)

Note: Section I, A through D, General Education Requirements, allows a student to take a combination of transfer courses in order to fulfill the 15 CH minimum requirement. General education course selection will vary depending upon the skills required for the specific A.A.S. degree, e.g., two courses from Discipline C, Mathematics and Science.

## I. GENERAL EDUCATION APPROVED CORE*

minimum
A. COMMUNICATIONS

English 101 Required, and other English
or Speech courses if applicable
B. FINE ARTS AND HUMANITIES

Select one or more courses from the following
disciplines: African-American Studies, Art, Fine
Arts, World Language, Humanities, Literature,
Music, Philosophy, Religion, Theater Art
C. MATHEMATICS AND SCIENCE

Select one or more courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Computer Information Systems, Geology, Mathematics, Oceanography, Physical Science, Physics, Zoology
D. SOCIAL AND BEHAVIORAL SCIENCES

Select one or more courses from the following disciplines: Anthropology, Business, Economics, Geography, History, Political Science, Psychology, Social Science, Sociology.
E. SOCIAL/BEHAVIORAL SCIENCES**

Anthropology 201, 202 Political Science
Economics 201, 202
Geography
History

Psychology
Social Science 101, 102
Sociology

## II. CAREER AND TECHNICAL EDUCATION REQUIRED COURSES

Sections II, III, [Note: 50-75\% of CTE coursework is required for sections II \& III.]

## III.WORK-BASED LEARNING COURSES

from $45-57 \mathrm{CH}$
(required internship, practicum, and/or apprenticeship)

## IV.PROGRAM ELECTIVES

minimum 60
(60 CH minimum to 72 CH maximum unless otherwise approved by the Illinois Community College Board (ICCB). Additional credit hours are due to exceptions for occupational fields in which accreditation or licensure by a state or national organization requires additional coursework.)
*1. A student who intends to transfer to a four-year university should meet with a college Academic Advisor to discuss the IAI approved General Education Core Curriculum (GECC). (See pages 31-37 for Illinois Articulation Initiative (IAI) approved general education and major courses.)
2. A student who does not plan to transfer to a four-year university may enroll in any General Education transfer course which will fulfill the requirements for the A.A.S. degree.
http://www.itransfer.org/IAl/gened/default.aspx?section=students

## Human Diversity

Some Associate of Applied Science programs require a Human Diversity Course for graduation. The student should meet with an Academic Advisor about their program and to select an HD course if it is required for graduation.

Note: Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at: http://www.ccc.edu.

## EDUCATIONAL GUARANTEE

Upon application by the graduate and his employer, the District will provide an Associate of Applied Science (A.A.S.) or Career Program Certificate graduate up to nine (9) additional post-graduation credit hours or the equivalent noncredit training hours in a career or certificate program (as determined by the Chancellor or designee) at no tuition or fees. To qualify under this section, the application must be made by the graduate within ninety (90) days of the graduate's initial employment. The employer must certify in writing to the Chancellor that the employee lacks specified skills to perform in a position for which the A.A.S. degree or career certificate should have prepared that employee. Employment must have commenced within twelve (12) months of the employee's degree or certificate award, and the achievement of same occurring over a period of no more than four (4) years in the case of a thirty (30) credit hour or more program, and two (2) years when the program is less than thirty (30) credit hours. http://www.ccc.edu/menu/Pages/Policies.aspx

## PROCRAMS of STUDY <br> (a) ® <br> (10) <br> © <br> (ㄷ) <br> (ㅍ)



## Programs of Study

Agriculture, Food and Natural resources

## ENVIRONMENTAL TECHNOLOGY 160 <br> Associate in Applied Science degree (A.A.S.) 68 Credit Hours (CH)

The A.A.S. degree program in Environmental Technology prepares students with the skills and knowledge needed to participate in environmental careers including environmental compliance in public and private sector organizations, pollution prevention, environmental remediation, workplace health and safety, and emergency response preparedness. Students will learn to develop procedures for proper hazardous materials handling techniques and design training programs used to implement existing and future regulatory requirements to ensure compliance. Graduates of the program will be prepared to work in the health and safety field in such positions as compliance officer, environmental safety specialist, laboratory technician, hazardous materials emergency response technician, and environmental coordinator.

## General Education

19 CH
English (035)
101 Composition
Speech (095)
101 Fundamentals of Speech Communication
Chemistry (073)
121 Basic Chemistry I
CIS (032)
120 Introduction to Microcomputers
Arts/Humanities and Social Behavioral Sciences
(Students should meet with a college Acadomic Advisor for selection of coudens should meet with a college Academic Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52.)33
Required Program Core ..... 41 CH
Biology (023)
119 Environmental Biology ..... 4
226 Human Structure and Function I ..... 4
English (035)
102 Composition OR ..... 3
107 Report Writing
Environmental Technology (027)
121 Introduction to Hazardous Materials Management ..... 3
131 Environmental Health and Safety ..... 3
141 Site Investigation and Sampling ..... 3
151 Intro to Environmental Laws and Policies ..... 3
175 Hazardous Materials Handling and Transportation ..... 3
211 Recycling and Waste Minimization ..... 3
241 Environmental Sampling ..... 4
243 Environmental Analysis ..... 4
Mathematics (045)
Any college level Math class ..... 4
ELECTIVES ..... 8 CH
Environmental Technology Electives
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 68 CH
ENVIRONMENTAL TECHNOLOGY 161
Basic Certificate (B.C.) 18 Credit Hours (CH)
Required Program Core ..... 18 CH
Environmental Technology (027)
121 Introduction to Hazardous Materials Management ..... 3
131 Environmental Health and Safety ..... 3
ELECTIVESStudents should meet with a college Academic Advisor forselection of elective courses.
100 level Environmental Technology electives ..... 6
200 level Environmental Technology electives ..... 6
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 18 CH

HORTICULTURE 241
Associate in Applied Science degree (A.A.S.) 63 Credit Hours (CH)

This A.A.S. degree program is designed to prepare students for career opportunities in interior and exterior landscape design, construction and maintenance, and in the horticulture components of the industry.

## General Education <br> 17 CH

Botany (025)
201 General Botany I 4
English (035)
101 Composition 3
Mathematics (045)
118 General Education Mathematics 4
Sociology (089)
210 Diverse Cultures in a Global Age 3
Humanities/Fine Arts 3
(Students should meet with a college Academic Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52.)

## Required Program Core

46 CH
Horticulture (096)
101 Introduction to Ornamental Horticulture 3
102 Turf grass Management 3
103 Landscape Pest Management 3
104 Plant Propagation 4
105 Identification of Herbaceous Landscape Plants 4
106 Identification of Woody Landscape Plants I 3
107 Soils and Fertilizers 3
201 Supervised Horticulture Experience 5
202 Landscape Design I 4
203 Landscape Design II 4
204 Landscape Installation 3
205 Arboriculture 3
206 Identification of Woody Landscape Plants II 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 63 CH

HORTICULTURE 320
Basic Certificate (B.C.) 18 Credit Hours (CH)

## Required Program Core <br> 18 CH

Horticulture (096)
101 Introduction to Ornamental Horticulture 3
105 Identification of Herbaceous Landscape Plants 4
106 Identification of Woody Landscape Plants I 3
202 Landscape Design I 4
203 Landscape Design II 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 18 CH

## PROGRAMS of STUDY <br> © <br> ® <br> (NO) <br> © <br> (Tr) <br> (®)

## AIR CONDITIONING \& REFRIGERATION 117 <br> Associate in Applied Science Degree (A.A.S.) 62 Credit Hours (CH)

The A.A.S. in Air Conditioning and Refrigeration studies the design, selection, maintenance, testing and installation of residential and commercial air conditioning, refrigeration and heating and ventilation systems, and business skills. The degree can lead to self-employment or employment as an assistant to engineers in industrial or business facility, air conditioning and refrigeration mechanic, furnace installer, oil burner mechanic or a gas furnace mechanic with cooling and heating dealers, contractors, or utility companies.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.
(Students should meet with a college Academic Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52.)

## Required Program Core

40 CH
Air Conditioning (094)
101 Introduction Air Conditioning I
102 Introduction Air Conditioning II
103 Duct Design and Layout
104 Equipment and Systems Controls
105 Owner-Contractor Management
120 Introductory Laboratory
150 Introduction to Refrigeration
151 Commercial Refrigeration
155 Refrigeration Laboratory
158 Commercial Refrigeration Laboratory
160 Introduction to Principles of Heating
165 Heating Laboratory
Engineering (034)
115 Engineering Communications Blueprint Reading
Mathematics (045)
107 Mathematics for Technicians I OR
advanced Mathematics course

## Electives

Recommended Air Conditioning courses:
Air Conditioning (094)
106 Sheet Metal I (3)
107 Welding I (3)
121 Advanced Laboratory (2)
156 Domestic Refrigeration Laboratory (2)
204 Advanced Control Systems (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS
15 CH

3 5

62 CH

## AIR CONDITIONING \& REFRIGERATION 118

Advanced Certificate (A.C.) 36 Credit Hours (CH)

## Required Program Core

36 CH
Air Conditioning (094)
101 Introduction Air Conditioning I 3
102 Introduction Air Conditioning II 3
103 Duct Design and Layout 3
104 Equipment and Systems Controls 3
120 Introductory Laboratory 2
150 Introduction to Refrigeration 3
151 Commercial Refrigeration 3
155 Refrigeration Laboratory 2
158 Commercial Refrigeration Laboratory 2
160 Introduction to Principles of Heating 3
165 Heating Laboratory 2
Engineering (034)
115 Engineering Communications - Blueprint Reading 3
Mathematics (045)
107 Mathematics for Technicians 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 36 CH

## AIR CONDITIONING - COMMERCIAL REFRIGERATION 153

Basic Certificate (B.C.) 17 Credit Hours (CH)
Required Program Core $\quad 17 \mathrm{CH}$
Air Conditioning (094)
102 Introduction Air Conditioning II 3
105 Owner-Contractor Management 3
151 Commercial Refrigeration 3
157 Analysis Laboratory 2
158 Commercial Refrigeration Laboratory 2
Mathematics (045)
107 Mathematics for Technicians 4
TOTAL PROGRAM MINIMUM CREDIT HOURS

AIR CONDITIONING - DOMESTIC REFRIGERATION 177
Basic Certificate (B.C.) 17 Credit Hours (CH)
Required Program Core 17 CH
Air Conditioning (094)
101 Introduction Air Conditioning I 3
102 Introduction Air Conditioning II 3
120 Introductory Laboratory 2
150 Introduction to Refrigeration 3
155 Refrigeration Laboratory 2

Mathematics (045)
107 Mathematics for Technicians
TOTAL PROGRAM MINIMUM CREDIT HOURS 17 CH
AIR CONDITIONING -- HEATING 178Basic Certificate (B.C.) 18 Credit Hours (CH)
Required Program Core18 CH
Air Conditioning (094)101 Introduction Air Conditioning I103 Duct Design and Layout105 Owner-Contractor Management160 Introduction to Principles of Heating165 Heating Laboratory
Mathematics (045)
107 Mathematics for Technicians18 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS
ARCHITECTURAL DRAFTING 122
Associate in Applied Science degree (A.A.S.) 63 Credit Hours (CH)The A.A.S. degree program in Architectural Drafting is thestudy of techniques necessary to produce working drawingsby which a building is constructed or remodeled. Completionof this program leads to employment as a draftsman ordetailer in architecture or design firms or contractors,material suppliers or construction related companies. Studymay include Computer Aided Design or Drafting.
General Education15 CH
Students should meet with a college Academic Advisor for selection ofspecific course requirements for the 15.0 credit hour minimum generaleducation portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.
Required Program Core ..... 21 CH
Architecture (005)
121 Architectural Drawing I ..... 4
122 Architectural Drawing II ..... 4
123 Architectural Drawing III ..... 4
166 Concepts of Planning ..... 5
202 General Construction4
Additional Requirements ..... 25 CH
Architecture (005)
170 Computer Aided Design I for Architectural Drafting Techniques
171 Computer Aided Design II for ArchitecturalDrafting Techniques
172 Computer Aided Design III for Architectural Drafting Techniques
204 General Construction Advanced
266 Architectural Planning
Art (010)
Any drawing course
Mathematics (045)
143 Pre-Calculus or other Math course(s)recommended by a college Academic Advisor
ELECTIVES
ARCHITECTURAL DRAFTING 124
Basic Certificate (B.C.) 16 Credit Hours (CH)
Required Program Core ..... 16 CH
Architecture (005)
121 Architectural Drawing I ..... 4
122 Architectural Drawing II ..... 4
202 General Construction ..... 4
204 General Construction Advanced ..... 4
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 16 CH
ARCHITECTURAL CAD 132
Basic Certificate (B.C.) 9 Credit Hours (CH)
The Basic Certificate program inArchitectural CAD is awardedto students upon completion of the required program courses.
Note: Also, see Mechanical Technology CAD 163 Basic Certificate (9 CreditHours). This certificate is the same as Architectural CAD 132 above with theexception that the courses are Mechanical Technology (049).
Required Program Core ..... 9 CH
Architecture (005)
170 Computer Aided Design I for Architectural ..... 3
Drafting Techniques
171 Computer Aided Design II for Architectural ..... 3
Drafting Techniques172 Computer Aided Design III for ArchitecturalDrafting Techniques3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 9 CH
BRICKLAYER 760
Basic Certificate (B.C.) 16 Credit Hours (CH)The Basic Certificate program for Bricklayer is designed toprovide students with an understanding of the bricklayingtrade. Students will receive hands-on training in the buildingof solid walls and chimneys, using bricks and block and arange of bonds as well as learning basic blueprint reading.
Required Program Core ..... 16 CH
332TECH
442 Introduction to Bricklaying ..... 3
443 Bricklaying Tools and Equipment ..... 2
428 Mortar ..... 3
429 Basic Mathematics and Specifications ..... 2
444 Bricklaying Installation Procedures ..... 3
767 Blueprint Reading ..... 2
330BSCM
532 Basic Computer Technology1
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 16 CH

# Programs of Study <br> <br> Architecture and Construction 

 <br> <br> Architecture and Construction}

## BUILDING ENERGY TECHNOLOGIES 159

Basic Certificate (B.C.) 21 Credit Hours (CH)
The Basic Certificate program in Building Energy Technologies is designed for students seeking expertise in the practical application of energy efficiency and renewable energy systems in the building construction industries. Those with interest in building operation and assessment, the construction trades, contracting, energy consulting, and related occupations will obtain the knowledge to plan, implement, audit, operate, and optimize energy systems within a wide range of new and retrofit building types. An emphasis on integration into traditional building construction and operation allows the graduate to effectively coordinate with architects, engineers, and contractors on the installation and operation of those systems.
Required Program Core
Environment Technology (027)
104 Energy Systems Fundamentals
114 Renewable Energy Systems
144 Building Systems Maintenance
204 Residential Energy Systems
214 Institutional Energy Systems
244 Energy Equipment Troubleshooting
TOTAL PROGRAM MINIMUM CREDIT HOURS
21 CH

## CAD TECHNOLOGY 144

Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)
The A.A.S. degree program in Computer-Aided Design (CAD) Technology provides the technical instruction and skill development for the graduate to become successfully employed in the drafting fields of the mechanical, architectural, and construction industry. Instruction is directed toward theoretical and technical skills in the use of modern drafting tools and equipment with emphasis placed on the training of CAD techniques.
General Education ..... 17 CH
CIS (032)
English (035)

101 Composition I ..... 3

Math (045)

140 College Algebra 4

Physics (077)

231 General Physics I: Mechanics \& Wave Motion 4

Fine Arts \& Humanities

Students should meet with a college Academic Advisor for selection of one
course each from these two disciplines. One course must meet the State of
Illinois Human Diversity requirement. See A.A.S. model on page 52.)

Required Program Core 43 CH
CIS (032)
103 Intro to BASIC Language 3
116 Intro to Operating Systems 3
123 Intro to Spreadsheets on Microcomputers 3
Engineering (034)
100 Elements of Engineering Drawing 3
110 Introductory Drafting 2
111 Intro to the Engineering Profession 2
131 Engineering Graphics and Intro to Design 3
132 Descriptive Geometry 3
190 Computer Applications in Engineering 3
202 Advanced Drafting and Basic Machine Design 3
Mathematics (045)
141 Plane Trigonometry 3
Mechanical Technology (049)
130 CAD Technology I 3
170 CAD Technology II 3
171 CAD Technology III 3
172 CAD Technology IV 3
TOTAL PROGRAM MINIMUM CREDIT HOURS 60 CH
Note: This program was formerly known as Drafting and Machine Design 144.
Programs of StudyArchitecture and Construction
CAD TECHNOLOGY 138Advanced Certificate (A.C.) 34 Credit Hours (CH)
Required Program Core

34 CH
Engineering (034)
100 Elements of Engineering Drawing ..... 3
131 Engineering Graphics and Intro to Design ..... 3
132 Descriptive Geometry ..... 3
190 Computer Applications in Engineering ..... 3
202 Advanced Drafting and Basic Machine Design ..... 3
Mathematics (045)
140 College Algebra
141 Plane Trigonometry ..... 3
Mechanical Technology (049)
130 CAD Technology I ..... 3
170 CAD Technology II ..... 3
171 CAD Technology III ..... 3
172 CAD Technology IV ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 34 CH
Note: This program was formerly known as Draftingand Machine Design 138.
CAD TECHNOLOGY 139
Basic Certificate (B.C.) 16 Credit Hours (CH)
Required Program Core ..... 16 CH
Mathematics (045)140 College Algebra ORCooperative Work Experience (108)
208 Engineering and Industrial Technologies
Mechanical Technology (049)130 CAD Technology I
170 CAD Technology II ..... 3
171 CAD Technology III ..... 3
172 CAD Technology IV ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 16 CH

Note: This program was formerly known as Drafting and Machine Design 139.43

$\square$
  4

## COMMUNICATIONS TECHNOLOGY 750 <br> Associate in Applied Science degree (A.A.S.) 65 Credit Hours (CH)

The A..A.S. degree program in Communications Technology is a cooperative effort between Richard J. Daley College and the "Electrical Joint Apprenticeship and Training Trust (EJATT)" which is made up of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local Union 134. Through the joint effort of the college and EJATT, the program is dedicated to consistently provide state-of-the art education and training to apprentices, and through them to the residential and commercial building contractors in the Chicago land area. This commitment to both the individual and industry requires not only providing electricians for today's market but also for tomorrow's market and future technologies.

Daley College and the EJATT are working cooperatively in ordertostructure the program to benefitthe students in meeting their educational and career objectives while maintaining the integrity and quality of the program. Selection for admission into the program is a rigorous process which functions to ensure that the most qualified candidates are selected by both the City Colleges of Chicago and the selection process established by the EJATT Local Union 134, which follows the guidelines of federal and state laws regulating admission into a registered apprenticeship program.

1. Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts. Official transcripts will be accepted in place of the high school diploma if the graduation date is provided.
2. At least 18 years old, prior to application.
3. Have taken two semesters of algebra (at high school or college) with a minimum of "C" grade in each semester, completed prior to application. An official transcript is required.
4. Have acceptable physical health as determined by a physician to be able to safely perform the tasks of a construction electrician, including drug testing.
5. Have evidence of a qualifying grade on an aptitude test as prescribed by the EJATT Local Union 134. The aptitude test covers English and Mathematics comprehension along with a spatial ability evaluation.
Each student must achieve a minimum grade of $C$ for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.
General Education ..... 15 CHEnglish (035)101CompositionHistory (085)
113 U.S. Labor History ..... 3
Psychology (087)
206 Business \& Industrial Psychology210 Principles of Supervisory Psychology
432 IBEW
714 Technical Math I3
Required Program Core ..... 50 CH
432IBEW
704 Construction Technology ..... 4.5
705 Print Reading I ..... 3.5
707 Fire Alarm Systems ..... 3.5
709 Print Reading II ..... 3.0
711 Communications ..... 4.0
715 Technical Math II ..... 3.0
716 Electronics ..... 4.5
717 Structured Wiring ..... 4.5
718 Integrated System I ..... 3.5
719 Integrated Systems II ..... 4.5
720 Communications Systems Verification ..... 3.5
721 Fiber Optics ..... 3.5
722 Computer Networking ..... 4.5
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 65 CH

## CONCRETE MASONRY 759

## Basic Certificate (B.C.) 16 Credit Hours (CH)

Training consists of an orientation to the cement masonry trade, industry terminology, and blueprint reading. Hands-on training includes the proper use and maintenance of tools, job safety procedures, and how to build a sandbox. Students will learn the basic ingredients of concrete, rodding placement and floating, basic set-up and form work, and clean-up.
Required Program Core16 CH
332TECH
426 Introduction to Concrete Masonry ..... 3
427 Masonry Tools and Equipment ..... 2
428 Mortar ..... 3
429 Basic Mathematics and Specifications ..... 2
430 Masonry Installations Procedures ..... 3
767 Blueprint Reading ..... 2
330BSCM
532 Basic Computer Technology ..... 1
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 16 CH

## Programs of Study

Architecture and Construction

## CONSTRUCTION CARPENTRY 775 <br> Basic Certificate (B.C.) 16 Credit Hours (CH)

The Basic Certificate program in Construction Carpentry prepares students for an entry level apprentice position with a construction contractor. The program provides instruction in tool safety and usage, construction materials, work site safety, blueprint reading, and mathematical concepts. Course content also includes an introduction to the trades and basic ARC welding. Theory and practical "hands- on" application are emphasized throughout the program. Students will receive the OSHA Construction Safety and Health 10-hour Certification and Scaffold Certification upon successful completion of the program.

Required Program Core 332TECH<br>401 Introduction to Labor and Trade Occupations<br>409 Construction Safety<br>429 Basic Mathematics and Specifications<br>432 Basic ARC Welding<br>448 Vocational Physical Training I<br>581 Concrete Framing<br>582 Residential Carpentry<br>583 Basic Hand Tools<br>767 Blueprint Reading I<br>330BSCM<br>532 Basic Computer Technology

TOTAL PROGRAM MINIMUM CREDIT HOURS

## CONSTRUCTION MANAGEMENT 375 <br> Associate in Applied Science degree (A.A.S.) 65 Credit Hours (CH)

The A.A.S. degree program in Construction Management prepares students to receive the education, training, and business knowledge necessary for employment in the construction industry. The program offers classroom and lab experiences led by instructors who are experienced as superintendents or project managers for some of the largest construction firms in the country.

| General Education | 15 CH |
| :--- | ---: |
| Students should meet with a college Academic Advisor |  |
| for selection of specific course requirements for the 15.0 credit |  |
| hour minimum general education portion of the A.A.S. degree. |  |
| See A.A.S. model on page 52 which includes the <br> State of Illinois Human Diversity requirement. <br>  <br> Required Program Core |  |
| Business (030) |  |
| 181 Financial Accounting | 41 CH |
| 269 Principles of Management |  |
| CIS (032) | 4 |
| 120 Introduction to Microcomputers | 3 |
| 432CMGT |  |
| 601 Introduction to Construction | 3 |
| 602 Methods of Building Construction | 2 |
| 603 Building Materials and Testing | 3 |
| 604 Blueprint and Specifications | 3 |
| 605 Construction Cost Estimating | 3 |
| 606 Construction Contracting Specifications | 3 |
| 607 Construction Scheduling/Management | 3 |
| 608 Project Management | 3 |
| 609 Construction Safety II | 3 |
| English (035) | 3 |
| 107 Report Writing | 3 |
| 332TECH | 3 |
| 449 Professional Development | 3 |
| ELECTIVES | 3 |
| Consult with a college Academic Advisor for selection |  |
| of minimum of three courses from the following disciplines: | 3 |
| Business, CIS, Construction Technology and Environmental Science. |  |

TOTAL PROGRAM MINIMUM CREDIT HOURS 65 CH

## ELECTRICAL CONSTRUCTION TECHNOLOGY 752 <br> Associate in Applied Science degree (A.A.S.) 65 Credit Hours (CH)

The A.A.S. degree program in Electrical Construction Technology is a cooperative effort between Richard J. Daley College and the "Electrical Joint Apprenticeship and Training Trust (EJATT)" which is made up of the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers (IBEW) Local Union 134. Through the joint effort of the college and EJATT, the program is dedicated to consistently providing state-of-the art education and training to apprentices, and through them to the residential and commercial building contractors in the Chicago land area. This commitment to both the individual and industry requires not only providing electricians for today's market but also looking toward tomorrow's market and future technologies.

Daley College and the EJATT are working cooperatively in order to structure the program to benefit the students in meeting their educational and career objectives while maintaining integrity and quality within the program. Selection for admission into the program is a rigorous process which functions to ensure that the most qualified candidates are selected by both the City Colleges of Chicago and the selection process established by the EJATT Local Union 134 which follows the guidelines of federal and state laws regulating admission into a registered apprenticeship program.

1. Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts. Official transcripts will be accepted in place of the high school diploma if the graduation date is provided.
2. At least 18 years old, prior to application.
3. Have taken two semesters of algebra (at high school or college) with a minimum of " $C$ " grade in each semester, completed prior to application. An official transcript is required.
4. Have acceptable physical health as determined by a physician to be able to safely perform the tasks of a construction electrician, including drug testing.
5. Have evidence of a qualifying grade on an aptitude test as prescribed by the EJATT Local Union 134. The aptitude test covers English and Mathematics comprehension along with a spatial ability evaluation.
Each student must achieve a minimum grade of $C$ for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.
General Education ..... 15 CHEnglish (035)101 Composition3
History (085)
113 U.S. Labor History ..... 3
Psychology (087)
206 Business \& Industrial Psychology ..... 3
210 Principles of Supervisory Psychology ..... 3
432IBEW
714 Technical Math I ..... 3
Required Program Core ..... 50 CH
432IBEW
702 Electrical Circuitry ..... 4.5
703 Conduit Bending I ..... 3.5
704 Construction Technology ..... 4.5
705 Print Reading I ..... 3.5
706 Conduit Bending II ..... 3.5
707 Fire Alarm Systems ..... 3.5
708 Motor Control Systems ..... 3.5
709 Print Reading II ..... 3.0
710 Programmable Control ..... 4.5
711 Communications ..... 4.0
712 H.V.A.C. Systems ..... 4.5
713 Instrumentation ..... 4.5
715 Technical Math II ..... 3.0
TOTAL PROGRAM MINIMUM CREDIT HOURS

# PROGRAMS OF STUDY 

Architecture and Construction

## ELECTRICAL LINE WORKER (OVERHEAD) 766 <br> Advanced Certificate (A.C.) 30 Credit Hours (CH)

The Advanced Certificate program for the Overhead Electrical Line Worker is structured to meet the current need for overhead electricians/electrical line workers in the electrical power industry. Upon completion of the program, graduates will be prepared to work as apprentices in the electric utility industry.
Required Program Core
30 CH
332TECH
448 Vocational Physical Training I
449 Professional Development
452 Basic Electrical Theory
453 Overhead Techniques \& Projects I
458 Overhead Techniques \& Projects II
459 Construction Safety \& Rescue
462 Vocational Physical Training II
463 Vocational Physical Training III
464 Power Equipment Operation
English (035)
197 Communication Skills
Mathematics (045)
107 Technical Math

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## MECHANICAL TECHNOLOGY CAD 163 <br> Basic Certificate (B.C.) 9 Credit Hours (CH)

The Basic Certificate program in Mechanical Technology CAD is awarded to students upon completion of the required program courses.

Note: Also, see Architectural CAD 132 Basic Certificate (9 Credit Hours). This certificate is the same as Mechanical Technology CAD above, with the exception that the courses are Architecture (005).

## Required Program Core

9 CH
Mechanical Technology (049)
170 CAD Technology II
171 CAD Technology III
172 CAD Technology IV
TOTAL PROGRAM MINIMUM CREDIT HOURS

GAS UTILITY WORKER 749
Advanced Certificate (A.C.) 50 Credit Hours (CH)

The Gas Utility Worker Program consists of general education courses and core courses that feature specific competencies in the safe construction and operation of natural gas distribution systems. The program takes a student through a series of basic and advanced skill sets designed to enhance on-the-job performance and to quickly bring the student to the level of a full-functioning, skilled worker once employed. Upon completion, students who graduate from this program will be prepared to work as a utility worker in the gas utility industry.

| General Education | 15 CH |
| :--- | ---: |
| CIS (032) | 3 |
| 120 Introduction to Microcomputers |  |
| English (035) <br> 107 Report Writing <br> Math (045) <br> 107 Math for Technicians I <br> History (085) <br> 113 United State Labor History <br> Speech (095) <br> 101 Fundamentals of Speech | 3 |

Required Program Core ..... 50 CH
065 PHYSICAL EDUCATION
110 Fitness1
330TECH
434 Introduction to Plumbing ..... 3
435 Plumbing Tools and Equipment ..... 2
448 Vocational Physical Training I ..... 1
449 Professional Development ..... 2
452 Basic Electrical Theory ..... 3
463 Vocational Physical Training III ..... 1
503 Gas Utility Training I ..... 6
504 Gas Utility Training II ..... 6
505 Gas Utility Training III ..... 3
506 Gas Utility Training IV4
432CMGT609 Construction Safety II3

## PLUMBING AND FIRE PROTECTION 753

Basic Certificate (B.C.) 16 Credit Hours (CH)
The Basic Certificate program in Plumbing and Fire Protection is designed to introduce students to plumbing and sprinkler systems. Students will be taught in the classroom and shop environment with theory and hands-on applications. Upon successful completion of the program, graduates will be qualified to work as a plumber's assistant and/or fitter assistant.

## Required Program Core 16 CH

 332TECH434 Introduction to Plumbing
435 Plumbing Tools and Equipment 2
436 Plumbing Codes 1
437 Basic Plumbing Related Mathematics 1
438 Introduction to Fire Protection 3
439 Home Plumbing Systems 4
432 Basic ARC Welding 1
330BSCM
532 Basic Computer Technology
1
TOTAL PROGRAM CREDIT HOURS 16 CH

WELDER (COMBINATION) 758
Basic Certificate (B.C.) 16 Credit Hours (CH)
The Basic Certificate program in Combination Welder is designed to provide students with training in basic welding skills in a shop setting. In addition to learning welding mathematics, blueprint reading, layout and fabrication, students are also introduced to the basic fundamentals of job safety and ethics. Graduates of this program are qualified for entry level employment as an ARC, MIG, or TIG welder.
Required Program Core 16 CH 332TECH
509 Intro to Basic ARC Welding 3
510 Blueprint, Layout and Fabrication 2
518 Manufacturing Materials \& Processes 1
520 ARC Welding 4
526 Welding Mathematics I 1
530 Advanced Welding 4
330BSCM
532 Basic Computer Technology 1
TOTAL PROGRAM MINIMUM CREDIT HOURS 16 CH
(Ix)
©
(®)

# Programs of Study <br> ARTS, A/V TECHNOLOGY \& COMMUNICATIONS 

## DIGITAL MULTIMEDIA DESIGN 350 <br> Associate in Applied Science degree (A.A.S.) 67 Credit Hours (CH)

The A.A.S. degree program in Digital Multimedia Design is designed to prepare students for entry-level positions in the field of interactive and multimedia design and for possible transfer into a four-year institution. Requirements for a major in Digital Multimedia Design will equip students with the necessary skills, both technically and aesthetically, to create digital multimedia presentations; output can be delivered on CD, DVD, video, or in the form of web pages over the Internet.

The program has three required areas of specialization: 1) Video \& Sound, 2) 3D Graphics, and 3) Interactive Media.

Note: Also see individual Basic Certificate programs for Video \& Sound 352, 3D Graphics 353, and Interactive Media 354.

## General Education

16 CH
Biology (023) or Physical Science (076)
English (035)
101 Composition
Fine Arts (042)
107 History of Architecture, Painting, and Sculpture I
Math (045)
118 General Education Math or higher
Social Science (088)
(Students should meet with a college Academic Advisor for selection of one course from this discipline which must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52).

## Required Program Core

Art (010)
131 General Drawing
142 Figure Draw and Composition
144 Two Dimensional Design
145 Three Dimensional Design
Digital Multimedia (138)
168 Advanced Computer Art I
299 Portfolio Development
Fine Arts (042)
104 The World of Cinema
108 History of Architecture, Painting and Sculpture II

## Specialization Areas

1) Video \& Sound

Digital Multimedia (138)
115 Digital Soundtrack
179 Video I
279 Video II
24 CH
2) 3D Graphics ..... 9 CH
Digital Multimedia (138)
105 Animation3
121 3D Graphics I ..... 3
221 3D Graphics II ..... 3
3) Interactive Media ..... 9 CH
Digital Multimedia (138)131 Multimedia I3
231 Multimedia II ..... 3
233 Multimedia III ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 67 CH
DIGITAL MULTIMEDIA DESIGN 351Advanced Certificate (A.C.) 36 Credit Hours (CH)
Required Program Core27 CH
Art (010)
131 General Drawing ..... 3
142 Figure Draw and Composition ..... 3
144 Two Dimensional Design ..... 3
145 Three Dimensional Design ..... 3
CIS (032)
120 Introduction to Microcomputers ..... 3
Digital Multimedia (138)
168 Advanced Computer Art I ..... 3
Fine Arts (042)
104 The World of Cinema ..... 3
107 History of Architecture, Painting and Sculpture I ..... 3
108 History of Architecture, Painting and Sculpture II ..... 3Specialization Areas9 CHChoose one area of specialization from the three listed below:

1) Video \& Sound
Digital Multimedia (138)
115 Digital Soundtrack (3)
179 Video I (3)
279 Video II (3) OR
2) 3D Graphics
Digital Multimedia (138)
105 Animation (3)
121 3D Graphics I (3)
221 3D Graphics II (3) OR
3) Interactive Media
Digital Multimedia (138)
131 Multimedia I (3)
231 Multimedia II (3)
233 Multimedia III (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

## PROGRAMS OF STUDY

ARTS, A/V TECHNOLOGY \& COMmUNICATIONS

DIGITAL MULTIMEDIA: VIDEO \& SOUND 352
Basic Certificate (B.C.) 18 Credit Hours (CH)

## Required Program Core

Art (010)
144 Two Dimensional Design
CIS (032)
120 Introduction to Microcomputers
Digital Multimedia (138)
115 Digital Sound Track
168 Advanced Computer Art I
179 Video I
279 Video II

## TOTAL PROGRAM MINIMUM CREDIT HOURS

DIGITAL MULTIMEDIA: 3D GRAPHICS 353
Basic Certificate (B.C.) 21 Credit Hours (CH)

## Required Program Core

Art (010)
144 Two Dimensional Design
145 Three Dimensional Design
CIS (032)
120 Introduction to Microcomputers
Digital Multimedia (138)
105 Animation
121 3D Graphics I
168 Advanced Computer Art I
221 3D Graphics II
TOTAL PROGRAM MINIMUM CREDIT HOURS

DIGITAL MULTIMEDIA: INTERACTIVE MEDIA 354
Basic Certificate (B.C.) 18 Credit Hours (CH)
Required Program Core
Art (010)
144 Two Dimensional Design
CIS (032)
120 Introduction to Microcomputers
Digital Multimedia (138)
131 Multimedia I
168 Advanced Computer Art I
231 Multimedia II
233 Multimedia III
TOTAL PROGRAM CREDIT HOURS

MEDIA COMMUNICATIONS 083
Associate in Applied Science Degree (A.A.S.)
63 Credit Hours (CH)
18 CH
The A.A.S. degree program in Media Communications is a modification and extension of the former Radio \& TV Broadcasting Program. Students may choose specialized courses that qualify them in the following areas: 1) Audio/ Video/Internet Production (AVIP), which includes Television;
2) Radio Production/Broadcasting; 3) Media Sales and Marketing; and 4) Interactive Media Design. All areas emphasize the use of technology, including computers. Therefore, computer literacy is required for successful completion of this program. The program prepares graduates for entry level positions in related fields and for possible transfer to a four-year institution.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit
hour minimum general education portion of the A.A.S. degree.
See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

Required Program Core
(for all Specialty Areas 1 through 4)
Business (030)
141 Business Math
Media Communications (011)
145 Introduction to Media Communications 3
190 Language, Media and Culture 3
271 Intro to Interactive Media (Internet) 3

15 CH

24 CH

295 Practicum Internship 6
298 Audio Video or Internet Capstone Project 3
Speech (095)
101 Fundamentals of Speech Communications
Students may select one of the four specialty areas:
SPECIALTY AREA (1)

## AUDIO/VIDEO/INTERNET/PRODUCTION (AVIP)

Students will learn to create short video and audio projects and learn all facets of video and audio production from program design (pre-production), and hands-on recording (production) through the editing process (post-production). Students will take courses in webcasting and streaming media using state-of-the-art digital technology, facilities, and instruction. By the end of the program, students will have basic knowledge of lighting, camera operation, storyboarding and basic scripting, editing, sound, and producing techniques. Students will assume roles as producers, directors, camera operators and video editors. Pre-and post-production, scripting, graphics, lighting, legal requirements, and nonlinear video editing skills will be emphasized.

Required Specialty Area (1) Courses for
Audio/Video/Internet/Production (AVIP)
Media Communications (011)
170 History of Television
203 Media Writing
231 TV Production I
232 TV Production II
240 Mini-Cam and Videotape Editing

## Elective Courses for Audio/Video/Internet/ Production (AVIP)

Select three courses from the following.
Entrepreneurship (143)
201 Introduction to Entrepreneurship (3)
202 Opportunity Recognition Development (3)
204 Entrepreneurial Marketing and Sales (3)
Media Communications (011)
234 Producing for Television (3)
241 Video Editing (3)
242 Television Graphics (3)
244 Advanced Videography, Gripping and Lighting Techniques (3)
245 Advanced Production Workshop (3)
260 Media Sales and Marketing (3)
261 Project Management \& Team Dynamics (3)
270 Introduction to Radio and TV Programming (3)
272 Advanced Audio/Video Production for Interactive Media (3) Speech (095)
160 Business and Professional Speech (3)

## SPECIALTY AREA (2) <br> RADIO PRODUCTION AND BROADCASTING

The Radio Production/Broadcasting course of study provides a comprehensive overview of the Media Communications industry with a focus in radio. The program provides a real world, hands-on overview of the art and business of radio broadcasting, while developing in-depth knowledge and skills regarding the total operation of a radio station, including the history of radio broadcasting from its inception to the latest radio technology. The program will train students in the areas of on-air talent, production, programming, or business, which includes radio marketing, promotions, and sales.

Required Specialty Area (2) Courses for
18 CH

## Radio Production and Broadcasting

Media Communications (011)
102 Announcing
160 History of Radio Genres
203 Media Writing
221 Radio Production I
222 Radio Production II
260 Media Sales and Marketing

## 15 CH

## Elective Courses for Radio Production and Broadcasting <br> Select two courses from the following: <br> English (035) <br> 105 Business Writing (3) <br> 107 Report Writing (3) <br> Entrepreneurship (143) <br> 201 Introduction to Entrepreneurship (3) <br> 202 Opportunity Recognition Development (3) <br> 204 Entrepreneurial Marketing \& Sales (3) <br> Media Communications (011) <br> 224 Broadcast Performance (3) <br> 261 Project Management \& Team Dynamics (3) <br> Speech (095) <br> 160 Business and Professional Speech (3) <br> SPECIALTY AREA (3) <br> MEDIA SALES AND MARKETING

The curriculum for Sales and Marketing as part of the Media Communications program is designed to put graduates on the front lines of the business world and, more specifically, to prepare students to understand and communicate the value of media properties (TV, radio, newspaper and Internet). Each course in the Sales and Marketing program is focused and detailed, yet part of a broad-based curriculum that balances relevant management principles with hands-on marketing procedures and techniques.
Required Specialty Area (3) Courses for ..... 21 CH
Media Sales and Marketing
Business (030)
231 Principles of Marketing ..... 3
236 Advertising ..... 3
237 Selling ..... 3
English (035)
105 Business Writing OR3
Entrepreneurship (143)
201 Introduction to Entrepreneurship ..... 3
Media Communications (011)
260 Media Sales and Marketing ..... 3
Speech (095)
160 Business and Professional Speech ..... 3
Elective Courses for Media Sales and Marketing ..... 3 CH
Select one course from the following:

230 E-Business Marketing (3)
272 Sales Management (3)
Entrepreneurship (143)
202 Opportunity Recognition Development (3)
204 Entrepreneurial Marketing \& Sales (3)
Psychology (087)
206 Business and Industrial Psychology (3)
Speech (095)
102 Public Speaking (3)

## PROGRAMS OF STUDY

ARTS, A/V TECHNOLOGY \& COMMUNICATIONS

## SPECIALTY AREA (4) <br> INTERACTIVE MEDIA DESIGN

Students will learn the basic principles of graphic design and e-design as they relate to designing for the Internet and multimedia. The program will introduce time-based interactive design, animation, audio, and digital video. The students will learn to create interactive experiences, develop original concepts, and take a project from storyboarding to production. Narrative, linear, and non-linear structures will be analyzed as well as advanced navigation schemes and dynamic web strategies.

## Required Specialty Area (4) Courses for <br> Interactive Media Design <br> Visual Communications (009) <br> 102 Web Design I <br> 103 Commercial Photography <br> 122 Graphics Software <br> 132 Publication Design <br> 201 Design Management <br> 202 Web Design II <br> 212 Motion Graphics I <br> Elective Courses for Interactive Media Design

21 CH

Select one course from the following:
Art (010)
141 Intro to the Visual Arts (3)
Entrepreneurship (143)
201 Intro to Entrepreneurship (3)
202 Opportunity Recognition and Development (3)
204 Entrepreneurial Marketing and Sales (3)
Media Communications (011)
203 Media Writing (3)
241 Video Editing (3)
272 Advanced Audio \&Video Production for Interactive Media (3)
Psychology (087)
206 Business and Industrial Psychology (3)
(Prerequisite: Psych 201)

## MUSIC BUSINESS 093 <br> Basic Certificate (B.C.) 21 Credit Hours (CH)

The Basic Certificate program in Music Business prepares students for the study of the techniques and standards needed for a career as a manager, publisher, professional musician, or agent. Completion of the Music Business program can lead to employment with such businesses as recording companies, management firms, publishing companies, music festivals, or music production companies. Practical experience within the music industry is included. The field is highly competitive, but employment opportunities are expanding rapidly.
Required Program Core ..... 21 CH
Business (030)
111Introduction to Business ..... 3
231 Marketing ..... 3
Music (060)
102 Music Theory I ..... 3
105 Group Piano I ..... 2
111 Aural \& Keyboard Skills I ..... 2
120 Introduction to Music Business ..... 3
221 Music Literature and History ..... 3
225 Individual Project/Service Learning ..... 2
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 21 CH
MUSIC TECHNOLOGY 094
Basic Certificate (B.C.) 26 Credit Hours (CH)
The Basic Certificate program in Music Technology is thestudy of techniques and standards needed for careers asa recording engineer, producer, professional musician, orcomposer/ arranger. Completion of the certificate programcan lead to employment with such businesses as advertisingagencies, recording studios, recording companies, videogame companies, publishing companies, radio stations, oras a free-lance artist. The field is highly competitive, butemployment opportunities are expanding rapidly.
Required Program Core ..... 26 CH
Digital Multimedia (138)
115 Digital Soundtrack ..... 3
Music (060)
102 Music Theory I ..... 3
103 Music Theory II ..... 3
105 Group Piano I ..... 2
106 Group Piano II ..... 2
111 Aural \& Keyboard Skills I ..... 2
112 Aural \& Keyboard Skills II ..... 2
204 Commercial Music Workshop I ..... 2
205 Commercial Music Workshop II ..... 2
221 Music Literature and History ..... 3
225 Individual Project ..... 26 CH

# Programs of Study <br> ARTS, A/V TECHNOLOGY \& COMMUNICATIONS 

## VISUAL MEDIA COMMUNICATIONS 165

Associate in Applied Science degree (A.A.S.) 61 Credit hours (CH)

The A.A.S. degree program in Visual Media Communications is a creative hybrid learning environment that challenges students to acquire competent skills in art, graphics, website, and animation design. Students train as visual designers and entrepreneurs in the visual communication industry.

The program offers a 61 credit hour A.A.S. with a focus in Graphic Design. Graduates real world design projects will be documented in a website and traditional portfolio for future employment and client presentations.

## General Education

English (035)
101 Composition
Mathematics (045)
118 General Education Mathematics
Fine Arts (042)
107 History of Architecture, Painting \& Sculpture
16 CH

Theater Art (099)
Fine Arts \& Humanities and Social \& Behavioral Sciences 6
Students should meet with a college Academic Advisor for selection of remaining course requirements for the general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

## Required Program Core

33 CH
Visual Communications (009)
101 Introduction to Visual Communications 3
102 Website Design I 3
103 Commercial Photography 3
110 Production Printing 3
122 Graphic Software 3
132 Publication Design 3
134 Logo Identity Design 3
201 Design Management 3
202 Website Design II 3
212 Motion Graphics I 3
224 Digital Typography 3
Electives (Recommended)
12 CH
Art (010)
131 General Drawing (3)
144 Two-Dimensional Design (3)
CIS (032)
181 Web Development I/Basic Web Tech. (3)
Cooperative Work Experience (008)
CWE 108 (6)
Media Communications (011)
271 Introduction to interactive Media (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

## VISUAL MEDIA COMMUNICATIONS 166 <br> Advanced Certificate (A.C.) 30 Credit Hours (CH)

## Required Program Core

18 CH
Visual Communications (009)
101 Introduction to Visual Communication 3
103 Commercial Photography 3
122 Graphic Software 3
132 Publication Design 3
134 Logo Identity Design 3
224 Digital Typography 3
Electives (Recommended) $\quad 12 \mathrm{CH}$
Cooperative Work Experience (008)
CWE 108 (6)
Visual Communications (009)
102 Website Design I (3)
3201 Design Management (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS 30 CH
Programs of Study
ARTS, A/V TECHNOLOGY \& COMMUNICATIONS
VISUAL MEDIA COMMUNICATIONS/PAGE LAYOUT 192
Basic Certificate (B.C.) 15 credit hours (CH)
Required Program Core ..... 15 CH
Visual Communications (009)
103 Commercial Photography ..... 3
122 Graphic Software ..... 3
132 Publication Design ..... 3
134 Logo Identity Design ..... 3
224 Digital Typography ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 15 CH
VISUAL MEDIA COMMUNICATIONS/
WEB PAGE DESIGN 193
Basic Certificate (B.C.) 15 Credit Hours (CH)
Required Program Core ..... 15 CH
Visual Communications (009)
102 Website Design I3
132 Publication Design ..... 3
202 Website Design II ..... 3
212 Motion Graphics I ..... 3
224 Digital Typography ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 15 CH

## PROGRAMS of STUDY <br> （®）® <br> （10） <br> （®） <br> （ㅍ） <br> （®） <br> （ㅍ）

$\exists \supset N \forall N I J$ S NOILVULSINIWC
＇LNヨWヨDVNVW＇SSヨNIS円G

## Programs of Study

Business, Management, Administration \& Finance

## ACCOUNTING 001 <br> Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)

The A.A.S. degree program in Accounting is the study of basic accounting skills. Completion of the program can lead to various levels of accounting positions in accounting firms, retail stores, manufacturing, service business, and small business employment as a junior member of an accounting staff, estimator, credit analyst, budget or general accountant, bank teller, and accounts receivable or accounts payable clerk.

## General Education

15 CH
Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

## Required Program Core

Business (030)
111 Introduction to Business
141 Business Mathematics or other Mathematics course (045) 118 or above
181 Financial Accounting
182 Managerial Accounting
204 Computer Apps Intermediate Accounting
205 Intermediate Accounting
206 Auditing
208 Federal Income Tax
211 Business Law I OR
214 Legal \& Social Environment Business
241 Introduction to Finance
250 Computerized Accounting Systems
CIS (032)
120 Intro to Microcomputers

## Electives

Select three courses from the following Business or CIS disciplines or other recommended courses by a college Academic Advisor:
Business (030)
203 Introduction to Cost Accounting (3)
CIS (032)
CIS 123 Introduction to Spreadsheets on Microcomputers (3)
CIS 145 Intro to Database on Microcomputers (3)
CIS 158 Beginning Internet (3)

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## ACCOUNTING 003

Advanced Certificate (A.C.) 30 Credit Hours (CH)
Required Program Core ..... 21 CH
Business (030)
111 Introduction to Business ..... 3
181 Financial Accounting ..... 4
182 Managerial Accounting ..... 4
204 Computer Apps Intermediate Accounting ..... 1
205 Intermediate Accounting ..... 3
208 Federal Income Tax ..... 3
241Introduction to Finance ..... 3
Electives ..... 9 CH
Select three courses from the following Business or CISdisciplines or other recommended courses by a collegeAcademic Advisor:
Business (030)
36 CH
103 Business Mat
203 Introduction to Cost Accounting (3)
206 Auditing (3)
211 Business Law I (3)
250 Computerized Accounting Systems
CIS (032)
120 Introduction to Microcomputers (3)
123 Into to Spreadsheets on Microcomputers (3)
145 Intro to Data Base on Microcomputers (3)
158 Beginning Internet (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 30 CH
ACCOUNTING 002
Basic Certificate (B.C.) 17 Credit Hours (CH)
Required Program Core ..... 17 CH
Business (030)
181 Financial Accounting ..... 4
182 Managerial Accounting ..... 4
Select three courses from the following Business or CIS disciplines: ..... 9
Business (030)
111 Introduction to Business (3)
141 Business Mathematics (3)
203 Introduction to Cost Accounting (3)
204 Computer Apps Intermediate Accounting (1)
205 Intermediate Accounting (3)

206 Auditing (3)
211 Business Law I (3)
208 Federal Income Tax (3)
250 Computerized Accounting Systems (3)
CIS (032)
120 Introduction to Microcomputers (3)
123 Introduction to Spreadsheets on Microcomputers (3)
145 Intro to Data Base on Microcomputers (3)
158 Beginning Internet (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

## Business, Management, Administration \& Finance

BUSINESS ADMINISTRATION/GENERAL BUSINESS 042
Advanced Certificate (A.C.) 30 Credit Hours (CH)
The Advanced Certificate program in Business Administration/ General Business is the study of basic business administration which can lead to employment in management positions in business, industry or government such as accounting, economics, finance, labor economics, marketing, and personnel management.

## Required Program Core

Business (030)
111 Intro to Business
181 Financial Accounting
182 Managerial Accounting
211 Business Law I OR
214 Legal \& Social Environment of Business
CIS (032)
120 Intro to Microcomputers
Economics (082)
201 Principles of Economics I

## Electives

Students should meet with a college Academic Advisor for selection of the recommended elective courses shown below: Business (030)
203 Introductory Cost Accounting (3)
204 Computer Applications in Accounting (1)
205 Intermediate Accounting I (3)
212 Business Law II (3)
230 E-Business (3)
231 Principles of Marketing (3)
232 Fundamentals of International Business (3)
241 Introduction to Finance (3)
269 Principles of Management (3)
CIS (032)
101 Intro to Computer Information Systems (3)
Economics (082)
201 Principles of Economics I (3)
202 Principles of Economics II (3)
Entrepreneurship (143)
201 Intro to Entrepreneurship (3)
202 Opportunity/Recognition/Development (3)

## LIBRARY TECHNICAL ASSISTANT 303 <br> Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)

The A.A.S. in Library Science can lead to employment as an assistant to a professional librarian in cataloguing periodicals, multi-media or information services of public, private, industrial, or school libraries.

## General Education <br> Students should meet with a college Academic Advisor for selection of specific course requirements for the general education portion of the A.A.S. degree. <br> See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement. <br> Required Program Core 24 CH

3 CIS (032)
120 Introduction to Microcomputers
3158 Beginning Internet 3
Library Technology (050)
3101 Introduction to Library Procedures 3
102 Multi-Media Technologies 3
125 Learning Resource/Library Practicum 6
201 Library Public Service 3
203 Materials Preparation Procedures 3
Electives $\quad 18 \mathrm{CH}$
Students should meet with a college Academic Advisor for selection of elective courses.
TOTAL PROGRAM MINIMUM CREDIT HOURS

## Programs of Study

Business, Management, Administration \& Finance

LIBRARY TECHNICAL ASSISTANT 330<br>Basic Certificate (B.C.) 12 Credit Hours (CH)<br>\section*{Required Program Core}<br>Library Technology (050)<br>101 Introduction to Library Procedures<br>102 Multi-Media Technologies<br>201 Library Public Service<br>203 Materials Preparation Procedures

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## MANAGEMENT/MARKETING 021

Associate in Applied Science degree (A.A.S.) 62 Credit Hours (CH)
The A.A.S. degree program in Management/Marketing is the study of basic business skills along with more in-depth study in a chosen field such as management, marketing, or entrepreneurship. Completion of the program can lead to employment as assistant, trainee, supervisor, or manager in manufacturing, merchandising, or service firms, or government service. The program also prepares graduates to start a business or improve their operation of a currently existing business.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.
See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

## Required Program Core

Business (030)
111 Introduction to Business
141 Business Mathematics OR
other Mathematics course (045) 118 or above
181 Financial Accounting
182 Managerial Accounting
211 Business Law I OR
212 Business Law II OR
214 Legal \& Social Environment Business
231 Marketing
241 Introduction to Finance
269 Principles of Management
CIS (032)
120 Intro to Microcomputers

## Business Electives

Select three courses from the following Business discipline or other recommended courses by a college Academic Advisor: Business (030)
203 Introduction to Cost Accounting (3)
204 Computer Applications Inter. Accounting (1)
206 Auditing (3)
208 Federal Income Tax (3)
216 Entrepreneurship (3)
250 Computerized Accounting Systems (3)
271 Human Resources Management (3)

15 CH

29 CH
CIS ElectivesThe following CIS courses are recommended:CIS (032)
123 Intro to Spreadsheets on Microcomputers (3)145 Intro to Data Base on Microcomputers (3)
158 Beginning Internet (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS62 CH
MANAGEMENT/MARKETING 022
Advanced Certificate (A.C.) 35 Credit Hours (CH)
Required Program Core35 CH
Business (030)
111 Introduction to Business ..... 3
141 Business Math OR ..... 3
Mathematics (045) 118 or above
181 Financial Accounting4
182 Managerial Accounting ..... 4
211 Business Law OR ..... 3
212 Business Law II OR
214 Legal \& Social Environment Business
231 Marketing3
241 Introduction to Finance ..... 3
269 Principles of Management ..... 3
CIS (032)
120 Introduction to Microcomputers ..... 3
English (035)
101 Composition ..... 3
Speech (095)
101 Fundamentals of Speech Communication ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 35 CH
MANAGEMENT/MARKETING 023
Basic Certificate (B.C.) 18 Credit Hours (CH)
Required Program Core ..... 6 CH
Business (030)
111 Introduction to Business ..... 3
141 Business Math OR ..... 3
Mathematics (045) 118 or above
Select three additional courses from the Business discipline: ..... 9 CH
Business (030)
231 Marketing (3)
236 Advertising (3)
237 Selling (3)
258 Small Business (3)
269 Principles of Management (3)
Select one of the following Communications courses:3 CH
English (035)
101 Composition (3)
Speech (095)
101 Fundamentals of Speech Communication (3)
160 Business and Professional Speech (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

## PROCRAMS of STUDY <br> © <br> © <br> （r） <br> （A） <br> （n）

## Programs of Study <br> Education and Training

## CHILD DEVELOPMENT BILINGUAL TEACHER AIDE 276 <br> Associate in Applied Science degree (A.A.S.) 61 Credit Hours (CH)

The A.A.S. in Child Development - Bilingual Teacher Aide prepares graduates to assist teachers of elementary school children in bilingual education in before or after school settings. The program is also for bilingual aides in the public school system, aides who will have contact with the bilingual classroom, dual language classroom, or English as a second language classroom.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

## Required Program Core

40 CH
Child Development (090)
101 Human Growth \& Development I
102 Human Growth \& Development II
107 Health, Safety, and Nutrition
201 Observation \& Management of Child Behavior*
262 Child, Family \& Community Relations
Education (083)
260 Principles of Practice in Elementary Education
269 Practicum in Elementary Education**
Linguistics (132)
101 Language and Culture
102 Introduction to Linguistics
103 Instructional Media for Second Language Training
104 Cross Cultural/Multicultural Education
201 Issues in First \& Second Language Acquisition

## Electives

Students should meet with a college Academic Advisor for selection of elective courses.

## TOTAL PROGRAM MINIMUM CREDIT HOURS

* Requires completion of clinical experience/observation hours.
${ }^{* *}$ Course is held in school-age setting.


## CHILD DEVELOPMENT - <br> ELEMENTARY EDUCATION 280 <br> Associate in Applied Science Degree (A.A.S.) 61 Credit Hours (CH)

The A.A.S. in Child Development - Elementary Education offers courses in child development theory and the skills needed to assist teachers of elementary school children or for graduates to work in after-school care programs.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.

## Required Program Core

Child Development (090)
101 Human Growth and Development I 4
102 Human Growth and Development II OR 3
149 Creative Activities For Young Children
107 Health, Safety, and Nutrition
109 Language Development 3
120 Introduction to Early Childhood Education
Group Care of Children
143 Science and Math for the Young Child 3
201 Observation, Assessment, and Documentation to
Support Young Children and Families* 3
Education (083)
260 Principles of Practice in Elementary Education 3
269 Practicum in Elementary Education** 6

## Electives

The Child Development, Psychology and Sociology courses
listed below are recommended for elective credit:
Child Development (090)
205 Development of the Exceptional Child (3)
Psychology (087)
201 General Psychology (3)
207 Child Psychology (3)
Sociology (089)
201 Introduction to the Study of Society (3)
203 Marriage and the Family (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS
61 CH
*Requires completion of clinical experience/observation hours.
**Course is held in school-age setting.

## CHILD DEVELOPMENT ELEMENTARY EDUCATION 284 <br> Advanced Certificate (A.C.) 34 Credit Hours (CH)

Required Program Core
Child Development (090)
101 Human Growth and Development I*
102 Human Growth and Development II
107 Health, Safety, and Nutrition
109 Language and Literacy Development in Early Childhood
120 Introduction to Early Childhood Education Group Care of Children
143 Science and Math for the Young Child
201 Observation, Assessment, and Documentation to Support Young Children and Families*
Education (083)
260 Principles of Practice in Elementary Education
269 Practicum in Elementary Education**

## Elective

Students should meet with a college Academic Advisor for selection of one elective course.

TOTAL PROGRAM MINIMUM CREDIT HOURS
*Requires completion of clinical experience/observation hours. **Course is held in school age setting.

## CHILD DEVELOPMENT -

## PRE-SCHOOL EDUCATION 278

Associate in Applied Science degree (A.A.S.) 62 Credit Hours (CH)

The A.A.S. degree program in Pre-School Education provides child development theory and skills for the student who intends to work immediately in a pre-school program as a teacher or teacher assistant in public and private preschools, child care centers, or nursery schools as well as prepare students to work as teacher aides and activities supervisors.
General Education ..... 15 CH

Students should meet with a college Academic Advisor
for selection of specific course requirements for the 15.0 credit
3 hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the

State of Illinois Human Diversity requirement.

Required Program Core

35 CH

101 Human Growth and Development I 4
107 Health, Safety, and Nutrition 3
109 Language and Literacy Development
in Early Childhood
120 Introduction to Early Childhood Education
Group Care of Children
143 Science and Math for the Young Child 3
149 Creative Activities For Young Children 3
201 Observation, Assessment, and Documentation to
Support Young Children and Families*
258 Principles and Practices of Preschool Education 4
259 Practicum in Pre-School 6
262 Child, Family and Community 3
Electives 12 CH
The three courses listed below in the Child Development and CIS disciplines are recommended for elective credit in addition to other courses recommended by a college Academic Advisor:

Child Development (090)
102 Human Growth and Development II (3)
205 Development of the Exceptional Child (3)
CIS (032)
120 Intro to Microcomputers (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

## Programs of Study <br> Education and Training

CHILD DEVELOPMENT -PRE-SCHOOL EDUCATION 282Advanced Certificate (A.C.) 32 Credit Hours (CH)
Required Program CoreChild Development (090)101 Human Growth and Development I107 Health, Safety, and Nutrition109 Language and Literacy Developmentin Early Childhood
120 Introduction to Early Childhood EducationGroup Care of Children
143 Science and Math for the Young Child
149 Creative Activities For Young Children
201 Observation, Assessment, and Documentation toSupport Young Children and Families*
258 Principles and Practices of Preschool Education
259 Practicum in Pre-School
Elective
Additional course recommended for the child development field.Although not required, it is strongly recommended.Child Development 090262 Child, Family \& Community (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS
CHILD DEVELOPMENT -
PRE-SCHOOL EDUCATION 277
Basic Certificate (B.C.) 10 Credit Hours (CH)
Required Program Core
Child Development (090)
101 Human Growth and Development I
Program Electives
Select two Child Development courses from the following:
Child Development (090)
107 Health, Safety and Nutrition (3)
120 Introduction to Childhood Education/Group Care of Children (3)149 Creative Activities For Young Children (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 10 CH332 CH4 CH

## CHILD DEVELOPMENT - <br> PRE-SCHOOL EDUCATION INFANT/TODDLER 286 <br> Advanced Certificate (A.C.) 32 Credit Hours (CH)

32 CH The Advanced Certificate program in Pre-School Education Infant/ Toddler prepares students for employment in center or home-based programs that provide day care for infants and toddlers. The study of child development theory and skills is necessary for those interested in becoming "nannies" or live- in infant and child care providers.
294
107 Health, Safety, and Nutrition ..... 3
in Early Childhood ..... 3
142 Methods and Materials for mant and Todder Care ..... 3
248 Principles and Practice of Infant and Toddler Care ..... 4Electives3 CH者Chid Development(0.0)230 Introduction to Early Intervention (3)262 Child, Family and Community Relations (3)32 CH*Requires completion of clinical experience/observation hours.**Ourse is held in school age setting.

## CHILD DEVELOPMENT - <br> SCHOOL AGE CHILD CARE 275 <br> Associate in Applied Science degree (A.A.S.) 61 Credit Hours (CH)

TheA.A.S. degree program in School Age Child Care provides graduates who have met the educational requirements to qualify as group workers and child care providers of school age children. The settings for which this focus is appropriate are private child-care centers and before-and after-school programs. Graduates of the program will also qualify to be assistant teachers or education support staff in public elementary schools.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.

## Required Program Core

Child Development (090)
101 Human Growth and Development I*
102 Human Growth and Development II
107 Health, Safety, and Nutrition
144 School Age Activity Programming
201 Observation, Assessment, and Documentation to Support Young Children and Families*
205 Development of the Exceptional Child
262 Child, Family and Community Relations
268 Principles and Practice of School Age Programs
269 Practicum in School Age Child Care**
Social Service (091)
212 Introduction to Group Process

## Electives

Students should meet with a college Academic Advisor for selection of elective courses.

## TOTAL PROGRAM MINIMUM CREDIT HOURS

*Requires completion of clinical experience/observation hours. **Course is held in school age setting.

## 61 CH

## TEACHING, LEADERSHIP AND <br> SUPPORT PROFESSIONALS 055

Associate in Applied Science (A.A.S.) 63 Credit Hours (CH)
The A.A.S. degree program in Teaching, Leadership and Support Professionals prepares students for entry-level positions in educational institutions. The emphasis is on observation and practice. It is also recommended for educational support professionals who may want to upgrade their skills or credentials.

## General Education

English (035)
101 Composition
3
Humanities (041)
123 Introduction to Arts and Ideas 3
Mathematics (045)
121 Math for Elementary Teachers 4
Social Science (088)
101 General Course I Science 3
Physical/Life Sciences 3
Students should meet with a college Academic Advisor for selection of remaining course requirements for the general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the
State of Illinois Human Diversity requirement.

## Required Program Core

## Education (083)

101 An Introduction to Education 3
102 Using Technology in the Classroom 3
205 Introduction to Teacher Assistant 3
208 School Leadership and Support Professionals 4
260 Principles of Practice in Elementary Education 3
299 Special Topics in Education
11 CH Psychology (087)
201 General Psychology 3
210 Diverse Cultures in Global Age 3
Additional Requirements
Select two courses from the following:
Education (083)
209 Observation/Seminar/Practicum in Teaching,Leadership/ Support Professionals in Elementary Education (6)
210 Observation/Seminar/Practicum in Teaching,Leadership/ Support Professionals in Secondary Education (6)
211 Observation/Seminar/Practicum in School Leadership/Support Professionals in Community Colleges (6)

## Programs of Study <br> Education and Training

## Electives

(minimum) 9 CH
Select three courses from the following:
Child Development (090)
101 Human Growth and Development I (4)
109 Language and Literacy Development
in Early Childhood (3)
Education (083)
103 Students with Disabilities in School (3)
203 Education Psychology (3)
256 The American Public School (3)

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## TEACHING, LEADERSHIP AND

SUPPORT PROFESSIONALS 057
Advanced Certificate (A.C.) 35 Credit Hours (CH)
The Advanced Certificate program in Teaching, Leadership and Support Professionals is recommended for students who are interested in pursuing entry-level positions in educational institutions as well as for educational support professionals who may want to upgrade their skills or credentials. The program has as its emphasis observation and practice.

## Required Program Core

23 CH
Education (083)
101 An Introduction to Education
3
102 Using Technology in the Classroom 3
208 School Leadership and Support Professionals 4
260 Principles of Practice in Elementary Education 3
299 Special Topics in Education 4
English (035)
101 Composition
3
Psychology (087)
201 Introduction to Psychology 3

## Electives

12 CH
Select two courses from the following:
Education (083)
209 Observation/Seminar/Practicum in
Teaching,Leadership/ Support Professionals
in Elementary Education (6)
210 Observation/Seminar/Practicum in Teaching,
Leadership/Support Professionals
in Secondary Education (6)
211 Observation/Seminar/Practicum in School
Leadership/Support Professionals in
Community Colleges (6)
TOTAL PROGRAM MINIMUM CREDIT HOURS

$$
\begin{aligned}
& \begin{array}{l}
7 \\
7 \\
7 \\
7
\end{array} \\
& \text { ก } \\
& \text { ヨวN }
\end{aligned}
$$

## PROCRAMS of STUDY <br> © <br> © <br> (1) <br> © <br> (a)

## PROGRAMS OF STUDY <br> Health Science

## BIOTECHNOLOGY 215 <br> Associate in Applied Science degree (A.A.S.) <br> 67 Credit Hours (CH)

The A.A.S. degree program in Biotechnology utilizes cellular components and microorganisms for the production of products used in medicine, pharmacology, agriculture, food processing and environmental cleanup. Employment opportunities are available in laboratories, hospitals, and research and development companies.

## Program Requirements for Admission

- Completion of the Biotechnology program application.
- Graduation from an accredited high school or acceptable scores on the General Education Development (GED) test. Foreign and domestic high school education or domestic GED must be validated by official transcripts.
- Validation of previous college or biotech education by official transcripts.
- Average or above-average high school standing with one year of biology.
- Algebra, chemistry, and biology courses taken in another country must be repeated in this country.
- Acceptable scores on the American College Test (ACT).
- Acceptable scores on the standardized reading test administered by Truman College.
- Demonstrated proficiency in speaking and reading English.

Each student must achieve a minimum grade of $C$ for all courses required to complete the degree. An overall grade point average of 2.0 or better must be maintained.

It is strongly recommended that students take Chemistry 207 "Organic Chemistry II" and Biology 210 "Survey of Biotechnology" to be competitive in the Biotechnology industry. Since Biotechnology is highly diverse, it is important that students select courses specific to the industry they are seeking to be employed. They should meet with a college Academic Advisor from the Department of Biology/Biotechnology or Department Chairperson.

## General Education <br> 18 CH

Biology (023)
121 Biology I

English (035)
101 Composition 3
Math (045) 125 Introductory Statistics"4
(Students should meet with a college Academic Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52.)

| Required Program Core | 43 CH |
| :--- | ---: |
| Biology (023) | 5 |
| 122 Biology II | 4 |
| 209 Biochemistry | 3 |
| 250 Intro to Molecular Biology | 4 |
| 251 Molecular Biology I | 4 |
| 252 Molecular Biology II | 5 |
| Chemistry (073) | 6 |
| 201 General Chemistry I | 4 |
| 205 Organic Chemistry I |  |
| Mathematics (045) | 4 |
| 140 College Algebra | 4 |
| Microbiology (024) | 6 CH |
| 233 General Microbiology |  |
| 234 Applied Microbiology |  |
| Electives |  |
| Select a minimum of two courses from the following |  |
| Biology, Chemistry and CIS disciplines or other |  |
| recommended courses by a college Academic Advisor. |  |
| Biology (023) |  |
| 107 Nutrition-Consumer Education (3) |  |
| 210 Survey of Biotechnology (3) |  |
| Chemistry (073) |  |
| 204 Quantitative Analysis (5) |  |
| 207 Organic Chemistry II (6) |  |
| 217 Intro to Instrumental Analysis (4) |  |
| CIS (032) |  |
| 116 Intro to Operating Systems (3) |  |

## DENTAL HYGIENE 222 <br> Associate in Applied Science degree (A.A.S.) 72 Credit Hours (CH)

NOTE: Until further notice, the Dental Hygiene program will remain at the approved 72 credit hours shown.

The A.A.S. in Dental Hygiene provides specialized educational, clinical, and therapeutic services in preventive oral healthcare preparing graduates for national, regional, and state board examinations required for licensure as registered dental hygienists. Major responsibilities include examination of the teeth and oral structures; the removal of plaque, calculus and stain from teeth; exposing and developing x-rays; and educating patients in home oral healthcare techniques. The A.A.S. can lead to employment opportunities in private dental offices, managed care facilities, dental product sales, public health clinics, or the insurance industry.
A unique partnership with the University of Illinois at Chicago (UIC) College of Dentistry gives students the opportunity to complete prerequisite and general education courses at Kennedy-King College followed by the core professional courses and clinical training at the UIC's College of Dentistry.
Special admission requirements for the Dental Hygiene Program include a college grade point average of 2.0 or better (on a 4.0 scale), satisfactory scores on standardized college placement and vocational aptitude tests, evidence of high school graduation or GED certificate, proof of current certification in CPR Basic Life Support at Healthcare Provider Level, letters of recommendation, autobiographical statement, and completion of 20 hours of college level prerequisites with a grade of "C" or better in:

Biology (023)
121- General Biology I (4)
226- Human Structure and Function I (4)
227- Human Structure and Function II (4)
Chemistry (073)
121- Basic Chemistry I (4)
Sociology (089)
201- Introduction to the Study of Society (3)
Selected candidates must complete a comprehensive physical and dental examination, including appropriate immunizations prior to the beginning of classes. Students are responsible for the purchase of all required books, instruments, uniforms, gloves, and malpractice insurance. Program curriculum, admission requirements, and cost estimates are subject to change. Please contact the department office for current guidelines.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association. The Commission is a specialized accrediting body recognized by the Council for Higher Education Accreditation and by the United States Department of Education.

The Dental Hygiene core professional courses listed below must be taken in sequence and passed with a grade of " $C$ " or better before the student may advance in the program.
First Year
First Semester - SummerDental Hygiene (100)
110 Oral Microbiology and Immunology ..... 2112 Concepts of Preventive Therapy I
Mathematics (045)
118 General Education Math ..... 4
Semester total ..... 8 CH
Second Semester - FallDental Hygine (100)
121 Principles of Dental Hygiene I (lecture) ..... 2
123 Principles of Dental Hygiene I (lab) ..... 2
125 Nutrition and Biochemistry ..... 2
131 Oral Structures and Function ..... 3
133 Head and Neck Anatomy ..... 2
135 Concepts of Preventive Therapy II ..... 1
English (035)
101Composition3
Semester total ..... 15 CH
Third Semester - Spring ..... Credit Hours
Dental Hygiene (100)
122 Principles of Dental Hygiene II (lecture) ..... 2
124 Principles of Dental Hygiene II (lab) ..... 3
126 Dental Radiology ..... 3
128 General and Oral Pathology ..... 2
130 Dental Materials ..... 3
Speech (095)
101 Fundamentals of Speech Communication ..... 3
Semester total ..... 16 CH
Second Year
Fourth Semester - Summer Credit Hours
Dental Hygiene (100)
200 Summer Clinic ..... 3
202 Critique of Dental Literature ..... 1
Psychology (087)
201 General Psychology ..... 3
Semester total ..... 7 CH
Fifth Semester - Fall ..... Credit Hours
Dental Hygiene (100)
233 Expanded Functions ..... 2
235 Community Dental Health I ..... 2
241 Dental Pharmacology ..... 2
243 Periodontics ..... 2
251 Clinical Dental Hygiene I ..... 5
Semester total ..... 13 CH
Sixth Semester - Spring ..... Credit Hours
Dental Hygiene (100)250 Oral Diagnosis2
252 Clinical Dental Hygiene II ..... 5
254 Dental Specialties ..... 1
256 Community Dental Health II ..... 1
258 Ethics and Jurisprudence ..... 2
260 Senior Seminar ..... 2
Semester total ..... 13 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 72 CH

## Programs of Study

health Science

## EMERGENCY MEDICAL TECHNICIAN - BASIC ENTRY LEVEL \& PARAMEDIC ADVANCED LEVEL

## (See below: Emergency Medical Technician-Basic (Basic Certificate) 252; EMT II Paramedic 265 (Advanced Certificate); and EMT II Paramedic 263 (A.A.S.)

A career in Emergency Medical Services (EMS) provides the student with the knowledge and training to recognize symptoms of illness and injury and to provide emergency medical care. Professionals in the field of EMS are prepared to make quick decisions based on classroom, laboratory, and field experience. Emergency medical technicians and paramedics perform their jobs with and for people. Students must have a sincere desire to work with people and must be empathetic to the needs of the sick and injured. Regional EMS systems utilize two levels of practice, EMT-B and Paramedic, which are licensed by the State of Illinois.

## Entry level training: EMT-B

Emergency Medical Technician-Basic (EMT-B) training provides basic knowledge and skills that can be used at home, school, or the work place, whenever a medical emergency is present. Successful completion of the certificate program comprising one course enables the student to sit for the state licensing exam. Students must attain license as an EMT-B before pursuing the paramedic level. EMT-B licensing is required by most municipalities for employment as fire fighter and other public service career.

## Advanced level training: Paramedic

Once the EMT license is attained, a student can advance to the paramedic program. This program offers a higher level of skill and knowledge to render advanced life saving techniques in an emergency situation. Successful completion of the program enables the student to sit for the state licensing exam. Paramedic licensing is required for all advanced life support ambulance service.

## EMERGENCY MEDICAL TECHNICIAN-BASIC 252 <br> Basic Certificate (B.C.) 8 Credit Hours (CH)

## Program Requirements for Admission

- Official high school transcript or GED certificate showing date of graduation or completion.
- 18 years of age or older.
- Must be eligible to enroll in or have passed English 101 or successful completion of EMT 100 - Emergency Medical Technician-First Responder Training course.
- Must complete interview with program director.


## Required Program Core <br> Credit Hours <br> Emergency Medical Technician (120) <br> 101 Emergency Medical Technician-Basic <br> 8 <br> TOTAL PROGRAM MINIMUM CREDIT HOURS 8 CH

## EMT II PARAMEDIC 265

## Advanced Certificate (A.C.) 34 Credit Hours (CH)

The Advanced Certificate in the Paramedic Program is awarded to the student that successfully completes the Paramedic Core Curriculum. Courses run for three consecutive semesters starting each fall. Applications are accepted the previous spring. Successful completion of the core curriculum provides eligibility to take the licensing examination offered by the Illinois Department of Public Health or the National Registry of EMTs.

## Program Requirements for Admission

Courses runs for three consecutive semesters starting each fall semester, Applications are accepted the previous spring. To be considered for admission the applicant must:

- Be a high school graduate or GED Certificate holder.
- Be currently licensed by the State of Illinois as an EMT-B.

Note: Students enrolled in a current spring semester EMT class who have not completed the state exam are not eligible to apply unless from a MXC EMT class with acceptable course grade.

- Earn a passing grade in Biology 116, equivalent A\&P course or higher (such as Human Structure and Function/BIO 226 and 227).
- Have a current CPR card.
- Ambulance experience as an EMT-B (approximately 500 hours) by start of program is strongly recommended.
- Achieve acceptable scores on admissions examinations. Submit, by deadline, completed program application with transcripts, to the Paramedic Program Director at Malcolm $X$ College.


## Applicant Interviews

Interviews with the EMS Region XI Admissions Committee are granted to those applicants who have met or exceeded admission criteria.

## Selection Factors

Selection of candidates for this program is highly competitive and conducted by interview process. Evaluation of applicant ability is based on academic history, EMS work experience, references, and communication skills. Emphasis is placed on academic history as demonstrated by GPA, and motivation as demonstrated by experience in the EMS field.

## Required Program Core

First Semester
Emergency Medical Technician (120)
221 Essentials of Paramedic Medicine I
Credit Hours

222 Paramedic Medicine Practicum I

## Semester total

## Second Semester

223 Essentials of Paramedic Medicine II
224 Paramedic Medicine Practicum II
Credit Hours

Semester total
Third Semester
227 Field Internship
Semester total

## TOTAL PROGRAM MINIMUM CREDIT HOURS

Credit Hours

## EMT II PARAMEDIC 263

Associate in Applied Science degree (A.A.S.) 61 Credit Hours (CH)

In addition to the Advanced Certificate, Malcolm X College offers the only paramedic program in the City of Chicago and is one of the few colleges in Illinois to offer an Associate in Applied Science Degree (A.A.S.) in this professional specialty. Successful completion of the Paramedic Core Curriculum, in addition to complementary general education courses, enables the paramedic student to attain an A.A.S. degree. Completion of the degree can broaden the student's marketability as well as provide a strong basis for continued professional learning.
This program is presented as a collaborative effort by Malcolm 9 X College, the Chicago Fire Department, and the Chicago Resource Hospitals: Advocate Illinois Masonic Medical Center, Northwestern Memorial Hospital, and University of Chicago Hospitals. The Paramedic Program is approved and accredited by the Illinois Department of Public Health, Division of Emergency Medical Services and Highway.

| General Education | $\mathbf{2 7}$ CH |
| :--- | ---: |
| English (035) | 3 |
| 101 Composition |  |
| Biology (023) <br> 120 Terminology for Medical Careers | 3 |
| Sociology (089) |  |
| 201 Introduction to the Study of Society | 3 |
| Psychology (087) | 3 |
| 201 General Psychology | 3 |
| Communications elective | 3 |
| Physical/Life Sciences electives |  |
| Fine Arts \& Humanities and Social \& Behavioral |  |
| Sciences | 9 |

(Students should meet with a college Academic Advisor for selection of one course each from these two disciplines. One course must meet the State of Illinois Human Diversity requirement. See A.A.S. model on page 52.)

## Required Program Core

Emergency Medical Technician (120)
221 Essentials of Paramedic Medicine I
222 Paramedic Medicine Practicum I 5
223 Essentials of Paramedic Medicine II 9
224 Paramedic Medicine Practicum II 5
227 Field Internship 6
TOTAL PROGRAM MINIMUM CREDIT HOURS
For further information about attaining an Associate in Applied Science degree in Emergency Medical Services, contact the EMS Program Office at (312) 850-7124.

## Programs of Study

Health Science

MEDICAL ASSISTANT (BASIC) 359<br>Advanced Certificate (A.C.) 33 Credit Hours (CH)

The Advanced Certificate program for Medical Assistant prepares students to become multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures in a doctor's office, clinic, hospital, or other medical setting.

## Required Program Core

33 CH
Biology (023)
120 Terminology for Medical Careers
Health (001)
102 Medical Law \& Ethics
103 Medical Assisting Clinical Procedures I
104 Medical Assisting Clinical Procedures II
105 Medical Careers Professional Development
106 Administrative Procedures
107 Pharmacology
108 Fundamentals of Ambulatory Billing \& Coding
109 Medical Assisting Externship Practicum
251 First Aid

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## MEDICAL ASSISTING 386

Basic Certificate (B.C.) 26 Credit Hours (CH)
The Basic Certificate program in Medical Assisting is a hands-on training program encompassing the administrative, clinical and laboratory principles of the medical office. The program is recommended for those contemplating a career in health care professions.

## Required Program Core

Biology (023)
115 Human Biology
120 Terminology for Medical Careers
132 Clinical Lab Procedures for Medical Offices
Business (030)
184 Principles of Medical Office Administration
CIS (032)
Introduction to Microcomputer
Phlebotomy (113)
109 Phlebotomy Practicum \& Seminary I

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## MORTUARY SCIENCE 257

Associate in Applied Science degree (A.A.S.) 62 Credit Hours (CH)

The A.A.S. degree program in Mortuary Science prepares students enrolled in the program with work-based experiences in how to embalm and restore human remains, arrange and conduct religious and humanistic funerals, memorial services, manage funeral home operations, sell funeral merchandise, assist grieving families, and assist members of the medical profession in areas related to human remains. Funeral home establishments may employ students prior to the state of Illinois required internship. The program is in compliance with the standards, guidelines, and curriculum of the American Board of Funeral Service Education (ABFSE), the Conference of Funeral Service Examining Boards (ICFSE), the City Colleges of Chicago (CCC), and the Illinois Department of Financial and Professional Regulations (IDFPR).
Goals of the Program: To provide a relevant, current and comprehensive ABFSE curriculum, provide comprehensive public safety and technical experiences through laboratory education, and to establish mastery levels at which students can successfully complete all program requirements and the International Conference of Funeral Service Exam (ICFSE), provide students with the necessary academic preparation to become licensed by the IDFPR, and to establish and maintain program policies that supports a well rounded, globally professional for empowerment.

The Program recognizes the importance of funeral service education personnel as: members of a human services profession, members of the community in which they serve, participants in the relationship between bereaved families, and those engaged in the funeral service profession; and as professionals, knowledgeable of and compliant with federal, state, provincial, and local regulatory guidelines; as well as professionals sensitive to the responsibilities for public health, and welfare in caring for human remains.

The program qualifies graduates to register with the IDFPR for intern to state licensure upon successful completion of the program and a registered score on the ICFSE (see

Capstone course requirements on last page of Mortuary Science program narrative).

[^1]
# PROGRAMS OF STUDY <br> Health Science 

## Program Admission Requirements

- Be at least 18 years of age.
- Official high school transcripts or General Education Certificate (GED) showing date of graduation or completion date (as applicable) for first-time college enrollment.
- Official college transcripts from all institutions attended.
- Completion of 18 semester credit hours in BIO 120 or Health Science 102, BIO 121, English 101, Speech 101, and Mathematics 118 for fall/August Day enrollment or, completion of 34 semester credit hours in BIO 120 or Health Science 102, BIO 121, English 101, Mathematics 118, BIO 226, BIO 227, BIO 130 and 131, Entrepreneur 201 and CIS 120 for spring/May evening enrollment.
- Grade Point Average must be at least "C" (GPA 2.5) for fall day enrollment or,
- Grade Point Average must be at least "C" (GPA 3.0) for spring evening enrollment.
- Grade C or better in English 101 and Mathematics 098 or a 10th grade reading and math level on the placement examination.
- Completion of all Prerequisite Electives \& General Education courses specified in day or evening curriculum.
- Submission of completed application to the Mortuary Science Program.
- Submission of three Letters of Recommendation.
- Submission of an Essay.
- \$40.00 non-refundable application fee with application submission.
- Interview with Program Director and Advisory Board Members.
- Biology 226 and 227 general education courses for transferability must have been completed within five years of admission. If more than five years, these courses must be audited or successfully tested out through program assessment. All courses strictly in Mortuary Science must be taken in the program. Transfer students must submit a full application packet and meet with Program Director.
- Transfer status is not a guaranteed acceptance. MXC college advisors perform transcript evaluations at the request of the student. Transcript evaluation forms are available at the Office of Admissions and Student Records on campus.
- Application deadline: April 7 of every year.
- Electronic notification of acceptance by program: April.
- Electronic applicant response to acceptance offer: April.
- Conviction of a felony: Contact the IDFPR (217)782-8556 to inquire if license would be awarded by state to practice in this profession.


## Acceptance Policy

- Candidates offered admission may not defer admission to a subsequent year. Applicants who decline admission must reapply.
- TheMortuary ScienceProgram Informationand Application is available on the web: www.malcolmx.ccc.edu/aas/mortuaryscience.
- The annual passage rate of first-time takers on the National Board Examination for the most recent threeyear period for this institution and all ABFSE accredited funeral service education programs is posted on the ABFSE web site www.abfse.org.
- The Mortuary Science Program at Malcolm X College is accredited by the American Board of Funeral Service Education (ABFSE) 3414 Ashland Avenue, Suite G, St. Joseph, Missouri 64506 (816) 233-3747. www.abfse.org Executive Director: Dr. Michael Smith.
(Public notification of change in Executive Director, spring 2011.)
To graduate with an Associate in Applied Science degree in Mortuary Science and be eligible to apply to the IDFPR, the student must:
- Complete the required prerequisite courses.
- Complete the 62 credit hours of the Mortuary Science curriculum.
- Earn at least a 2.0 grade point average, a "C" or higher in Mortuary Science courses.
- Pass the Practice National Board Exam (PNBE) and Comprehensive Exit Examinations in capstone course.
- Register and complete the Arts and Sciences National Board Exam (NBE) within 45 days of the City Colleges of Chicago graduation date.
- Meet all graduation requirements of the City Colleges of Chicago and Mortuary Science program.

Application Deadline is April 7 of every year. New students are accepted into the Mortuary Science program during the spring of each year, with the program starting during the spring term in May and during the fall term in August. Courses are offered Monday-Thursday during the fall enrollment in the day from 8 a.m. $-3: 20$ p.m.; during the spring enrollment in the evening from 6-8:50 p.m.; and during the summer enrollment in the evening from 4-9:50 p.m.

Upon acceptance into the Mortuary Science program, students must provide documentation of current health insurance, immunizations and recent medical examination. The student must exemplify professionalism, good communication and language skills and an overall comprehension of public health and sanitation. Some of the required courses have their own prerequisite course. Please see each course descriptions in the college catalog.

## Programs of Study <br> health Science

## Prerequisite Courses

## Mortuary Science Day program:

These requirements must be completed before applicant applies to the Mortuary Science Day Program. Each course must be taken by all students to establish eligibility for admission and fulfillment of the Associate in Applied Science degree requirements.
Biology (023)
120Terminology for Medical Careers OR
Health Science (124)
102 Prof. Medical \& Health Care Practices
Biology (023)
121 Biology I
English (035)
101 Composition
Mathematics (045)
118 General Education Mathematics
Speech (095)
101 Fundamentals of Speech Communications

## Mortuary Science (128) ABFSE Core-Courses and General Education Courses 18-Month DAY Curriculum begins in fall/August

First Semester (Aug.-Dec.) Credit Hours
Mortuary Science (128)
102 Microbiology for Embalmers
103 Chemistry for Embalmers
104 Pathology for Embalmers
111 History of Funeral Service
Biology (023)
226** Human Structure and Function I

## Semester total

Second Semester (Jan.-May)
Credit Hours
Mortuary Science (128)
108 Accounting in Funeral Service
109 Sociology for Funeral Service
207 Restorative Art
213 Embalming Theory I
Biology (023)
227** Human Structure and Function II 4

## Semester total

Third Semester (Aug.-Dec.)
Mortuary Science (128)
Credit Hours

203 Funeral Directing
204 Mortuary and Business Law
215 Restorative Art Laboratory
216 Embalming Theory II3

Biology (023)
130 \& 131** Human Cadaver Anatomy I and II 2
Entrepreneurship (143)
201*** Intro to Entrepreneurship 3
Semester total 163

Fourth Semester (Jan.-May) Credit Hours
Mortuary Science (128)
210 Advanced Mortuary Science Practice/Ethics 2
211 Psychology of Funeral Service 3
209 Funeral Management/Merchandise 3
214 Embalming Laboratory 3
CIS (032)
120*** Introduction to Microcomputers 3
3 Semester total 14
Total General Education/ABFSE hours 16
Total Core Course hours 46
TOTAL PROGRAM MINIMUM CREDIT HOURS 62 CH
**General Education courses included in program credit hours
***ABFSE Business Management (Entrepreneurship) course required and included in program credit hours

Accelerated Curriculum-14-Month EVENING Curriculum This program of study is available to any student who has successfully completed all of the prerequisite electives and general education courses. This program is designed to meet the needs of those applicants who have completed the minimum requirement of 34 college credit hours within the required prerequisite electives and general education courses.

Acceptance notice must be issued from the Director of the Mortuary Science Program prior to enrollment into the 14-Month Evening Program. Courses are offered in the evenings only. Students in the accelerated program can only attend courses in the evening. Students are not allowed to attend day course offerings and vice-versa. Application deadline is April 7 of every year.

Courses are offered Monday-Thursday from 4-9:50 p.m. during first and fourth semesters, and from 6-8:50 p.m. during the second and third semesters. The accelerated curriculum begins in May and ends in July of the following year. All students are encouraged to have access to a computer and Internet services. Several course offerings will require basic computer skills due to Blackboard course materials and assessments. Several computer labs are located on campus for student convenience. Prerequisite Electives and General Education Courses.
These requirements must be completed before applicant applies to the Mortuary Science Evening Program. Each course must be taken by all students to establish eligibility for admission and fulfillment of the Associate in Applied Science degree requirements.
Health Science (124)
102 Professional Medical and Healthcare Practices OR
Biology (023)
120 Terminology for Medical Careers
121 Biology I
226 Human Structure \& Function I
227 Human Structure \& Function II
130 Human Cadaver Anatomy I
131 Human Cadaver Anatomy II
English (035)
101 Composition
Speech (095)
101 Fundamental of Speech Communication
Mathematics (045)
118 General Education Math
Entrepreneurship (143)
201 Intro to Entrepreneurship
CIS (032)
120 Intro to Microcomputers
** General Education courses included in program credit hours
***ABFSE Business Management (Entrepreneurship) course
required and included in program credit hours

## Mortuary Science Core Courses <br> 14-Month Evening Curriculum begins in spring/May

First Semester (May-Aug.) Credit Hours
Mortuary Science (128)
109 Sociology for Funeral Service 3
111 History of Funeral Service 3
104 Pathology for Embalmers 3
211 Psychology of Funeral Service 3
Semester total 12
Second Semester (Aug.-Dec.) Credit Hours
Mortuary Science (128)
102 Microbiology for Embalmers 3
103 Chemistry for Embalmers 3
213 Embalming Theory I 3
207 Restorative Art 3
Semester total 12
Third Semester (Jan.-May) Credit Hours
Mortuary Science (128)
203 Funeral Directing
3
204 Mortuary and Business Law 3
214 Embalming Laboratory 3
216 Embalming Theory II 3
Semester total 12
Fourth Semester (May-Aug.)

Credit Hours

Mortuary Science (128)
108 Accounting in Funeral Service 3
209 Funeral Management and Merchandise 3
215 Restorative Art Laboratory 2
210 Advanced Mortuary Science Practice/Ethics 2
Semester total 10
Total General Education/ABFSE hours 16
Total Core Course hours 46
TOTAL PROGRAM MINIMUM CREDIT HOURS 62 CH
**General Education courses included in program credit hours.
***ABFSE Business Management (Entrepreneurship) course
required and included in program credit hours

## Day/Evening Program

One (1) Capstone Course: To registerfor the capstone course, students must have successfully completed semesters one-three and are concurrently enrolled in the fourth semester. Beginning January 1, 2004 all Funeral Service Education Students must take the National Board Examination (NBE) as a requirement for completion of the program. The NBE is the final exam in the capstone course. Students must self-register and pay the NBE fee within 45-days of the City Colleges of Chicago graduation date in order to take the final exam. Students must first obtain authorization from the Director before self-registration. Once authorized, failure to register and pay the NBE fee within the 45-days will prevent the student from successfully completing the course and declaring completion and graduation status from the program and college.

## Programs of Study

## NEPHROLOGY/RENAL TECHNOLOGY 247 <br> Associate in Applied Science degree (A.A.S.) 65 Credit Hours (CH)

The A.A.S. degree program in Nephrology (Renal Dialysis) is a medical discipline specializing in the treatment of patients with end stage renal disease and/or dysfunction. Nephrology technologists are members of a health care team dedicated to helping patients on renal dialysis. Technologists operate technical and sophisticated medical equipment which removes excess fluids and toxins from the circulatory system. They monitor, adjust settings, and record patient data during dialysis. Technologists must become familiar with associated medical support equipment, the application of such, and their safe handling and cleaning. With the high prevalence of diabetes and hypertension, the number of people developing End Stage Renal Disease is increasing. The field of Nephrology is expanding and advancing, which requires Renal Dialysis Technicians and Technologists to have more advance skills.

## Enrollment Procedures

A program application is required for entry. Students are admitted in the spring semester with the program starting in the fall semester.

## Program Admission Requirements

- Must be at least 18 years of age.
- Submit completed application to the Office of Nephrology/ Renal Technology program along with official high school transcripts or GED certificate showing date of graduation and two letters of recommendation from former teachers, employers, counselors or minister.
- Provide official transcripts for all college courses taken by applicant.
- Submit letter to the Nephrology/Renal Technology office stating why the applicant has chosen the field of Nephrology/ Renal Technology.
- Achieve a minimum grade "C" or better in English 101.

For more information on the Nephrology/Renal Technology program please call (312) 850-7370 or 7371.

Note: This program is exempt from the A.A.S. model shown on page 52, since it was approved by ICCB prior to the development of this model effective with the 2012-2014 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.
First Year
Fall Semester Credit Hours
Biology (023)
120 Terminology for Medical Careers ..... 3
Renal Technology/Nephrology (018)
101 Intro to Health Care Field \& Nephrology ..... 3
102 Basic Hemodialysis Principles I ..... 3
103 Basic Hemodialysis Principles II ..... 3
104 Hemodialysis Procedures I ..... 3
Semester total15 CH
Spring Semester Credit Hours
Chemistry (073)
121 Basic Chemistry I ..... 4
Renal Technology/Nephrology (018)
105 Heparinization / BAC in Dialysis ..... 3
106 Diagnostic Tests \& Procs in Neprology ..... 3
107 Hemodialysis Procedures II ..... 3
108 Clinical Experience I ..... 3
Semester total16 CH
Summer Semester
Renal Technology/Nephrology (018)
109 Clinical Experience IICredit Hours
Semester total ..... 3 CH
Second Year
Fall Semester ..... Credit HoursPsychology (087)
201 General Psychology
Renal Technology/Nephrology (018)
201 Renal Physiology and Renal Diseases ..... 3
202 Renal Disease and Pathophysiology ..... 3
203 Clinical Experience III ..... 3
204 Clinical Experience IV ..... 3
Semester total15 CH
Spring Semester
Credit Hours
Mathematics (045)
118 General Education Mathematics ..... 4
Renal Technology/Nephrology (108)
205 Uremic Syndrome ..... 3
206 Advanced Technology in Nephrology ..... 3
207 Clinical Experience V ..... 3
208 Clinical Experience VI ..... 3
Semester total ..... 16 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 65 CH

# Programs of Study <br> Health Science 

## NURSING 239

Associate in Applied Science (A.A.S.) 69 Credit Hours (CH)

The A.A.S. degree program in Nursing prepares students through the study of nursing theory and patient care techniques to take the licensure examination for Registered Nurses (RN). Both classroom instruction and clinical experiences in Chicago and surrounding suburban area hospitals and primary care facilities are provided. The curriculum is designed to lead the student to employment as a Registered Professional Nurse in hospitals, clinics, nursing homes, physicians' offices, schools, public health, government, and military, or industry.
Note: Effective fall 2012, City Colleges of Chicago updated its Associate Degree Nursing (ADN) program application process in an effort to create a more efficient and seamless system. All new applicants to the CCC Nursing Programs will apply via a centralized online application at:
http://www.ccc.edu/services/Pages/Apply-to-the-NursingProgram.aspx

The online application process will streamline the admission process and allow prospective students to apply by submitting one single application which will be reviewed by the CCC Nursing Program Admissions Committee. However, receiving and completing the application for a Nursing program does not guarantee admission. In addition, indicating the college preference choices also does not guarantee admission.

## Program Prerequisite Requirements:

The prerequisite requirements for the 69 CH Nursing program include four prerequisite courses which must be completed and grades available prior to submitting the online application by the posted application deadline date. The minimum 16 credit hours earned for these prerequisite courses count towards the approved 69 credit hour degree program and also fulfill the general education portion of the degree.

## Prerequisite General Education Courses:

English 101 with a "C" or higher; (3 CH)
Biology 121 with a " C " or higher; ( 5 CH )
Chemistry $121(4 \mathrm{CH})$ with a "B" or higher or
Chemistry $201(5 \mathrm{CH})$ with a "C" or higher
Math $118(4 \mathrm{CH})$ or Math $125(4 \mathrm{CH})$ or higher
Math course with a "C" or better

## Total General Education Prerequisite Courses 16 CH minimum

## Required Program Core

Nursing (063)

## Semester I

101 Fundamentals of Nursing I

## Semester 2

102 Fundamentals of Nursing II 7

## Semester 3

210 Nursing Process and Alterations in Homeostasis I 6
211 Nursing Process and Alterations in Homeostasis II 6

## Semester 4

212 Nursing Process and Alterations in Homeostasis III 6
213 Nursing Process and Alterations in Homeostasis IV 6
203 Nursing in Perspective 3
Total Credit Hours for Core Courses 41 CH

## Additional Requirements:

(Must be taken before enrolling in third semester of Nursing)
Biology (023)
226 Human Structure and Function I 4
227 Human Structure and Function II 4
Microbiology (024)
233 General Microbiology 4
ssTotal Additional Requirements 12 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS $\quad 69 \mathrm{CH}$

Note: This program is exempt from the A.A.S. model shown on page 52, since it was approved by ICCB prior to the development of this model effective with the 2012-14 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

## Programs of Study

Health Science

NURSING (PRACTICAL) 240<br>Advanced Certificate (A.C.) 49 Credit Hours (CH)

The Advanced Certificate program in Practical Nursing provides students with a basic knowledge of nursing theory and practice. Graduates of the practical nursing program meet the educational requirements for the NCLEX-PN exam to become a licensed practical nurse (LPN). Graduates of the program may transfer their credits to an associate or bachelor degree nursing program. If more applicants apply than the program can accept, the most qualified applicants will be accepted.

Requirements for consideration into the program:

- High School Diploma or GED
- Program Application
- Official Transcripts
- Proof of eligibility for college level math by coursework or placement test
- Pre-Admissions Test


## General Education

23 CH
English (035)
101 Composition I
Biology (023)
*120 Terminology for Medical Careers
*121 Biology I
226 Human Structure and Functions I
227 Human Structure and Functions II
Math (045)
118 General Math OR
125 Introductory Statistics
Required Program Core
First Semester
Nursing (063)
150 Nursing Fundamentals I
151 Nursing Fundamentals II
152 Nursing Perspectives

## Second Semester

153 Nursing through the Life Span I
154 Nursing through the Life Span II
Third Semester
155 Nursing through the Life Span III

## TOTAL PROGRAM MINIMUM CREDIT HOURS

49 CH

NURSING (RN COMPLETION) 381
Associate in Applied Science degree (A.A.S.)
70 Credit Hours (CH)
The A.A.S. degree program in Nursing RN Completion provides students who have completed the Practical Nursing Program with the nursing coursework that will result in an Associate in Applied Science degree in Nursing. This is a ladder program designed to provide an opportunity for Practical Nursing (PN) graduates to continue their education by building on their previous education rather than repeating previously learned material. The A.A.S. degree in Nursing program prepares students to become registered nurses (RN's) through licensure from the Illinois Department of Financial and Professional Regulation (IDFPR), and meets critical local, state, and national needs for nursing professionals. Successful completion of the program will allow the student to apply to sit for the NCLEX- RN licensure examination.

## Admission Requirements for the RN Completion <br> Nursing Program:

Admission is competitive. The District has one admission policy for all the City Colleges of Chicago RN Programs. Students seeking admission must first successfully complete the entire program of study to become a practical nurse (PN). What makes the RN Completion program unique is that students seeking admission into the program are not required to take the NCLEX-PN Licensure Examination.

Note: Effective fall 2012, City Colleges of Chicago updated its Associate Degree Nursing (ADN) program application process in an effort to create a more efficient and seamless system. All new applicants to the CCC Nursing Programs will apply via a centralized online application at:
http://apps.ccc.edu/Nursing2012/index.aspx
The online application process will streamline the admission process and allow prospective students to apply by submitting one single application which will be reviewed by the CCC Nursing Program Admissions Committee. However, receiving and completing the application for a Nursing program does not guarantee admission. In addition, indicating the college preference choices also does not guarantee admission.

```
English (035) *
1 0 1 \text { Composition with a "C" or higher}
Math (045) *
118 General Education Math OR
125 Introductory Statistics or higher Math course
    with a "C" or higher
Microbiology (024)*
233 General Microbiology with a "C" or higher 4
*General Education prerequisite courses 11
Biology (023) **
1 2 1 \text { Biology I with a "C" or higher}5
226 Human Structure & Function I with a "C" or higher 4
227 Human Structure & Function II with a "C" or higher 4
```

```
Chemistry (073) **
1 2 1 ~ B a s i c ~ C h e m i s t r y ~ I ~ w i t h ~ a ~ " B " ~ o r ~ h i g h e r ~ O R ~
2 0 1 \text { General Chemistry I with a "C" or higher}
**Core program courses totaling
```

TOTAL REQUIRED PREREQUISITE COURSES
Additional Required General Education Courses Speech (095)
101 Fundamentals of Speech Communication
Psychology (087)
201 General Psychology

## Total Additional General Education Courses <br> 6 CH

(The 6 CH for additional general education courses as well as the 11 CH for the prerequisite required general education courses totaling 17 CH of general education which count towards the 70 CH A.A.S. degree.)

Note: This program is exempt from the A.A.S. model shown on page 52, since it was approved by ICCB prior to the development of this model effective with the 2012-2014 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

## Additional Requirements

Nursing (063)
210 Nursing Process and Alterations in Homeostasis I
211 Nursing Process and Alterations in Homeostasis II
212 Nursing Process and Alterations in Homeostasis III
213 Integration of Concepts of Complex Nursing IV
203 Nursing in Perspective

## Total Additional Requirements

Choose a minimum of 9 credit hours in escrow from any of the following licensure courses:

Work Based Learning Courses
Nursing (063)
150 Nursing Fundamentals I (4)
151 Nursing Fundamentals II (4)
152 Nursing Perspectives (2)
153 Nursing Through the Life Span I (5)
154 Nursing Through the Life Span II (5)
155 Nursing Through the Life Span III (6)
TOTAL PROGRAM MINIMUM CREDIT HOURS
70 CH

## OBSTETRICS \& GYNECOLOGIC TECHNOLOGY 221 Basic Certificate (BC) 11 Credit Hours (CH)

This certificate program is designed to present the basic concepts and principles for developing skills and competencies needed in special procedures which the physician may use to assist the mother in labor and delivery. This program will offer knowledge and obligation in aseptic technique, scrubbing, gowning and gloving. The female anatomy, layers of abdomen, proper positioning, draping, patient safety, skin preparation, instrumentation, supplies, drugs, equipment, and different terminology, including different types of anesthesia used during labor and delivery.
Program Requirements for Admission

- Consent of Program Director, English Composition 101 recommended before the Obstetrics Program courses (3 credit hours is part of program total).
- Submit an application and interview with the program director.
- Co-enrollment in Obstetrics Technology 214 and 215.
- Prerequisite for Obstetrics Technology 215 is a "C" or better in 214.


## Required Program Core <br> 11 CH

English (035)
101 Composition
3
Surgical Technology (016)
214 Obstetrics/Gynecologic Technology 4
215 Obstetrics/Gynecologic Technology 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 11 CH
OCCUPATIONAL THERAPY ASSISTANT (OTA) 259 Associate in Applied Science degree (A.A.S.) 75 Credit Hours (CH)
The A.A.S. degree program in Occupational Therapy Assistant is the study of occupational therapy as a skilled healthcare service that uses occupation to promote meaningful living. Occupational therapy assistants, under the guidance of occupational therapists, adapt activities, tasks, and the environment in order to enable people of all ages and backgrounds to fulfill their chosen occupations and life roles. Career options can include employment in hospitals, clinics, schools, specialized community care settings, and wellness programs.

The program's mission is to prepare competent and effective occupational therapy practitioners who value occupation as both a means and as an end to quality living for self and others through a sound educational experience that includes preparation in:

- The occupational therapy process
- The impact of culture
- Use of self as an agent of change
- Ethical professional practice
- Teaching and learning processes
- Collaborating as a healthcare professional
- Working in a variety of practice environments
- Oral and written communication skills


## Programs of Study

## health Science

Students can make formal application to the program when all pre-admission coursework is completed, or when preadmission coursework completion will occur before the beginning of Semester I of the program. A minimum grade of "C" is required in each pre-admission and general education course. If more candidates apply than the program can accept, the best qualified will be admitted.

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education. (Address: AOTA Accreditation Dept., 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 208241220; Phone: (301) 652-2682). Program participants are eligible for graduation from the OTA Program with an A.A.S. degree upon successful completion of all required academic courses and fieldwork. Graduates of the program are eligible to sit for the National Certification Exam for Occupational Therapy Assistants administered by the National Board for Certification in Occupational Therapy, Inc.(NBCOT). After successful completion of this exam, an individual becomes a Certified Occupational Therapy Assistant. Determination of exam eligibility for applicants who have a felony related charge or conviction requires individualized review by NBCOT, Inc. Most states require licensure in order to practice. Illinois license issuance is based upon the results of the NBCOT Certification exam

## Required courses before formal admission to the OTA Program. (These hours count towards the OTA degree.) 15 CH

Occupational Therapy Assistant (122)
106 Foundations of Human Occupation
English (035)
101 Composition
Psychology (087)
201 General Psychology
207 Child Psychology (may substitute Child Dev. 101)
CIS (032)
120 Introduction to Microcomputers
See page 52 for A.A.S. general education degree requirements.
Additional required courses (may be taken before or during the first year of the OTA program):
Biology (023)
226 Human Structure and Function I*
227 Human Structure and Function II
Sociology (089)
201 Introduction to the Study of Society
Select one course from the following:
Child Development (090)
10 Human Growth and Development II (3)
Psychology (087)
222 Adult Development and Aging (3)
Social Service (091)
102 Introduction to Gerontology (3)
OTA (122) sequence requirements
First semester
107 Occupations of Chilahood ..... 2
Second Semester109 Occupations of Adolescence and Early Adulthood5
110 Practice Skills for the OTA II ..... 2
Third Semester
209 Occupations of Middle Adulthood ..... 5
210 Practice Skills for the OTA III ..... 2
211 Special Topics for the OTA I ..... 3
Fourth Semester
212 Occupations of Later Adulthood ..... 5
213 Practice Skills for the OTA IV ..... 2
214 Special Topics for the OTA II ..... 3
Summer Term***
215 Fieldwork Level 2A/Professional Seminar ..... 6
216 Fieldwork Level 2B/Professional Seminar ..... 6

* Biology 226 has a prerequisite of Biology 121.** Students must complete a minimum of 6 credit hours OTA 211and OTA 214.*** All academic coursework must be completed and an exit exam passed in orderfor students to proceed to the fieldwork component of the program.


## OPHTHALMIC TECHNOLOGY 382

## Associate in Applied Science degree (A.A.S)

 65 Credit Hours (CH) of an ophthalmic technician to provide quality vision care services to patients which includes ophthalmic terminology, patient pre-testing skills, optical skills, contact lens patient education/ information, ocular anatomy and physiology, visual training, practice management, ancillary testing, instrument maintenance, and assisting the doctor with minor ophthalmic surgery. Clinical experience with doctors and patients is an important part of the curriculum.| General Education | 16 CH |
| :---: | :---: |
| English (035) |  |
| 101 Composition I | 3 |
| Speech (095) |  |
| 101 Fundamentals of Speech Communication | 3 |
| Biology (023) |  |
| 116 Anatomy and Physiology | 4 |
| 120 Terminology for Medical Careers | 3 |
| Arts/Humanities and Social/Behavioral Sciences | 3 |
| Students should meet with a college Academic Advisor for selection of remaining course requirements for the general education portion of the A.A.S. degree. |  |

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.

Required Program Core<br>Ophthalmic Technology (167)<br>112 Anatomy and Physiology of the Eye<br>114 Ophthalmic Optics<br>120 Ophthalmic Pre-Testing<br>125 Retinoscopy and Refractometry<br>130 Ophthalmic Dispensing<br>141 Ophthalmic Office Procedures<br>150 Ocular Pharmacology<br>160 First Aid, Emergency Care, CPR<br>221 Ophthalmic Ancillary Testing<br>223 Advanced Ophthalmic Assisting<br>230 Clinical Practicum I<br>235 Contact Lenses<br>240 Integrated Science for Ophthalmic Technicians<br>242 Clinical Practicum II<br>243 Advanced Ophthalmic Procedures<br>244 Advanced Ophthalmic Technique<br>260 Introduction to Surgical Technology<br>290 Electronic Medical Record

TOTAL PROGRAM MINIMUM CREDIT HOURS
49 CH

## PHARMACY TECHNOLOGY 254

Advanced Certificate (A.C.) 33 Credit Hours (CH)
The Advanced Certificate program in Pharmacy Technology prepares students for employment as Pharmacy Technicians. The program is accredited by the American Society of Health-System Pharmacists.
Pharmacy technicians assist and support licensed pharmacists in providing health care and medications to patients. They may perform many of the same duties as pharmacists, but all technicians' work must be checked by a pharmacist before medication is dispensed. While Pharmacy Technicians can work everywhere pharmacists work, some state laws may limit the duties they perform.

## Enrollment Procedures

A special application is required for entry into the program. Upon acceptance into the program, students must provide proof of current health insurance and recent medical examination

## Program Admission Requirements

- No conviction of felony crime.
- Submit a completed application to the Pharmacy Technology program before June 1 for fall semester admission only.
- Provide official high school transcripts or GED certificate showing date of graduation as well as official transcripts of all college courses taken by applicant.
- Provide official results of the College placement examination indicating college level scores in Mathematics, English, and reading comprehension.
- Submit three letters of recommendation either from former teachers, employers, counselors or ministers to the Pharmacy Technology office, Room 3524.
- Personal interview with members of the program's admissions committee.
For more information on the Pharmacy Technology program please call (312) 850-7385.


## First Semester

Pharmacy Technology (062)
102 Basic Science for Allied Health 4
103 Intro to Pharmacy Technology 4
104 Pharmaceutical Calculations 3
201 Introduction to Pharmacy Law 1
204 Clinical Practicum I
Semester Total 16 CH

Second Semester Credit Hours
101 Pharmacology for Allied Health 4
113 Prescription Processing 2
121 Pharmacy Communication 3
202 Pharmacy Operations 4
205 Clinical Practicum II 4
Semester total 17 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS 33 CH

## PHLEBOTOMY 219

## Basic Certificate (B.C.) 11 Credit Hours (CH)

The Basic Certificate program in Phlebotomy leads to certification through the National Phlebotomy Association (NPA), the American Society of Clinical Pathologists (ASCP), and the American Society of Phlebotomy Technicians (ASPT).

The phlebotomist is an entry level health care worker who serve as the direct link between the patient and the laboratory. The position is responsible for drawing both venous and arterial blood specimens from patients and sending blood to the laboratory. In some cases, physician approval is required. The laboratory technologist relies on the integrity and accuracy of the phlebotomist in procuring the proper specimens; accurate diagnosis of a patient's condition can depend on quality work. Phlebotomists can further their education and become laboratory technicians or technologists.

## Program Admission Requirements

- Submit a complete application to the Phlebotomy program.
- Provide an official high school transcript or GED certificate showing date of graduation or completion.
- Take the college entrance examination (COMPASS).
- Schedule a personal interview with program personnel.


## Required Program Core <br> 11 CH

Phlebotomy (113)
109 Phlebotomy Practicum \& Seminar I
209 Phlebotomy Practicum \& Seminar II 6

## TOTAL PROGRAM MINIMUM CREDIT HOURS

# Programs of Study <br> Health Science 

## PHYSICIAN ASSISTANT (PA) 262

Associate in Applied Science (A.A.S.) 78 Credit Hours (CH)
The A.A.S. degree program for Physician Assistant (PA) prepares students to be "academically and clinically ready to provide healthcare services with the direction and responsible supervision of a physician." Graduate PAs perform many of the medical tasks traditionally performed by physicians. Physician Assistants, when certified and licensed, are qualified to practice medicine as part of a team with their supervisory physician. PAs perform histories and physical examinations, diagnose and treat illnesses, order and interpret laboratory tests, counsel patients on preventive health, suture wounds, set fractures, and assist in surgery. Physician Assistants can write prescriptions in 50 states, the District of Columbia and Guam. The scope of practice and delegation of medical tasks is determined by the supervising physician in compliance with state statute and regulation.

A PA must have excellent verbal and writing skills and be able to communicate in a culturally appropriate manner. In addition, a PA is required to have detailed knowledge of basic sciences, behavioral sciences, and a foundation in general higher education.

Licensure and Certification- All states require a physician assistant to pass the Physician Assistant National Certification Exam (PANCE) as a requirement for state licensure. To maintain certification, a PA must complete 100 hours of continuing medical education every two years and take a recertification examination every six years.

The John H. Stroger Jr. Hospital of Cook County/Malcolm $X$ College PA program was the first physician assistant program established in Illinois and remains the sole publicly sponsored program in northern Illinois. It was first accredited in 1988 and is presently accredited on probation by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA). The SHCC/MXC PA program is a full-time 25-month program with resources located at
Malcolm X College, John H. Stroger Jr. Hospital of Cook County and several other medical facilities. Graduates receive an Associate of Applied Science degree and Certificate of Completion.

Master's Degree Option - Students entering the Program with a Bachelor's degree have the option to enroll in a Master of Medical Science degree during their clinical year with an affiliated university.

For more information contact the Physician Assistant Program office at 312-850-7255.

## Program Admission Requirements

To be considered for admission into the Physician Assistant program, an applicant must have the following:

- GPA of 3.0 in completion of all prerequisite courses, and a GPA of 3.0 in completion of all science prerequisite courses with a minimum grade of " C " in all prerequisite science course credit. As of April 15, 2013 all applicants must have a cumulative undergraduate GPA of 3.0.
- Must have a high school diploma or GED.
- Should have a minimum of 1000 hours in non-volunteer direct patient contact healthcare experience.
- Must Prior to January 31, 2013 applicants must have all college prerequisites for an Associate's degree. As of April 15, 2013 applicants must have a Bachelor's degree. Both categories of applicants must have 6 credit hours in English, 8 credit hours in Natural Sciences, and 3 credit hours in Psychology.
- Foreign transcripts must be evaluated by City Colleges of Chicago.


## Prerequisite General Education Courses Credit Hours

English 101 Composition 3
Speech/ Public Speaking 3
General Biology 4
General or Organic Chemistry 4
Psychology 3
Introductory Statistics (Math 125) 4
Total Prerequisite General Education Courses 21 CH
Prerequisite Science Courses
Organic Chemistry I and Biochemistry 10
Organic Chemistry II, Genetics or medical science 4
Course at 200-level or above
(e.g. Pathophysiology or Immunology)

Microbiology 2334
Anatomy / Physiology I (Biology 226) 4
or Anatomy with lab
Anatomy / Physiology II 4
or Physiology (Biology 227) with lab
Medical Terminology or Competency Exam 3
Total Prerequisite Science Courses 29 CH
Total Combined General Education 50 CH and Science Prerequisites

Note: This program is exempt from the A.A.S. model shown on page 52 since it was approved by ICCB prior to the development of this model effective with the 2012-14 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

## PROGRAMS OF STUDY <br> Health Science

## Other Admission Requirements

To be eligible for consideration for admission, the applicant must have the minimum academic prerequisites and healthcare experience.

- All science courses must have been completed within five years of admission. Exceptions may be considered on a case-by-case basis for candidates with documented academic excellence and appropriate clinical experience.
- Healthcare Experience: applicants should have a minimum of 1000 hours in non-volunteer direct patient contact healthcare experience. The PA Admissions Committee, using a standardized procedure, considers the nature and quality of healthcare experience in evaluating an applicant's preparation. Direct patient care and other healthcare experience in the United States' healthcare system is ranked higher than experience in other areas. Once an applicant reports more than 10 years' experience, the Admission Committee does not assign the applicant additional recognition.
- Science Course Five-Year Rule: Science courses must be completed within the last five years or be retaken. Applicants may choose to take higher level courses or competency examinations, e.g., ACT or CLEP, for credit. A waiver of the five-year rule may be granted at the discretion of the PA Program staff and faculty on a very limited case-by-case basis for the candidate with documented academic excellence and appropriate clinical experience. Waiver requests using program forms and including the appropriate documentation should be received by the final date of application. Please obtain a waiver request form, if needed, from the Physician Assistant Program office. An additional fee may be required for waiver review.
- Applicant Interviews: Interviews are granted only to those applicants who have met or exceeded the Admissions Committee's criteria. If an interview is requested, participation by the applicant is required to be considered for final selection.
- Selection Factors: Evaluation of applicants is based on academic history, references, healthcare experience, personal statements/short essays, personal interviews, and a pre-admission exam. Priority is given to Illinois residents and to those with a documented commitment to primary care and an underserved community practice.

Admission to the SHCC/MXC PA Program is extremely competitive. Completion of prerequisites and length of healthcare experience does not guarantee acceptance into the program.

APPLICATION DEADLINE AND FEE - All applications are online through Central Application Service for Physician Assistants (CASPA) beginning April 15 of the current year at https://portal.caspaonline.org. Application fees are determined by CASPA. The deadline for application is January 15 of the following year.. An additional fee may be required for review of a waiver request.

## Notification of Admission to the Program:

Acceptance to the program is offered in May of each year.

## Applicant Response to Acceptance Offer:

Mid-May candidates offered admission may not defer. There is no waiting list for subsequent years; therefore, those who are not accepted must reapply.

## Other Costs:

In addition to tuition and fees, PA students are required to bear additional estimated costs: medical equipment and supplies for two years (estimated) \$1,300; books and classroom supplies for two years (estimated) \$2,770.

## Health Insurance:

Physician assistant students are required to maintain comprehensive health insurance coverage because of the risk for accidental exposure to infectious agents and to other hazards associated with the healthcare environment.

Physician assistant students will incur additional travel costs for off-site clinical training experiences in the Chicago metropolitan area.

## Financial Aid:

Eligibility and amounts will vary.

## Policies Affecting Accepted/Admitted Physician Assistant Students:

The program is a full-time course of studying with no provision for part-time or evening study. Due to the intensity of the physician assistant program and the necessary time commitment for classroom instruction, clinical training experiences, and study, students are strongly discouraged from working. Therefore, physician assistant students must be able to maintain sufficient flexibility to respond to schedule changes, unexpected patient care demands, and the educational objectives of the program.

## Programs of Study

## Health Science

## Advanced Placement:

The SHCC/MXC PA Program does not offer advanced placement in core PA courses regardless of a student's previous course work or experience in another healthcare/ medical field.

Health Evaluation, Physical Examination and Immunity: Students are required to submit documentation of their medical histories, physical examination, and proof of immunity in the forms of laboratory test results, immunization documents, and/or letters from their healthcare provider prior to entering the Program. Immunization documentation and laboratory tests must be updated as required by clinical training sites. The Hepatitis B immunization series is required for students who are not immune.

## Academic Performance and Attendance:

Students in the SHCC/MXC PA Program must earn a grade of " $C$ " or better in all PA courses and course enhancements in order to remain in the program. Grading includes measures of professionalism and participation in program classes and activities. Attendance in all scheduled classes, activities, clinical rotation, physical diagnosis, and skills practice sessions is required. Scheduled classes/activities may occur all days of the week (including weekends), during day, evening and night hours.

## Malpractice Insurance:

The City Colleges of Chicago provides enrolled physician assistant students with malpractice insurance coverage.

## Licensure Issues:

Please be advised that the State of Illinois and other jurisdictions and credentialing bodies determine the criteria for professional licensure, certification, registration, or employment. Physician assistants must meet the same high standards required of physicians, nurses, and other health professionals. Applicants with histories of impairments such as alcoholism, drug and substance abuse, certain mental illnesses, or other disabilities may be denied licensure by healthcare organizations. Applicants with felony and other convictions also may be denied licensure by these same organizations.

## Conduct:

Students are required to follow the rules of conduct policies and procedures established by Malcolm X College and the John H. Stroger, Jr. Hospital of Cook County, other affiliated settings, and the physician assistant program.

## Changes:

Physician assistant program admission requirements, curriculum, courses, affiliations, and expenses are subject to change without notice.
Physician Assistant (PA) Year 1 Summer SessionPhysician Assistant (129)
110 Gross Anatomy for PA’s3
111 Professional Development for PA’s ..... 1
112 Pathophysiology I for the PA ..... 2
Semester Total ..... 6
Fall Semester Credit Hours
Physician Assistant (129)
101 Applied Clinical Skills I ..... 4
102 Medical Sciences I ..... 4
103 History \& Physical Assessment I ..... 3
107 Medical Pharmacology I ..... 2
113 Pathophysiology II for the PA ..... 2
Semester total ..... 15
Spring Semester ..... Credit Hours
Physician Assistant (129)
105 Medical Science II ..... 4
106 History \& Physical Assessment II ..... 3
114 Medical Pharmacology II ..... 2
215 Nutritional Concepts ..... 3
Semester Total ..... 12
Spring Subterm V (May-June) Credit Hours
Physician Assistant (129)
104 Applied Clinical Skills II ..... 2
109 Medical Science III ..... 3
214 Independent Study ..... 3
Semester total ..... 8
Total First Year ..... 41
Physician Assistant (PA) Year 2
Summer, Fall, Spring and Mini Summer Terms
Physician Assistant (129)
201 Internal Medicine ..... 3
202 Emergency Medicine ..... 3
203 General Surgery ..... 3
204 Trauma Surgery ..... 3
205 Pediatrics ..... 3
206 Obstetrics/Gynecology ..... 3
207 Family Practice ..... 3
208 Psychiatry/Mental Health ..... 3
209 Geriatrics ..... 3
210 Orthopedics ..... 3
211 Elective Clinical Rotations ..... 3
213 Seminar Special Topics in Healthcare ..... 4
Total Second Year ..... 37
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 78 CH

## RADIOGRAPHY 246

Associate in Applied Science Degree (A.A.S.)
75 Credit Hours (CH)
The A.A.S. degree program in Radiography is the study of the theory, technical skills, patient care, and techniques necessary to use radiation in the diagnosis of disease. Completion of the program can lead to employment as an X-ray technologist or radiographer in private and public hospitals, clinics, and laboratories. The A.A.S. degree program in Radiography provides the necessary professional skills, progressive maturity, and the intellectual, social, and emotional values necessary for a graduate to be a trustworthy member of a healthcare team.

The program is offered at Malcolm X College and Wilbur Wright College. Malcolm X College's program begins in the summer and Wilbur Wright College's program begins in the fall.

Upon completion of the program of study, graduates become eligible to take the national certification exam offered by the American Registry of Radiologic Technologists (ARRT). In addition, graduates may apply for a license from the Illinois Emergency Management Agency/Division of Nuclear Safety.

## Admission Requirements

Admission is competitive. In order to be considered for Admission to the Radiography Associate Degree Program, a student must:

- Be at least 18 year of age.
- Have at least a 2.5 GPA .
- Provide a copy of a GED certificate if applicable.
- Provide a copy of college transcripts. Please send a copy to the college Admissions Office and a copy to the Radiography Office, or you may request a copy directly from the Registrar's office.
- Complete the following prerequisite courses with a grade of " $C$ " or better:

Mathematics 118 or higher Biology 120 or Health Sciences 102
Note: Additional criteria for admission may be required. Please see your Academic Advisor on your campus to discuss all admissions requirements for the Associate in Applied Science Radiography degree program.

## Application Period:

Malcolm X College's admission applications are accepted February 1 through April 1 of each year for admittance in the program the summer of the same year.
Wilbur Wright College's admission applications are accepted through December 1st of each year for admittance in the program the following fall.

## General Education <br> 17 CH

Biology (023)
226 Human Structure and Function I* 4
227 Human Structure and Function II* 4
CIS (032)
120 Introduction to Microcomputers
English (035)
101 Composition
Psychology (087)
201 General Psychology
*Prerequisite: Biology 114 or Biology 115 or Biology 121, or Consent of Department Chairperson.

Note: This program is exempt from the A.A.S. model shown on page 52, since it was approved by ICCB prior to the development of this model effective with the 2012-14 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

## Required Program Core

58 CH
Radiography (021)
101 Intro to the Radiation Sciences 2
102 Attitudes in Patient Care 2
105 Imaging Physics 3
115 Basic Principles of Image Production 3
124 Introduction to Patient Care 2
128 Image Evaluation 1
131 Radiographic Procedures I 2
140 Introduction to Clinical Education 4
141 Radiography Clinical Education I 4
200 Pathology 3
202 Radiology Management 1
205 Applied Radiographic Techniques 3
206 Imaging 2
208 Radiobiology 3
232 Radiographic Procedures II 4
233 Radiographic Procedures III 4
234 Special Radiographic Procedures 2
242 Radiography Clinical Education II 4
243 Radiography Clinical Education III 4
244 Radiography Clinical Education IV 5
TOTAL PROGRAM MINIMUM CREDIT HOURS
75 CH
Note: This program may be revised pending review.

## Programs of Study <br> Health Science

## RENAL DIALYSIS TECHNOLOGY 248

Advanced Certificate (A.C.) 36 Credit Hours (CH)

## Prerequisite: English 101 Composition

## First Year

First Semester
Credit Hours
Biology (023)
121 Biology I
Renal Technology/Nephrology (018)
101 Intro to Health Care Field \& Nephrology
102 Basic Hemodialysis Principles I
103 Basic Hemodialysis Principles II
104 Hemodialysis Procedures I
Semester Total
17 CH
Second Semester Credit Hours
Chemistry 121
Renal Technology/Nephrology (018)
105 Heparinization / BAC in Dialysis
106 Diagnostic Tests \& Procs in Neprology
107 Hemodialysis Procedures II
108 Clinical Experience I
Semester Total
Summer Semester
Renal Technology/Nephrology (018)
109 Clinical Experience II
3
Semester Total

Note: Also see A.A.S. degree program "Nephrology/Renal Technology 247"

RESPIRATORY CARE 234
Associate in Applied Science degree (A.A.S.) 71 Credit Hours (CH)

The A.A.S. in Respiratory Care will offer the study of theory and techniques instrumental in diagnosis, treatment, management, and preventive care of patients with cardiopulmonary problems. It will prepare the students to become a well rounded professional and competent advanced respiratory therapist. The graduate will be eligible to take the National Board for Respiratory Care entrylevel respiratory care practitioner examination to become a "Certified Respiratory Therapist" and the advanced level respiratory care practitioner examination to become a "Registered Respiratory Therapist."

Successful completion of the program can lead to employment as a respiratory therapist in hospitals, clinics or home settings or branch off into research, sales, education or other career opportunities.

## Admission Requirement

Admission is competitive. In order to be considered for Admission to the A.A.S. in Respiratory Care, a student must:

- Have at least a GPA of 2.50.
- Have a personal interview with the College program personnel.
- Have their official transcripts reviewed.
- Earn a "C" or higher in: Chemistry (073) 121 Math (045) 118 or higher English (035) 101 or higher Biology (023) 116 or 226 \& 227

| General Education | 16 CH |
| :--- | ---: |
| English (035) | 3 |
| 101 Composition * | 4 |
| Math (045) |  |
| 118 or higher (Except Math 140)* |  |
| Physics (077) |  |
| 131 Mechanics and Power |  |
| Humanities/Fine Arts** |  |
| (any Humanities \& Fine Arts course, |  |
| i.e. African-American Studies 101; |  |
| Literature 121, 150) |  |
| Social Science |  |
| (any Social Science course) |  |
| *Courses must be taken before admission to this program. |  |
| ** Note: This program is exempt from the A.A.S. model shown on page |  |
| 52, since it was approved by ICCB prior to the development of this model |  |
| effective with the 2012-14 CCC Academic Catalog. This exemption |  |
| includes the State of Illinois Human Diversity requirement. |  |

(any Social Science course)
Courses must be taken before admission to this program
** Note: This program is exempt from the A.A.S. model shown on page effective with the 2012-14 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

Health Science
Required Program Core
First Year
Fall I
Respiratory Therapy (061)
114 Basic Respiratory Care
115 Cardiopulmonary/Renal Anatomy \& Physiology116 Patient Assessment117 Respiratory Pharmacology
118 Respiratory Microbiology
119 Respiratory Care Laboratory I
Spring I
Respiratory Therapy (061)
127 Clinical Practice I
137 Advanced Pathology \& Clinical Application
139 Respiratory Care Laboratory II
141 Ventilatory Mechanics I
Summer
Respiratory Therapy (061)
129 Clinical Practice II
146 Ventilatory Mechanics II
Second Year
Fall II
Respiratory Therapy (061)
200 Respiratory Care Laboratory III
222 Clinical Practice III
225 Age Specific Care
227 Critical Care Services
Spring II
Respiratory Therapy (061)
224 Clinical Practice IV
230 Advanced Cardiopulmonary Monitoring
250 Cardiopulmonary Rehab Home Care
260 Advanced Specialty Topics
TOTAL PROGRAM MINIMUM CREDIT HOURS

## STERILE PROCESSING CLINICAL 269 <br> Basic Certificate (B.C.) 11 Credit Hours (CH)

The Basic Certificate program in Sterile Processing Clinical presents the basic concepts and principles for developing skills and competencies required for infection prevention and control in the sterile processing department in a health care facility. The program offers basic knowledge related to instrumentation connected with surgical procedures. Students will be involved in processes such as cleaning, disinfecting, decontamination, sterilization, standard precautions, and universal precautions, as well as gain basic knowledge concerning various types of central service equipment such as ultrasonic cleaning, washer sterilizers, cart washers, autoclaves, steris, sterrad and ethylene oxide (ETO) machines.

Note: Graduates are eligible to write the International Association of Healthcare Central Service Material Management Examination (IAHCSMM).

## Program Requirements for Admission

- Consent of Program Director.
- Submit an application and interview with the Program Director/Program Personnel.
- Co-enroll in Sterile Processing 216 and 217.
- Prerequisite for Sterile Processing 217 is a "C" or better in 216.
- English 101 Composition recommended before the Surgical Technology courses.
(3 credit hours is part of program total)

| Required Program Core | $\mathbf{1 1}$ CH |
| :--- | ---: |
| English (035) | 3 |
| 101Composition |  |
| Surgical Technology (016) | 4 |
| 217 Sterile Processing Technology Lab | 4 |
| 216 Sterile Processing Technology | $\mathbf{1 1 ~ C H}$ |

## Programs of Study <br> health Science

## SURGICAL TECHNOLOGY 267 <br> Associate in Applied Science degree (A.A.S.) <br> 61 Credit Hours (CH)

The A.A.S. degree program in Surgical Technology is designed for surgical technologists (formerly called operating room technicians) who perform many different responsibilities in the operating room. They act as the scrub person, as the circulator, and as the first assistant on the surgical team. Surgical technologists' responsibilities involve preparing the operating room and instruments, equipment, and supplies that will be needed; positioning and preparing the patient for surgery; and passing instruments, sponges, and sutures to the surgeon. Surgical technologists are the surgical team's experts in aseptic technique, being constantly vigilant for any break in the technique that could endanger the sterile field. Surgical technologists belong to a separate non- nursing profession and are highly skilled, having completed the necessary specialized education and training focused on working in the operating room. The preferred entry-level education for the surgical technologist is the associate degree.

## Program Prerequisites

Must be met through credit, waiver or exemption
English (035)
101 Composition (3)
Health Science (124)
102 Professional Medical (3) OR
Biology (023)
120 Terminology for Medical Careers (3)
121 Biology I (5)
226 Human Structure and Function I (4)

## Admission requirements

- Submit a complete application to the Surgical Technology program.
- Submit three letters of recommendation.
- Provide official transcripts of all college courses taken by applicant.
- Conduct a personal interview with program personnel.
- Submit application by April 15 of each year to the Surgical Technology Department, Room 3511.
- Complete all of the program prerequisites.

Note: This program is exempt from the A.A.S. model shown on page 52, since it was approved by ICCB prior to the development of this model effective with the 2012-14 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.
First Year
First Semester Credit Hours
Biology (023)
227 Human \& Structure Function II ..... 4
Business (030)
284 Business Communications ..... 3
Surgical Technology (016)
111 Intro to Surgical Technology ..... 3
112 Preparation for Surgery ..... 4
113 Special Patient Care ..... 3
Semester Total ..... 17 CH
Second Semester ..... Credit Hours
Surgical Technology (016)
114 Surgical Interventions I ..... 4
115 Surgical Interventions II ..... 4
116 Surgical Interventions III ..... 4
Semester Total12 CH
Summer TermCredit Hours
Social Science (088)
101 OR 102 General Course I OR II ..... 3
Surgical Technology (016)
117 Surgical Pharmacology ..... 2
200 Application of Aseptic Technique ..... 3
Semester Total ..... 8 CH
Second Year
Third SemesterCredit Hours
Sociology (089)
201 Intro to Sociology ..... 3
Speech (095)
101 Fundamentals of Speech Communication ..... 3
Surgical Technology (016)
211 Surgical Intervention IV ..... 2
212 Clinical Practicum I ..... 5
Semester Total ..... 13 CH
Fourth Semester ..... Credit Hours
Psychology (087)
201 General Psychology ..... 3
Surgical Technology (016)
213 Clinical Practicum II ..... 8
Semester Total ..... 11 CH
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 61 CH

## PROCRAMS of STUDY <br> © <br> © <br> (r) <br> (A) <br> (ㄸ)

XUVNIT@つ aNV XLITVLIdSOH

## Programs of Study <br> Hospitality and CUlinary

## BAKING AND PASTRY ARTS 365 <br> Associate in Applied Science Degree (A.A.S.) 62 Credit Hours (CH)

The A.A.S. degree in Baking and Pastry Arts is a sequential learning program taught over four semesters. All semesters include lecture, discussion, demonstration and hands-on production that allow students to practice the techniques of baking and pastry production in a commercial bakeshop environment. This program includes production for restaurant and bakeshop sales, offering the student realworld experience in the field.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.

## Required Program Core <br> 330BKPS Baking \& Pastry <br> 765 Introduction to Baking <br> 766 Baking Safety \& Sanitation <br> 767 Baking Techniques <br> 768 Pastry Techniques <br> 769 Cookies \& Tarts <br> 770 Basic \& Classical Cakes <br> 771 Special Occasion Cakes <br> 772 Individual Pastries <br> 773 Confectionary Arts <br> 774 Hearth Breads \& Rolls <br> 775 Specialty Breads <br> 776 Advanced Baking Principles <br> 777 Chocolate \& Confections <br> 778 Contemporary Desserts

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## 15 CH

## 五

BAKING AND PASTRY ARTS 366
Advanced Certificate (A.C.) 38 Credit Hours (CH)
The Advanced Certificate program in Baking and Pastry Arts is a sequential program taught over three semesters and includes a majority of the core courses from the parent Baking and Pastry Arts 365 A.A.S. degree program with the exception of Chocolates and Confections, Contemporary Desserts, and General Education requirements.
Required Program Core ..... 38 CH
330BKPS Baking \& Pastry
765 Introduction to Baking ..... 3
766 Baking Safety \& Sanitation ..... 3
767 Baking Techniques ..... 3
768 Pastry Techniques ..... 3
769 Cookies \& Tarts ..... 3
770 Basic \& Classical Cakes ..... 3
771 Special Occasion Cakes ..... 3
772 Individual Pastries ..... 3
773 Confectionary Arts ..... 3
774 Hearth Breads \& Rolls ..... 4
775 Specialty Breads ..... 4
776 Advanced Baking Principles ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 38 CH
BAKING AND PASTRY ARTS 367
Basic Certificate (B.C.) 15 Credit Hours (CH)
The Basic Certificate in Baking and Pastry Arts introducesthe student to the commercial baking environment, coveringsafety and sanitation skills and station setup, proper useand care of equipment, and baking and pastry terminology.The program is designed to provide the student with theopportunity to investigate and assess Baking and PastryArts as a possible career.
Required Program Core ..... 15 CH
330BKPS Baking \& Pastry
765 Introduction to Baking ..... 3
766 Baking Safety \& Sanitation ..... 3
767 Baking Techniques ..... 3
768 Pastry Techniques ..... 3
769 Cookies \& Tarts ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS

## CAKE DECORATING AND BAKING <br> (PROFESSIONAL) 392 (L'art Du Gâteau) <br> Basic Certificate (B.C.) 16 Credit Hours (CH)

The Basic Certificate program in Professional Cake Decorating and Baking is designed for students to learn from internationally-renowned master chef instructors in L'Art du Gâteau offered by Kennedy-King College's French Pastry School. This all-inclusive, 16-week, full-time certificate program is custom-designed to meet the needs of students who want to specialize in the prestigious art of cake baking and decorating. This unique hands-on program focuses on all aspects involving the creation of wedding, celebration, and specialty cakes. Personal attention from chef mentors is given every day in the kitchen, providing a comfortable, yet thorough training.

Required Program Core<br>330FPS Culinary<br>779 Safety \& Sanitation<br>780 Baking, Pastry \& Technology<br>781 Cake Baking and Construction<br>782 Cake Decorating Techniques<br>783 Cake Business Planning

## TOTAL PROGRAM MINIMUM CREDIT HOURS

16 CH

## CULINARY ARTS 362 <br> Associate in Applied Science Degree (A.A.S.) 63 Credit Hours (CH)

The A.A.S. degree in Culinary Arts is a sequential learning program taught over four semesters. All semesters include lecture, discussion, demonstration and hands-on production that allow students to practice the techniques of food production in a commercial food service environment. The curriculum includes additional methods and techniques that will increase the student's repertoire of ethnic and classical menus. In addition, the coursework will include management skills, cost control, budgeting techniques, merchandising, business planning, resume writing and interviewing techniques. General Education classes must be completed to satisfy the degree requirements. Students will receive the ServSafe ${ }^{\circledR}$ Sanitation Certification and will be eligible for the City of Chicago and State of Illinois Sanitation certificates upon completion.

## General Education

15 CH
Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.
Required Program Core ..... 48 CH
330CUL Culinary
701 Introduction to Food Service I ..... 3
703 Food Sanitation \& Food Safety I ..... 2
705 Chef's Training I-Section A ..... 4
706 Chef's Training II-Section A ..... 4
707 Food Service Technology ..... 4
708 Chef's Training I- Section B ..... 4
709 Chef's Training II- Section B ..... 4
714 Nutrition for Chefs ..... 4
721 Entrée Preparation ..... 7
723 Food Service Management ..... 5
728 Advanced Cooking ..... 7
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 63 CH
CULINARY ARTS 363
Advanced Certificate (A.C.) 41 Credit Hours (CH)

The Advanced Certificate program in Culinary Arts is made up of all courses included in the parent Culinary Arts 362 A.A.S. program with the exception of the general education classes and advanced cooking course. Supplementing the Basic Culinary certificate program, the focus is on advanced techniques and offers extensive practice utilizing contemporary and classical menus. Students will receive the ServSafe® Sanitation Certification and will be eligible for the City of Chicago and State of Illinois Sanitation certificates upon completion.

| Required Program Core | $\mathbf{4 1} \mathbf{C H}$ |
| :--- | ---: |
| 330CUL Culinary | 3 |
| 701 Introduction to Food Service I | 2 |
| 703 Food Sanitation \& Food Safety I | 4 |
| 705 Chef's Training I - Section A | 4 |
| 706 Chef's Training II - Section A | 4 |
| 707 Food Service Technology | 4 |
| 708 Chef's Triaining I - Section B | 4 |
| 709 Chef's Training II - Section B | 4 |
| 714 Nutrition for Chefs | 7 |
| 721 Entrée Preparation | 5 |
| 723 Food Service Management | $\mathbf{4 1 ~ C H}$ |

## Programs of Study <br> Hospitality and CUlinary

## CULINARY ARTS 364 <br> Basic Certificate (B.C.) 13 Credit Hours (CH)

The Basic Certificate in the Culinary Arts curriculum introduces the student to the commercial kitchen environment by covering safety and sanitation procedures, basic mise en place including knife skills and station set-up, proper use and care of equipment, classical cooking terminology, standard cooking methods, stock preparation, and sauce production. This program is designed to give the student the opportunity to investigate and assess Culinary Arts as a possible career goal.

## Required Program Core

330CUL Culinary<br>701 Introduction to Food Service I<br>703 Food Sanitation \& Food Safety I<br>705 Chef's Training I - Section A<br>708 Chef's Training I - Section B

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## FOOD SANITATION 253

Basic Certificate (B.C.) 2 Credit Hours (CH)
The Basic Certificate program in Food Sanitation is a partnership between City Colleges of Chicago and the Chicago Department of Public Health. The program offers training in food service sanitation in four languages: English, Spanish, Chinese, and Korean. This program prepares personnel from food establishments for certification and recertification by the City of Chicago and the State of Illinois and also trains and certifies food vendors participating in outdoor summer festivals.

## Required Program Core

Food Service Administration (038)
222 Food Service Sanitation
TOTAL PROGRAM MINIMUM CREDIT HOURS

## HOSPITALITY 061 <br> Associate in Applied Science degree (A.A.S.) 63 Credit Hours (CH)

The A.A.S. degree program in Hospitality is designed to prepare students in the study of theory, technical skills, and practical techniques to qualify them both for entry-level jobs and for career development in the hotel/motel management arena of the hospitality industry. The academic curriculum is designed to develop management capabilities through presentation of basic information and concepts in an industry-centered format.

Students should meet with a college Academic Advisor for
selection of specific course requirements for the 15.0 credit
hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human
Diversity requirement.
Required Program Core ..... 48 CH
Business (030)
181 Financial Accounting ..... 4
203 Introduction to Cost Accounting ..... 3
211 Business Law I ..... 3
231 Marketing ..... 3
269 Principles of Management ..... 3
271 Human Resources Management ..... 3
CIS (032)
101 Intro to Computer Information Systems ..... 3
Cooperative Work Experience (008):
101 Cooperative Education Exploration ..... 3
105 Business Technologies CWE ..... 6
Food Service Administration (038)
222 Food Service Administration ..... 2
Hospitality (003)
102 Hotel-Motel Sales Promotion ..... 3
103 Food and Beverage Supervision ..... 3
108 Intro to Meeting \& Convention Management and Planning ..... 3
202 Front Office and Room Division Management ..... 3
205 Hospitality Industry Purchasing ..... 3

HOSPITALITY FRONT OFFICE 062
Advanced Certificate (A.C.) 32 Credit Hours (CH)

## Required Program Core <br> 32 CH

Business (030)
181 Financial Accounting 4
182 Managerial Accounting 4
211 Business Law I 3
269 Principles of Management 3
Cooperative Work Experience (008)
105 Business Technologies CWE
English (035)
101 Composition
Hospitality (003)
104 Intro to the Hospitality Industries
3
202 Front Office and Room Division Management 3
Speech (095)
101 Fundamentals of Speech Communication
3
TOTAL PROGRAM MINIMUM CREDIT HOURS
32 CH

PASTRY AND BAKING (PROFESSIONAL) 746
[L'art De La Pâtisserie]
Basic Certificate (B.C.) ( 24 Credit Hours)
The Basic Certificate program in Professional Pastry and Baking through Kennedy-King College's French Pastry School offers excellent innovative and effective pastry, baking, and confectionery arts education in the L' Art de la Patisserie inclusive 24 -week certificate program. Instructed by some of the best pastry artisans in the world, students receive intensive hands-on practice, using the finest ingredients and equipment, in order to be optimally prepared to pursue a career in pastry. The basic certificate offers the rare opportunity to learn the art of pastry in an intimate setting, being personally mentored by masters. Students' skills are finely honed through hands-on practice and repeated exposure to the best pastry techniques, tools, and ingredients.
Required Program Core $\quad 24$ CH
330FPS Culinary
707 Food Service Technology 4
712 Baking Theory \& Problems 5
754 Candy \& Confectionery 2
758 Plated Desserts 4
761 Chocolate \& Sugar 5
762 French Cakes \& Pastries 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 24 CH
Human Services PROGRAMS of STUDY
©
©
©
©
(®)
(e)

# Programs of Study <br> Human Services 

## ADDICTIONS STUDIES 344

Associate in Applied Science degree (A.A.S.) 64 Credit Hours (CH)

The A.A.S. Degree program in Addictions Studies is ideal for prospective mental health practitioners or those already working in the field who wish to receive training and credentials in Addictions Studies. Many Addictions Studies practitioners find employment in medical and non-medical detoxification centers, rehabilitation programs, community mental health centers and family service centers, halfway houses, therapeutic communities, business, or industry. Some combine counseling with such primary professions as nursing, social work, school guidance counseling, or the clergy.

The program is accredited by the Illinois Alcoholism and Other Drug Abuse Professional Certification Association (IAODAPCA).

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See A.A.S. model on page 52 which includes the State of Illinois Human Diversity requirement.
Required Program Core ..... 43 CH
Child Development (090)
101 Human Growth \& Development I
102 Human Growth \& Development II
Mental Health (118)
223 Introduction to Addictions Studies
224 Principles and Practices of Addictions Studies
229 Practicum in Addictions Treatment*
230 Addictions and the Family: Treatment
231 Addictions Treatment of Special Populations
Psychology (087)
201 General Psychology
213 Abnormal Psychology
Social Service (091)
101 Introduction to Social Work4
109 Report Writing for Social Service Aides ..... 3
201 Principles of Social Work Practice ..... 3
212 Introduction to Group Process ..... 3
Electives ..... 6 CH
Courses in such fields as Education, Gerontology, Nursing,Psychology, Sociology, and Speech/Communication are valuableto primary studies in alcoholism and substance abuse. Meet witha college Academic Advisor for elective course selection.
TOTAL PROGRAM MINIMUM CREDIT HOURS64 CH
ADDICTIONS STUDIES 343Advanced Certificate (A.C.) 37 Credit Hours (CH)
Required Program Core37 CH
Child Development (090)
101 Human Growth and Development I ..... 4
102 Human Growth and Development II ..... 3
Mental Health (118)
223 Introduction to Addictions Studies ..... 3
224 Principles \& Practices of Addictions Treatment ..... 3
229 Practicum in Addictions Treatment* ..... 6
230 Addictions \& the Family: Treatment ..... 3
231 Addictions Treatment of Special Populations ..... 3
Social Service (091)
101 Introduction to Social Work ..... 3
109 Report Writing for Social Service Aides ..... 3
201 Principles of Social Work Practice ..... 3
212 Introduction to Group Process ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 37 CH
ADDICTIONS STUDIES 345
Basic Certificate (B.C.) 18 Credit Hours (CH)
The Basic Certificate program in Addictions Studiesprovides students with the academic requirements neededin the application for the Certified Alcohol and Other DrugsCounselor (CADC) examination.
Required Program Core ..... 18 CH
Mental Health (118)
223 Introduction to Addictions Studies ..... 3
224 Principles \& Practices of Addictions Treatment ..... 3
229 Practicum in Addictions Treatment* ..... 6
230 Addictions \& the Family: Treatment ..... 3
231 Addictions Treatment of Special Populations ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 18 CH
*This Practicum is targeted to students who have already completed socialwork and developmental psychology courses at another college, university,or are seeking additional clock hours towards certification.

## Programs of Study

## Human Services

## COMMUNITY HEALTH CARE WORKER 716* <br> Associate in Applied Science Degree (A.A.S.) 63 Credit Hours (CH)

The Community Health Care Worker program is designed to focus on competencies universally required for primary and preventive health care. The curriculum also serve students who may wish to enter into a nursing program or other allied health professions. Research shows that many health educator programs at the university level (bachelor, masters) require as a core curriculum the same knowledge and competence areas incorporated into this program.

## General Education

English (035)
101 Composition
CIS (032)
120 Introduction to Microcomputers
Social Science (088)
101 General Course I/Soc Sci
Biology (023)
115 Human Biology
Humanities (041)
201 General Course I or
202 General Course II
Child Development (090)
101 Human Growth \& Development I
102 Human Growth \& Development II
Required Program Core
Health Technology (334HLTH)
701 Introduction to Community Health Work
702 Accessing Community Resources
703 Community Health Problems
704 Communicable Diseases
705 Nutrition, Exercise \& Disease
706 Human Development Overview
707 Portfolio Development
708 Adult and Senior Health
709 Substance Abuse Issues
710 Mental Health Issues
711 Case Management Fundamentals
712 Field Experience First Aid \& CPR

## TOTAL PROGRAM MINIMUM CREDIT HOURS

3
## COMMUNITY HEALTH CARE WORKER 717* <br> Advanced Certificate (A.C.) 47 Credit Hours (CH)

Required Program Core ..... 47 CH
Child Development (090)
101 Human Growth \& Development I ..... 4
102 Human Growth \& Development II ..... 3
334HLTH Health Technology
701 Introduction to Community Health Work ..... 3
702 Accessing Community Resources ..... 3
703 Community Health Problems ..... 3
704 Communicable Diseases ..... 3
705 Nutrition, Exercise \& Disease ..... 3
706 Human Development Overview ..... 4
707 Portfolio Development ..... 3
3
709 Substance Abuse Issues ..... 3
710 Mental Health Issues ..... 3
711 Case Management Fundamentals ..... 3
712 Field Experience First Aid \& CPR ..... 6
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 47 CH
COMMUNITY HEALTH CARE WORKER ..... 718*
Basic Certificate (B.C.) 19 Credit Hours (CH)
Required Program Core ..... 19 CH
logy (334HLTH) 701 Introduction to Community Health Work ..... 3
702 Accessing Community Resources ..... 3
703 Community Health Problems ..... 3
704 Communicable Diseases ..... 3
705 Nutrition, Exercise \& Disease ..... 3
706 Human Development Overview ..... 4
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 19 CH

# Programs of Study <br> Human Services 

## COSMETOLOGY 349

Advanced Certificate (A.C.) 36 Credit Hours (CH)
The Advanced Certificate program in the field of Cosmetology offers challenging and rewarding opportunities designed to give students thorough training in the art, skill and applied science used in the treatment of hair, nails, and skin. The program meets the standards of the Illinois Department of Finance and Professional Regulation (IDFPR) in total hours, teaching staff, equipment, facilities, libraries, and course content.

Students are required to complete a specific number of hours in the Technical Center Styling Salon. Once students have completed all coursework and laboratory hours, they are ready to sit for the licensure examination through the IDFPR. Students must be licensed in order to practice Cosmetology in Illinois.

## Required Program Core

36 CH
Cosmetology (163)
101 Introduction to Cosmetology/Cosmetic Art
102 Hair Shaping Technology
103 Basic Styling Technology
104 Hair Tinting Technology
105 Salon Technology I
106 Salon Technology II
201 Advanced Styling Technology
202 Summative Seminar

## TOTAL PROGRAM MINIMUM CREDIT HOURS 36 CH

Note 1: Cosmetology 101, 102 and 103 are prerequisites for 104, 105, 106, 201 and 202 and must be taken in sequence or concurrently passing with a minimum of a C grade. Courses 101, 102 and 103 will be offered each new semester for incoming students.
Note 2: Graduates of the Cosmetology Program may earn an Associate in General Studies Degree (A.G.S.) upon successful completion of additional college credit hours of which a specified number must be the general education requirements necessary for the A.G.S.. Students wishing to earn an AGS should consult a college Academic Advisor for a specific number of additional credit hours needed to earn the degree.

## GERONTOLOGY SPECIALIST 340 <br> Associate in Applied Science degree (A.A.S.) 61 Credit Hours (CH)

The A.A.S. degree program for Gerontology Specialist prepares students for entry level in the field, a human services position that qualifies the individual for work in federal, state, and local agencies, both private and public, that provide outreach services for the elderly.
General Education ..... 19 CH
Biology (023)
115 Human Biology ..... 4
CIS (032)
120 Introduction to Microcomputers ..... 3
English (035)
101 Composition ..... 3
Psychology (087)
201 Introduction to Psychology ..... 3
Arts/Humanities and Social/Behavioral Sciences ..... 6(Students should meet with a college Academic Advisor for selection ofone course each in these two disciplines. One course must meetthe State of Illinois Human Diversity requirement. See A.A.S. model onpage 52.)
Required Program Core ..... 36 CH
Psychology (087)
222 Adult Development and Aging ..... 3
223 Death, Dying and Bereavement ..... 3
Social Service (091)
102 Introduction to Gerontology ..... 3
103 Aging and Social Policy ..... 3
105 Physiology of Aging ..... 3
106 Aging and the Family ..... 3
107 Aging and Leisure ..... 3
202 Aging and Human Services ..... 3
203 Interpersonal Communication with Elderly ..... 3
204 Cross-Cultural Studies in Gerontology ..... 3
250 Practicum I ..... 3
251 Practicum II ..... 3
Electives ..... 6 CHSelect a minimum of two Gerontology course electivesrecommended by a college Academic Advisor.
TOTAL PROGRAM MINIMUM CREDIT HOURS

## Programs of Study

## Human Services

## GERONTOLOGY AIDE 339 <br> Basic Certificate (B.C.) 12 Credit Hours (CH)

This Basic Certificate program is designed to create the credentials needed to become a Gerontology Aide, or provides extra credentialing for individuals already in a related field who wish to add Gerontology coursework to their credentials.

Note: Also, see A.A.S. Gerontology Specialist 340.

## Required Program Core

12 CH
Psychology (087)
222 Adult Development and Aging
Social Service (091)
102 Introduction to Gerontology
105 Physiology of Aging
250 Practicum I

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## HUMAN DEVELOPMENT \& FAMILY SERVICES 391

Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)
The A.A.S. degree program in Human Development and Family Services is based on the individual and family perspective, an interdisciplinary field that integrates several behavioral, social, and biological concepts to understand human interaction and development. Program graduates work in social service agencies, retirement communities and other geriatric facilities, non-profits, and education centers.
General Education ..... 17 CH
English (035)
101 Composition I ..... 3
Speech (095)
101 Fundamentals of Speech Communication ..... 3
Math (045)
125 Introductory Statistics ..... 4
Psychology (087)
201 General Psychology ..... 3
Select one from the following: ..... 4
Biology (023)114/115 General Education Biology/Human BiologyChemistry (073)
121 Basic Chemistry I
201 General Chemistry I
Physical Science (076)
111/112 General Course I \& II
See A.A.S. model on page 52 which includes the State of Illinois HumanDiversity requirement.
Required Program Core ..... 37 CH
Child Development (090)
101 Human Growth and Development I ..... 4
102 Human Growth and Development II ..... 3
English (035)
102 Composition II ..... 3
HDFS (168)
201 Human Development and Sexuality ..... 3
202 Intimate Relationships ..... 3
203 Family Development fro ..... 3
205 Internship for Human Development ..... 6
Philosophy (043)
Psychology (087)
211 Social Psychology ..... 3
Sociology (089)
201 Introduction to the Study of Society ..... 3
Electives ..... 6 CH
The Art, Child Development and Music disciplines listed below are recommended for elective credit.
Art (3), Music (3)
(Consult with a college Academic Advisor for selection of Art and Music courses.) OR Child Development (090)
107 Health, Safety, and Nutrition (3)
120 Introduction to Early Education/Group Care (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 60 CH

# Programs of Study <br> Human Services 

## NURSING HOME ADMINISTRATION 341

Basic Certificate (B.C.) 12 Credit Hours (CH)
The Basic Certificate program in Nursing HomeAdministration addresses the educational needs of managers who will work with the elderly population in health care settings. The program prepares students for employment in longterm care facilities, as well as to sit for the nursing home administrator licensure exam. The program coursework includes both gerontology and business courses based on the requirements of the nursing home administrator's job description.

Required Program Core
12 CH
Business (030)
271Human Resources Management
Social Service (091)
102 Introduction to Gerontology
252 Nursing Home Administration
253 Accounting for Long Term Care

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## PSYCHIATRIC REHABILITATION 258

Basic Certificate (B.C.) 15 Credit Hours (CH)
The Psychiatric Rehabilitation Certificate Program (PRCP) prepares individuals for entry-level jobs in the Mental Health Services delivery system. The program is designed to provide the necessary skills needed to work with individuals with severe mental health issues in the process of recovery. The program was developed in a cooperative effort between the University of Chicago Center for Psychiatric Rehabilitation and the Illinois Department of Mental Health.

| Required Program Core | $\mathbf{1 5}$ CH |
| :--- | ---: |
| Psychiatric Rehabilitation (134) | 3 |
| 101 Survey of Psychiatric Rehabilitation | 3 |
| 102 Psychiatric Rehabilitation Skills | 3 |
| 103 Health Skills for Psychiatric Rehabilitation | 3 |
| 104 Vocational \& Community Living Skills | 3 |
| 105 PRCP Internship | 3 INIMM CREDIT HOURS |
| TOTAL PROGRAM MINIMUM | $\mathbf{1 5}$ CH |

15 CH

## SOCIAL WORK-GENERALIST 313 <br> Associate in Applied Science degree (A.A.S.) <br> 66 Credit Hours (CH)

The A.A.S. degree in Social Work includes the study of the generalist approach to working with the individual, family, group, and community. The degree can lead to employment as an aide to a social worker in government, community, or private social service agencies.General Education15 CHStudents should meet with a college academic advisorfor selection of specific course requirements for the 15.0 credithour minimum general education portion of the A.A.S. degree.
See A.A.S. model on page 52 which includes the State of IIlinois Human Diversity requirement.
Required Program Core ..... 37 CHChild Development (090)
101 Human Growth and Development I* ..... 4
102 Human Growth and Development II ..... 3
107 Health, Safety, and Nutrition ..... 3
Mental Health (118)
223 Introduction to Addictions Studies ..... 3
Social Services (091)
101 Introduction to Social Work ..... 3
109 Report Writing for Social Service Aides ..... 3
201 Principles of Social Work Practice ..... 3
212 Introduction to Group Process ..... 3
215 Social Problems \& Social Action I ..... 3
228 Methodology for Social Work ..... 3
229 Practicum in Social Service ..... 6
Electives ..... 14 CH
Recommended Areas of Supporting Coursework:Students are urged to take elective courses in Psychology,Sociology, Child Development, Anthropology, Criminal Justice,and Addiction Studies to become familiar with various approachesto individual, group, or societal problems. In addition, ComputerInformation Systems 120: Introduction to Microcomputers andEnglish 102: Composition, are strongly recommended. Meetwith a college Academic Advisor for course selection.
TOTAL PROGRAM MINIMUM CREDIT HOURS66 CH

## Programs of Study

## human Services

SOCIAL WORK-GENERALIST 317<br>Advanced Certificate (A.C.) 37 Credit Hours (CH)<br>Required Program Core<br>Child Development (090)<br>101 Human Growth and Development I*<br>102 Human Growth and Development II<br>107 Health, Safety, and Nutrition<br>Mental Health (118)<br>223 Introduction to Addictions Studies OR<br>228 Principles of Social Work Practice<br>Social Services (091)<br>101 Introduction to Social Work<br>109 Report Writing for Social Service Aides<br>201 Principles of Social Work Practice<br>212 Introduction to Group Process<br>215 Social Problems \& Social Action I<br>228 Methodology for Social Work<br>229 Practicum in Social Service

## TOTAL PROGRAM MINIMUM CREDIT HOURS

*Requires completion of clinical experience/observation hours.
Business (030)
269 Principles of Management ..... 3
37 CH Child Development (090)
101 Human Growth and Development I* ..... 4
102 Human Growth and Development II ..... 3
Mental Health (118)
223 Introduction to Addictions Studies ..... 3
228 Principles of Mental Health Practices ..... 3
3 Psychology (087)
211 Social Psychology3
Social Service (091)
109 Report Writing in Social Work ..... 3
212 Introduction to Group Process ..... 3
215 Social Problems and Social Action I ..... 3
248 Principles of Youth and Group Work ..... 3
249 Practicum in Youth Work ..... 6
Electives ..... 10 CHStudents should meet with a college academic advisorfor selection of elective courses.
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 63 CH
SOCIAL WORK: YOUTH WORK 371
Advanced Certificate (A.C.) 31 Credit Hours (CH)
Required Program Core31 CH
Child Development (090)
101 Human Growth and Development I*4
102 Human Growth and Development II ..... 3
Mental Health (118)
223 Introduction to Addictions Studies ..... 3
228 Principles of Social Work Practice ..... 3
Social Services (091)
109 Report Writing for Social Service Aides ..... 3
212 Introduction to Group Process ..... 3
215 Social Problems \& Social Action I ..... 3
248 Principles of Youth and Group Work ..... 3
249 Practicum in Youth Work ..... 6
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 31 CH
SOCIAL WORK: YOUTH WORK 372
Basic Certificate (B.C.) 15 Credit Hours (CH)
Required Program Core ..... 15 CH
Social Services (091)
3
215 Social Problems \& Social Action I ..... 3
248 Principles of Youth and Group Work ..... 3
249 Practicum in Youth Work ..... 615 CH

TOTAL PROGRAM MINIMUM CREDIT HOURS
15 CH

## PROCRAMS of STUDY <br> © <br> © <br> （r） <br> （A） <br> （ㅍ）

久〇OTONHOヨL NOILVWYOINI

# Programs of Study <br> information Technology 

## COMPUTER INFORMATION SYSTEMS 011 <br> Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)

The study of basic business and technical principles used in programming and operating personal computers. The A.A.S. can lead to entry-level jobs as computer programmer, programmer analyst, systems analyst, operations manager, network administrator, or unit supervisor in private and public firms or organizations. Advances in technology have increased the computer's application in the factory, the office and the telecommunications industry. As computer use grows, so will the need for workers who are able to cope with change and adapt to new technologies.

## General Education

Students should meet with a college Academic Advisor for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.

See page 52 for A.A.S. general education degree requirements.

## Required Program Core

CIS (032)
101 Introduction to Computer Information Systems
120 Introduction to Microcomputers
250 Introduction to Systems
Business (030)
111 Introduction to Business
181 Financial Accounting

## 24 CH

182 Managerial Accounting
Math (045)
118 General Education Math OR any Math course 118 or above
Additional CIS Required Courses
Select four courses from the following:
CIS (032)
103 Introduction to Basic Language (3)
122 Introduction to Word Processing on Microcomputers (3)
142 Introduction to C or C++ Language (3)
144 Introduction to JAVA Programming Language (3)
145 Introduction to Database on Microcomputers (3)
158 Beginning Internet (3)
181 Web Development I/Basic Web Technology (3)
182 Web Development II/Client Side Script (3)
244 Advanced JAVA Programming Language (3)
258 Advanced Internet (3)

## Electives <br> 9 CH

Students should meet with a college Academic Advisor for selection of elective courses.

## TOTAL PROGRAM MINIMUM CREDIT HOURS

(3)$\square$60 CH

## COMPUTER INFORMATION SYSTEMS 013 <br> (Advanced Certificate (A.C.) 30 Credit Hours)

## Required Program Core

14 CH

## CIS (032)

101 Introduction to Computer Information Systems

## 250 Introduction to Systems

Business (030)
181 Financial Accounting 4
182 Managerial Accounting 4
Additional CIS Required Courses $\quad 9 \mathrm{CH}$
Select three courses from the following CIS discipline or other recommended courses by a college Academic Advisor:
CIS (032)
103 Introduction to Basic Language (3)
120 Introduction to Microcomputers (3)
122 Introduction to Word Processing on Microcomputers (3)
142 Introduction to C or C++ Language (3)
144 JAVA I (3)
145 Introduction to Database on Microcomputers (3)
158 Beginning Internet (3)
181 Web Development I (3)

182 Web Development II (3)
235 Advanced COBOL Programming (3)
244 JAVA II (3)
258 Advanced Internet (3)
Electives $\quad 7 \mathrm{CH}$
Students should meet with a college Academic Advisor for selection of elective courses.
TOTAL PROGRAM MINIMUM CREDIT HOURS 30 CH
COMPUTER INFORMATION SYSTEMS 012
Basic Certificate (B.C.) 12 Credit Hours (CH)
Required Program Core $6 \mathbf{C H}$
CIS (032)
101 Introduction to Computer Information Systems 3
120 Introduction to Microcomputers 3
CIS Electives $\quad 6 \mathrm{CH}$
Select two courses from the following or other
recommended courses by a college Academic Advisor:
CIS (032)
103 Introduction to Basic Language (3)
122 Introduction to Word Processing on Microcomputers (3)
142 Introduction to C or C++ Language (3)
144 JAVA I (3)
145 Introduction to Database on Microcomputers (3)
158 Beginning Internet (3)
181 Web Development I/Basic Web Technology (3)
182 Web Development II/Client Side Script (3)
244 Advanced JAVA Programming Language (3)
258 Advanced Internet (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS
12 CH

# Programs of Study <br> Information Technology 

## COMPUTER SECURITY AND FORENSIC INVESTIGATION 297

Basic Certificate (B.C.) 20 Credit Hours (CH)
The Basic Certificate program in Computer Security and Forensic Investigation (CSFI) comprises two tracks: (1) Information Security and (2) Computer Forensic Law Enforcement. CSFI includes a required program core group of courses, expands on the forensic focus of the FCl program, and adds an Information Security component. All students are required to complete the core course group prior to selecting the one track that fits their objective.

1) The Information Security track focuses on design, implementation and management of information security in the corporate environment. Students will be prepared for the nationally recognized Certified Information Systems Security Professional (CISSP) Exam. CISSP designation can provide career enhancement, increase marketability, and ensure prospective employers of a certain level of information security knowledge.
2) The Computer Forensic/Law Enforcement track focuses on computer forensic investigation and provides law enforcement personnel, criminal justice majors, and other interested parties with the procedures and methodology for investigation of computer crimes, and handling electronic evidence as it relates to criminal procedures.

## Required Program Core (minimum) 20 CH

 Computer Security \& Forensic Investigation (162)101 General Technology Essentials*
102 Introduction to Information Security
202 Introduction to Cybercrime
Information Security Track (1)**
213 Information Security Technology
214 Information Security Systems Analysis
215 Information Security Domains
216 Information Security Program Management
OR
Computer Forensic/Law Enforcement Track (2)**
203 Financial Cybercrime
204 Introduction to Computer Forensics \& Law
205 Computer Forensic Technology
206 Internet Vulnerabilities, Criminal Activities
\& Investigative Procedures

## TOTAL PROGRAM MINIMUM CREDIT HOURS

[^2]
## ENVIRONMENTAL GIS 264

Basic Certificate (B.C.) 21 credit hours (CH)
The Basic Certificate program in Environmental GIS (Geographic Information Systems) introduces the fundamental concepts of GIS and real world representation, using GIS vector and raster technology via spatial data input, topology, cartographic projections, and coordinate systems. The program prepares students with background information and technological skills to explore, capture, manage, analyze, model, perform spatial operations, and to find trends and patterns on landscape.

## General Education

## 13 CH

English (035)
101 Composition
CIS (032)
120 Introduction to Microcomputers 3
Geography (084)
201 Physical Geography OR 3
Geology (075)
201 Physical Geology
Mathematics (045)
125 Intro to Statistics

$$
4
$$

Required Program Core 8 CH
Physical Science (076)
201 Fundamental Vector GIS 4
202 Raster GIS \& Remote Sensing 4
TOTAL PROGRAM MINIMUM CREDIT HOURS

## INFORMATION PROCESSING 719

Basic Certificate (B.C.) 26 Credit Hours (CH)
The Basic Certificate program in Information Processing prepares students to develop skills in information technology, emphasizing software applications and modern office procedures. Courses are designed to provide instruction in computer keyboarding, computer literacy, word processing, spreadsheets, databases, business writing, and use of the Internet and electronic mail. Students also receive training in desktop publishing and apply their skills to office settings through their practicum experience.

## Required Program Core <br> 26 CH

330BSCM
503 Business Writing 3
508 Practicum 1
525 Introduction to Office Systems 2
526 Introduction to Personal Computers 2
540 Business Math 3
543 Keyboarding for Microcomputers I 2
544 Keyboarding for Microcomputers II 2
550 Word Processing Applications 2
551 Spreadsheet Applications 2
552 Database Applications 2
553 Desktop Publishing Applications 2
568 Language Skills I 3

## Programs of Study <br> information Technology

## NETWORKING SYSTEMS AND TECHNOLOGY 141 <br> Associate in Applied Science degree (A.A.S.) (60 Credit Hours)

A student chooses to major in one of two tracks:
(1) Networking or (2) Hardware/Software Support, depending on the career goals. The Networking Track is for individuals interested in maintaining network equipment and software such as servers, hubs, switches and routers. The Hardware/Software Support track prepares individuals for PC hardware and software maintenance and support. Both tracks also prepare students for a variety of computer industry certifications: A+, Network, CNA, MCP, MOUS, CCNA.

## General Education

18 CH
Students should meet with a college Academic Advisor for selection of specific course requirements for the general education portion of the A.A.S. degree.

See page 52 for A.A.S. general education degree requirements.

## Required Program Core <br> (Track 1 or Track 2)

(minimum) 42 CH

Select one of the following two tracks:

## Networking Track (1)

CIS (032)
101 Intro to Computer Information Systems
116 Introduction to Operating Systems
120 Introduction to Microcomputers
Networking Technologies (165)
121 Internetworking I
122 Internetworking II
221 Internetworking III
222 Internetworking IV
Students should meet with a college Academic Advisor for selection of a minimum 21 credit hours from the
additional core courses shown below:
21 CH
Note: For students who do not have any equivalent professional experience, at least three credit hours of an internship is required.

Business (030)
111 Intro to Business (3)
CIS (032)
158 Beginning Internet (3)
258 Advanced Internet (3)
260 CIS Field Project (3) OR
299 Special Topics in CIS (3-4)
Cooperative Work Experience (008)
106 Commercial-Data Processing CWE (3-6)
108 Engineering \& Industrial Tech CWE (3-6)
206 Commercial Data Processing CWE (3-6)
208 Engineering \& Industrial Tech CWE (3-6) OR
Hardware/Software Support Track (2)
CIS (032)
101 Intro to Computer Information Systems ..... 3
116 Introduction to Operating Systems ..... 3
120 Introduction to Microcomputers ..... 3
122 Introduction to Word Processing on Microcomputers ..... 3
123 Introduction to Spreadsheets on Microcomputers ..... 3
145 Introduction to Data Base on Microcomputers ..... 3
Networking Technologies (165)
121 Internetworking I321 CH
Students should meet with a college Academic Advisor for selection of a minimum 21 credit hours from the additional core courses shown below: ..... 21 CH
Note: For students who do not have any equivalent professional experience, at least three credit hours of an internship is required.
Business (030)
111 Intro to Business (3) ..... (3)
CIS (032)
158 Beginning Internet (3)
258 Advanced Internet (3)
260 CIS Field Project (3) OR
265 CIS Internship (3)
Cooperative Work Experience (008)
106 Commercial-Data Processing CWE (3-6)
108 Engineering \& Industrial Tech CWE (3-6)
208 Engineering \& Industrial Technologies (3-6)
NETWORKING SYSTEMS AND TECHNOLOGY 142
Advanced Certificate (A.C.) 30 Credit Hours (CH)
Required Program Core ..... 6 CH
101 Introduction to Computer Information Systems ..... 3
116 Introduction to Operating Systems ..... 3
Additional Requirements ..... 24 CH
Networking Track (1)
Networking Technologies (165)
121 Internetworking I3
122 Internetworking II ..... 3
221 Internetworking III ..... 3222 Internetworking IV
Hardware/Software Support Track ( ..... (2)
CIS (032)
120 Introduction to Microcomputers ..... 3
122 Introduction to Word Processing ..... 3 on Microcomputers
123 Introduction to Spreadsheets ..... 3on Microcomputer
145 Introduction to Data Base on Microcomputers3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 30 CH

# Programs of Study <br> Information Technology 

NETWORKING SYSTEMS AND TECHNOLOGY 143
Basic Certificate (B.C.) 18 Credit Hours (CH)
Required Program Core
CIS (032)
101 Introduction to Computer Information Systems
116 Introduction to Operating Systems
Additional Requirements
Select one of the following two tracks:
Networking Track (1)
Networking Technologies (165)
121 Internetworking I
122 Internetworking II
221 Internetworking III
222 Internetworking IV
OR
Hardware/Software Support Track (2)
CIS (032)
120 Introduction to Microcomputers
3
122 Introduction to Word Processing
3
on Microcomputers
123 Introduction to Spreadsheets
3
145 Introduction to Data Base on Microcomputers 3

TOTAL PROGRAM MINIMUM CREDIT HOURS

## WEB DEVELOPMENT 155

Advanced Certificate (A.C.) 31 Credit Hours (CH)
The Web Development Advanced Certificate program prepares students for entry-level positions as Web site editors, developers, or designers. Students acquire an understanding of programming principles and languages incorporated in Web pages, and become proficient in HTML and related technologies. This program will also be useful to individuals whose job duties have expanded to include web site responsibilities or who wish to develop web pages for their businesses.

## Required Program Core 13 CH

 CIS (032)181 Web Development I 3
182 Web Development II 3
281 Web Development III 3
282 Web Development IV 4

| Electives | 18 CH |
| :--- | ---: |
| Select six courses from the following: |  |
| CIS (032) |  |
| 101 Intro to Computer Information Systems (3) |  |
| 103 Intro to BASIC Language (3) |  |
| 116 Intro to Operating Systems (3) |  |
| 120 Intro to Microcomputers (3) |  |
| 122 Intro to Word Processing (3) |  |
| 123 Intro to Spreadsheets (3) |  |
| 144 JAVA I (3) |  |
| 145 Intro to Database (3) |  |
| 203 Advanced BASIC Programming (3) |  |
| 244 JAVA II (3) |  |
| 250 Intro to Systems (3) |  |
| TOTAL PROGRAM MINIMUM CREDIT HOURS |  |
|  |  |
| WEB DEVELOPMENT 152 |  |
| Basic Certificate (B.C.) 16 Credit Hours (CH) |  |
| Required Program Core |  |
| CIS (032) |  |
| 181 Web Development I/Basic Web Tech. |  |
| 182 Web Development II/Client Side Script. | 3 |
| 281 Web Development III/Server Side Program | 3 |
| 282 Web Development IV/Web Database Integr. | 4 |
| Electives | 3 CH |
| Select one course from the following: |  |
| CIS (032) |  |
| 101 Intro to Computer Information Systems (3) |  |
| 103 Intro to BASIC Language (3) |  |
| 116 Intro to Operating Systems (3) |  |
| 120 Intro to Microcomputers (3) |  |
| 122 Intro to Word Processing on Micro (3) |  |
| 123 Intro Spreadsheet on Microcomputer (3) |  |
| 144 Intro to JAVA Programming Language (3) |  |
| 145 Intro to Database on Microcomputer (3) |  |
| 203 Advanced BASIC Programming (3) |  |
| 244 Advanced JAVA Programming Language (3) |  |
| 250 Intro to Systems (3) |  |

16 CH

## PROGRAMS of STUDY <br> © <br> ® <br> (ix) <br> © <br> (ㅍ) <br> (®)

CRIMINAL JUSTICE/PRIVATE POLICE SERVICES 319
Advanced Certificate (A.C.) 30 Credit Hours (CH)
The Advanced Certificate program in Criminal Justice Private Police Services is focused on the study of theory and practices of current trends in private police services, criminal and civil law for private security officers. The program can lead to promotion to security directors, middle-management positions or self-employment.

## Required Program Core <br> 30 CH

Criminal Justice (080)
102 Administration of Criminal Justice
114 Administration of Juvenile Justice
170 Scope \& Purpose of Private Police
172 Management \& Supervision for Private Police
174 Law for Private Police
211 Introduction to Investigation
222 Professional Responsibilities
234 Criminal Law and Procedure
English (035)
107 Report Writing
CIS (032)
120 Introduction to Microcomputers

## TOTAL PROGRAM MINIMUM CREDIT HOURS

CRIMINAL JUSTICE/PRIVATE POLICE SERVICES 326
Basic Certificate (B.C.) 18 Credit Hours (CH)

## Required Program Core

Criminal Justice (080)
102 Administration of Criminal Justice
170 Scope \& Purpose of Private Police
172 Management \& Supervision for Private Police
174 Law for Private Police
211 Introduction to Investigation
222 Professional Responsibilities
TOTAL PROGRAM MINIMUM CREDIT HOURS

CRIMINAL JUSTICE/PUBLIC POLICE SERVICES 294
Associate in Applied Science degree (A.A.S.) 60 Credit Hours (CH)

The A.A.S. degree program in Criminal Justice Public Police Services is the study of theory and practice of contemporary criminal justice for those who plan careers as police officers or other criminal justice positions, as well as police who wish to advance in rank or into administrative levels of criminal justice.

General Education

15 CH

Students should meet with a college Academic Advisor
for selection of specific course requirements for the 15.0 credit hour minimum general education portion of the A.A.S. degree.
See page 52 for A.A.S. general education degree requirements.
3 Required Program Core
3 Criminal Justice (080)
102 Administration of Criminal Justice ..... 3
114 Administration of Juvenile Justice ..... 3
202 Issues in Criminal Justice ..... 3
211 Introduction to Investigation ..... 3
221 Police Organization and Management ..... 3
222 Professional Responsibility ..... 3
234 Criminal Law and Procedure ..... 3
256 Constitutional Law ..... 3
CIS (032)
120 Introduction to Microcomputers ..... 3
Political Science (086)
201 National Government (3) OR ..... 6
Psychology (087)
201 General Psychology ..... (3) $\underline{O R}$
Sociology (089)
201 Introduction to the Study of Society (3)
Electives ..... 12 CH
The courses listed below in Criminal Justice and Englishdisciplines are recommended for elective credit as well asother courses recommended by a college Academic Advisor.Criminal Justice (080)155 Introduction to Corrections (3)250 Introduction to Criminology (3)English (035)
107 Report Writing (3)

## Programs of Study

## Law, Public Safety, Corrections and Security

## CRIMINAL JUSTICE/PUBLIC POLICE SERVICES 295

Advanced Certificate (A.C.) 30 Credit Hours (CH)

## Required Program Core

Criminal Justice (080)
102 Administration of Criminal Justice
114 Administration of Juvenile Justice
202 Issues in Criminal Justice
211 Introduction to Investigation
221 Police Organization and Management
222 Professional Responsibility
234 Criminal Law and Procedure
256 Constitutional Law
CIS (032)
120 Introduction to Microcomputers

## Additional Field Courses

Select one course from the following:
Criminal Justice (080)
155 Introduction to Corrections (3)
English (035)
107 Report Writing (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS

CRIMINAL JUSTICE/PUBLIC POLICE SERVICES 296
Basic Certificate (B.C.) 15 Credit Hours (CH)
Required Program Core
Criminal Justice (080)
102 Administration of Criminal Justice
114 Administration of Juvenile Justice
202 Issues in Criminal Justice
211 Introduction to Investigation
234 Criminal Law and Procedure OR
256 Constitutional Law

## TOTAL PROGRAM MINIMUM CREDIT HOURS

## General Education

Chemistry (073)
121 Basic Chemistry I 4
CIS (032)
120 Introduction to Microcomputers 3
English (035)
101 Composition
Psych (087)
201 General Psychology
Speech (095)
101 Fundamentals of Speech Communication
Arts/Humanities
The A.A.S. degree program in Emergency Management was developed in response to a long recognized need for a systematized approach to preparing emergency managers. Following the recommendations of the model curriculum of the Federal Emergency Management Agency's Higher Education Program, students choose from one of the three Emergency Management program tracks: 1)Homeland Security, 2) Incident Command, or 3) Emergency Preparedness.
Note: Also see individual Basic Certificate programs for Homeland Security 356, Incident Command 357, and Emergency Preparedness 358.

Students should meet with a college Academic Advisor for selection of one course in this discipline.
(Students should meet with a college Academic Advisor for selection of one course from this discipline which must meet the State of Illinois Human Diversity requirement. See A.A.S model on page 52).

## Required Program Core

18 CH
Select one of the following three tracks:
Homeland Security Track 1

## EMERGENCY MANAGEMENT 355 <br> Associate in Applied Science degree (A.A.S.) 64 Credit Hours (CH)

Environmental Technology (027)
100 Introduction to Emergency Management 3
101 Basic Skills in Emergency Management 3
106 Introduction to Terrorism 3
115 Intro to Weapons of Mass Destruction 3
205 Terrorism Planning 3
215 Advanced Weapons of Mass Destruction 3
OR
Incident Command Track 2
Environmental Technology (027)
100 Introduction to Emergency Management 3
101 Basic Skills in Emergency Management 3
102 Leadership, Influence and Communication 3
111 Basic Incident Command 3
212 Advanced Incident Command 3
221 Emergency Management Operations I 3
OR

# Programs of Study Law, Public Safety, Corrections and Security 

Emergency Preparedness Track 3
Environmental Technology (027)
100 Introduction to Emergency Management
101 Basic Skills in Emergency Management ..... 3
103 Introduction to Emergency Planning ..... 3
108 Mitigation Management
113 Emergency Resource Management
203 Advanced Emergency Planning
Additional Requirements
Environmental Technology (027)
112 Disaster Response and Recovery
225 Psychology of Terrorism or
226 Disaster Psychology
222 Emergency Management Operations II
(capstone internship)
Recommended Core Electives
Environmental Technology (027)
122 Disaster Site Worker (3)
123 Chemical Emergency Response (3)
Recommended Other Electives ..... (minimum) 10 CH
Select three to four courses from the following:
CIS (032)
116 Introduction to Operating Systems (3)
Computer Security and Forensic Inv (162)
102 Introduction to Information Security (4)
213 Information Security Technology (3)
Emergency Medical Technician (120)
101 EMT Basic (3)
Environmental Technology (027)
121 Introduction to Hazardous Materials Management (3)
131 Environmental Health and Safety (3)
141 Site Investigation and Sampling (3)
181 Emergency Response Level I, II, III (3)
TOTAL PROGRAM MINIMUM CREDIT HOURS64 CH
EMERGENCY PREPAREDNESS 358
Basic Certificate (B.C.) 18 Credit Hours (CH)
This certificate is intended for those individuals whosefunction is in the planning and support sectors of theemergency response field. This is a broad field of activityas it addresses the common needs of all emergencysituations, but includes the unique needs of specific typesof emergencies, i.e., the needs of planning and response toa hurricane vs. a terrorist attack involving weapons of massdestruction.

[^3]33311 CH
Required Program Core ..... 18 CH
Environmental Technology (027)
100 Introduction to Emergency Management ..... 3
101 Basic Skills in Emergency Management ..... 3
103 Introduction to Emergency Planning ..... 3
108 Mitigation Management ..... 3
113 Emergency Resource Management ..... 3
203 Advanced Emergency Planning ..... 3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 18 CH
FIRE SCIENCE AND TECHNOLOGY 3364 Associate in Applied Science degree (A.A.S.)34

The A.A.S. degree program in Fire Science and Technology includes the study of principles, practices, and equipment used in fire prevention, protection, and suppression. This degree may lead to employment with municipal, industrial, or government fire departments as a fire fighter, arson investigator, safety and fire prevention specialist, or fire science training instructor, or can help promote advancement in rank for persons employed as fire fighters.
General Education ..... (minimum) 16 CH
English (035)
101 Composition3
Humanities (041)
201 General Course I Humanities OR ..... 3
202 General Course II Humanities
Mathematics (045)
118 General Education Math ..... 3
Social Science (088)
101 General Course I Social Science OR ..... 3
102 General Course II Social Science
Physical Science (076)
112 General Course II4
(Students should meet with a college Academic Advisor for selection of one course from this discipline which must meet the State of Illinois HumanDiversity requirement. See A.A.S model on page 52).
Required Program Core30 CH
Fire Science and Technology (116)101Introduction to Fire Science3
102 Fire Fighting Tactics I ..... 3
103 Fire Suppression Systems ..... 3
104 Fire Suppression Apparatus ..... 3
201 Fire Service Hydraulics ..... 3
202 Building Construction for Fire Service ..... 3
203 Fire Protection Systems ..... 3
204 Fire Fighting Tactics II ..... 3
205 Chemistry of Flammable Materials ..... 3
210 Fire Prevention Fundamentals I ..... 3
Electives ..... 14 CHStudents should meet with a college Academic Advisorfor selection of elective courses.
TOTAL PROGRAM MINIMUM CREDIT HOURS60 CH

## Programs of Study

## Law, Public Safety, Corrections and Security

## HOMELAND SECURITY 356 <br> Basic Certificate (B.C.) 18 Credit Hours (CH)

The Basic Certificate program for Homeland Security is designed to meet new federal requirements for those in law enforcement, emergency response, and public safety fields who perform response activities at the emergency scene relating to the needs of on-scene emergency response regardless of the type of emergency..

Note: Also, see Emergency Management A.A.S. degree 355.

## Required Program Core

18 CH
Environmental Technology (027)
100 Introduction to Emergency Management
101 Basic Skills in Emergency Management
106 Introduction to Terrorism
115 Intro to Weapons of Mass Destruction
205 Terrorism Planning
215 Advanced Weapons of Mass Destruction
TOTAL PROGRAM MINIMUM CREDIT HOURS

## INCIDENT COMMAND 357

Basic Certificate (B.C.) 18 Credit Hours (CH)
The Basic Certificate program for Incident Command is designed to meet new federal requirements for those in law enforcement, emergency response, and public safety fields who perform response activities relating to the needs of on-scene emergency response regardless of the type of emergency.
Note: Also, see Emergency Management A.A.S. degree 355.

## Required Program Core

18 CH
Environmental Technology (027)
100 Introduction to Emergency Management
101 Basic Skills in Emergency Management
102 Leadership, Influence and Communication
111 Basic Incident Command
212 Advanced Incident Command
221 Emergency Management Operations I
TOTAL PROGRAM MINIMUM CREDIT HOURS

PARALEGAL 304
Associate in Applied Science degree (A.A.S.) 63 Credit Hours (CH)

The A.A.S. degree program for Paralegal prepares students with the necessary skills to become highly trained paralegals to meet the needs of corporations, law firms and offices, and other sectors where law-related work is performed. Students completing an A.A.S. in Paralegal are employable in any area where law-related work is conducted. Paralegals may not provide legal services directly to the public, except as permitted by law. The program is approved by the American Bar Association.
General Education ..... 24 CH
CIS (032)
120 Introduction to Microcomputers ..... 3
English (035)
101 Composition I ..... 3
102 Composition II ..... 3
Humanities (041) ..... 3
123 Introduction o to Arts \& Ideas OR201 General Humanities IPhilosophy (043)3
105 Logic OR
106 Introduction to Philosophy OR
107 Ethics
Political Science (086)
201 The National Government ..... 3
Social Science (088)
102 General Course II ..... 3
Speech (095)
101 Fundamentals of Speech Communication ..... 3
Note: This program is exempt from the A.A.S. model shown on page52, since it was approved by ICCB prior to the development of this modeleffective with the 2012-2014 CCC Academic Catalog. This exemptionincludes the State of Illinois Human Diversity requirement.
Required Program Core ..... 30 CH
Introductory Courses (may be taken concurrently):
Business (030)
147 Introduction to Paralegal Studies ..... 3
148 Civil Litigation ..... 3
149 Family Law ..... 3
Advanced Courses:
Business (030)
150 Legal Research \& Writing I ..... 3
219 Real Estate Law for the Paralegal ..... 3
220 Criminal Law for the Paralegal ..... 3
222 Business Law for the Paralegal ..... 3
223 Tort Law ..... 3
224 Wills, Trusts \& Probate ..... 3
225 Legal Research \& Writing II ..... 3
Additional Core courses: ..... 9 CH
Select two courses from the followingBusiness (030)
227 Elder Law (3)
228 Environmental Law for the Paralegal (3)
229 Immigration Law (3)
238 Legal Ethics (3)
239 Business Organization and Agency Law (3)
Select one course from the following:
226 Internship for the Paralegal (3)
240 Computers in the Law Office (3)
Note: Although not required, elective credit may be recommendedby the Program Director in consultation with the student.
TOTAL PROGRAM MINIMUM CREDIT HOURS63 CH

ONIU@LOVAONVW

## PROGRAMS of STUDY <br> - <br> ① <br> (Ii) <br> (n)

## Programs of Study

MANUFACTURING

## COMPUTER NUMERIC CONTROL MACHINING 724

Basic Certificate (B.C.) 19 Credit Hours (CH)

## General Education

Math (045)
125 Introduction to Statistics
Required Program Core
340MFGT
111 Machining Processes I
112 Machining Processes II
140 CNC Fundamentals
123 CNC Milling Operations \& Programming
137 CNC Turning Operations \& Programming

## TOTAL PROGRAM MINIMUM CREDIT HOURS

19 CH
COMPUTER NUMERICAL CONTROL MACHINING 725
Advanced Certificate (A.C.) 37 Credit Hours (CH)
Computer Numerical Control (or CNC) Machining is a challenging and rewarding career that combines mechanical and digital skills to sculpture metal with incredible precision. The basic certificate provides the skills and knowledge to set up and operate CNC lathes and mills, while the Advanced Certificate adds Computer-Aided Design (CAD) and ComputerAided Manufacturing (CAM) skills. Certificate completers will be able to gain entry level jobs as a CNC machine operator or machinist trainee, while the Advanced Certificate completers will be able to pursue additional entry-level positions as CAD/ CAM technicians or CNC programmers, as well as tool and die apprenticeships.

## General Education

7 CH
English (035)
101 Composition
Math (045)
125 Introduction to Statistics

## Required Program Core <br> 340MFGT

139 Print Requirements and Quality Assurance
111 Machining Processes I
112 Machining Processes II
140 CNC Fundamentals
123 CNC Milling Operations \& Programming
137 CNC Turning Operations \& Programming
138 Introduction to SolidWorks
207 Introduction to MasterCAM
144 Wire Electrical Discharge Machining
143 Advanced Metrology

## COMPUTERIZED NUMERICAL CONTROL (CNC) 748 Advanced Certificate (A.C.) 41 Credit Hours (CH)

The Advanced Certificate program in Computerized Numerical Control is designed for study of the basic principles of machine tool technology incorporating basic computer applications to the manufacturing industry, including CNC programming and computer integrated manufacturing (CAD/ CAM).

## Required Program Core 41 CH

330BSCM
546 Career Development I 3
332ENGR
300 Introduction to CAD 3
301 CNC Operations 3
302 CNC Programming I 3
303 CNC Programming II 3
304 CAD/CAM Numerical Control 3
305 Introduction to Computer Application in 4
Manufacturing (CAM)
539 Metallurgy 3
761 Machine Shop Math 3
764 Machine Shop Technology 4
767 Blueprint Reading 2
770 Machine Tool Operations 3
777 Statistical Process Control 3
779 Internship 1
TOTAL PROGRAM MINIMUM CREDIT HOURS

## FACTORY AUTOMATION 727

Advanced Certificate (A.C.) 35 Credit Hours (CH)
Factory Automation technicians operate, maintain, repair and install automated production equipment used through manufacturing. In addition to the traditional mechanical and electrical skills, modern production requires digital, programmable skills such as robotic programming, sensor technology and the use of Programmable Logic Controllers.

This certificate provides foundational mechanical and electrical skills for entry level jobs in maintenance, repair and installation of manufacturing production equipment. Program completers will be employable as a maintenance mechanic trainee or helper, and as a building maintenance trainee. Students will also have the opportunity to earn the Manufacturing Skill Standards Council's (MSSC) credential in Maintenance Awareness.

```
General Education
                                    7CH
English (035)
101 Composition
Math (045)
125 Introduction to Statistics
Required Program Core

28 CH340MFGT191 Industrial Electricity253 Pneumatics
255 Industrial Hydraulics
291 Programmable Logic Controllers292 Principles of Mechanisms295 Electric Motor Controls
297 Advanced Mechanical Systems
145 Computer Integrated Manufacturing (CIM)
146 Team Dynamics in Manufacturing
OR
PHYSICS (077)
131 Mechanics and Power
TOTAL PROGRAM MINIMUM CREDIT HOURS
FACTORY AUTOMATION 726Basic Certificate (B.C.) 20 Credit Hours (CH)
General Education ..... 4 CH
Math (045)
125 Introduction to Statistics
Required Program Core
340MFGT
191 Industrial Electricity
253 Pneumatics
255 Industrial Hydraulics
292 Principles of Mechanisms
295 Electric Motor Controls
TOTAL PROGRAM MINIMUM CREDIT HOURS

\section*{INDUSTRIAL MAINTENANCE 790}
Advanced Certificate (A.C.) 36 Credit Hours (CH)
The Advanced Certificate program in Industrial Maintenance applies the theory and application of electricity and electronics to wiring, motors, industrial controls, electronic instrumentation, and programmable logic controllers. The program integrates academic and occupational education and leads to an internship at an actual worksite. These skills will help students expand their career opportunities and career plans in occupations related to power and control of buildings and equipment. Projects will demonstrate wiring, motor controls, switches, power operated mechanical devices, and other set-ups of systems that apply to electric/electronic power controls.

\section*{Required Program Core \\ 432ENGR}
502 Electrical Wiring
503 Applied Mathematics
504 Intro to Pneumatic Technology
505 Solid State Fundamentals
506 Industrial Motors
507 Industrial Controls

4
508 Digital Electronics Fundamentals ..... 3
509 Industrial Programmable Control ..... 3
510 Industrial Hydraulics ..... 3
512 Internship ..... 2
515 Principles of DC/AC ..... 4
516 Quality Assurance ..... 2
517 National Electric Code ..... 2
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 36 CH
MANUFACTURING TECHNOLOGY 770
Associate of Applied Science degree (A.A.S.) 62 Credit Hours (CH)

The A.A.S. degree program in Manufacturing Technology Maintenance Mechanic offers the technologies required for maintenance mechanics in the manufacturing or service industries and covers theory and practical projects. The program is appropriate for career changes, high school graduates, general education diploma holders, and machining workers with a need to enhance their careers.
General Education16 CHEnglish (035)101 Composition3
Arts \& Humanities ..... 3
Math (045)
125 Introduction to Statistics ..... 4
Social \& Behavioral Science ..... 3
Additional General Education ..... 3-Any approved Human Diversity course
Required Program Core ..... 31 CH
340MFGT
139 Print Requirements and Quality Assurance ..... 3
104 Statistical Process Control (SPC) ..... 3
142 Geometric Dimensioning \& Tolerancing ..... 3
111-1 Machining Processes I ..... 3
140 CNC Fundamentals ..... 3
138 Introduction to SolidWorks ..... 3
191 Industrial Electricity ..... 4
292 Principles of Mechanisms ..... 3
141Manufacturing Materials \& Processes ..... 3
143 Advanced Metrology ..... 3
Electives ..... 15 CH

\section*{340MFGT}

101 Introduction to Welding (3)
112-1 Machining Processes II (3)
123 CNC Milling Operations \& Programming (3)
137 CNC Turning Operations \& Programming (3)
201 Supervised Work-based Learning (3)
253 Pneumatics (3)
255 Industrial Hydraulics (3)
291 Programmable Logic Controllers (3)
295 Electric Motor Controls (3)
297 Advanced Mechanical Systems (3)
145 Computer Integrated Manufacturing (CIM) (3)
144 Wire Electrical Discharge Machining (3)
146 Team Dynamics in Manufacturing (3)

\section*{Programs of Study}
```

330TRNS
1 5 2 ~ I n t r o d u c t i o n ~ t o ~ B u s i n e s s ~ L o g i s t i c s ~ ( 3 ) ~
CIS (032)
120 Introduction to Microcomputers (3)
ENGR (034)
1 1 1 Introduction to the Engineering Profession (2)
1 3 1 Engineering Graphics and Introduction to Design (3)
1 3 2 Descriptive Geometry (3)
PHYSICS (077)
1 3 1 Mechanics and Power (3)

```

\section*{TOTAL PROGRAM MINIMUM CREDIT HOURS}

\section*{PROCESS TECHNOLOGY 789}

Associate in Applied Science degree (A.A.S.)
63 Credit Hours (CH)
The A.A.S. degree program in Process Technology prepares students to work as entry-level operators or technicians in the process industry. The program prepares graduates to demonstrate technical knowledge, skills and abilities in computer applications, instrument systems, process systems, process trouble-shooting, quality control and safety control.

\section*{Program Requirements for Admission:}
- Cumulative GPA of 2.0 or higher.
- Must meet English 101 and Math 140 eligibility requirement
- Chemistry and Physical Science courses must be completed within five years of admission to the Process Technology Program. These courses can be audited after five years. If audited, the student must meet the requirements of the course.
- Subject to criminal background check and random drug screening.

\section*{General Education}

\section*{18 CH}

English (035)
101 Composition
(See A.A.S. model on page 52 for course selection.)
Mathematics \& Science
Fine Arts/Humanities
Social \& Behavioral Sciences
(Students should meet with a college Academic Advisor for selection of one course from this discipline which must meet the State of llinois Human Diversity requirement. See A.A.S model on page 52).

\section*{Required Program Core \\ 45 CH}

CIS (032)
120 Introduction to Microcomputers
Mathematics (045)
140 College Algebra
,

\section*{340PRTE}
115 Introduction to Process Technology ..... 3
116 Process Instrumental I ..... 4
117 Process Instrumental II ..... 4
118 Process Technology Equipment ..... 6
119 Safety, Health and Environment ..... 3
202 Quality Control ..... 3
203 Unit Systems ..... 4
204 Operations ..... 4
205 Process Troubleshooting ..... 4
206 Process Technology Internship ..... 3
PROCESS TECHNOLOGY 754
Advanced Certificate (A.C.) 38 Credit Hours (CH)
Required Program Core ..... 38 CH
CIS (032)
120 Introduction to Microcomputers ..... 3
340PRTE
115 Introduction to Process Technology ..... 3
116 Process Instrumentation I ..... 4
117 Process Instrumentation II ..... 4
118 Process Technology Equipment ..... 6
119 Safety, Health and Environment ..... 3
202 Quality Control ..... 3
203 Unit Systems ..... 4
204 Operations ..... 4
205 Process Troubleshooting ..... 4
TOTAL PROGRAM MINIMUM HOURS ..... 38 CH
QUALITY ASSURANCE 729
Basic Certificate (B.C.) 16 Credit Hours (CH)
Quality Assurance professionals use precision measurementand statistical tools to verify that products and services meetexpectations. This certificate programs provides foundationalskills for Quality Assurance in manufacturing such as printreading, geometric dimensioning and tolerancing, andstatistical process control.
General Education ..... 4 CH
Math (045)
125 Introduction to Statistics ..... 4
Required Program Core ..... 12 CH
340MFGT
3139 Print Requirements and Quality Assurance ..... 3
104 Statistical Process Control (SPC) ..... 3
4142 Geometric Dimensioning \& Tolerancing ..... 3143 Advanced Metrology3
TOTAL PROGRAM MINIMUM CREDIT HOURS

\section*{PROGRAMS of STUDY \\ （1a）® \\ （10） \\ © \\ （ri） \\ （®）}

\section*{Programs of Study}

Science, Technology, Engineering and Mathematics

\section*{AGRICULTURAL BIOTECHNOLOGY 389}

Advanced Certificate (A.C.) 31 Credit Hours (CH)
The Advanced Certificate program in Agricultural Biotechnology provides the study of theory, principles, techniques and current trends in biotechnology. This program is especially meant for students with prior collegelevel experience in biology and chemistry. Permission of the Department Chairperson is required to enroll in this program.

\section*{Program Required Core}

Biology (023)
121 Biology 1
209 Biochemistry
210 Survey of Biotechnology
250 Introduction to Molecular Biology
251 Molecular Biology I
252 Molecular Biology II
253 Plant Molecular Biology
260 Bioinformatics
299 Special Topics in Biology
TOTAL PROGRAM MINIMUM CREDIT HOURS

31 CH

\section*{CHEMICAL LABORATORY TECHNOLOGY 137 \\ Associate of Applied Science (A.A.S.) 63 Credit Hours (CH)}

The A.A.S. degree program in Chemical Laboratory Technology focuses on the study of the development, production and utilization of industrial chemicals and methods used in modern chemical laboratories. The program can lead to employment as a chemical lab technician (working under supervision of senior technicians), engineer, or scientist in production or testing, as well as in commercial utilization of chemicals and chemical products.

\section*{General Education \\ (minimum) 16 CH}

English (035)
101/102 Composition 6
Mathematics (045)
140 College Algebra 4
Fine Arts \& Humanities and 3
Social \& Behavior Sciences 3
(Students should meet with a college Academic Advisor for selection of one course from this discipline which must meet the State of Illinois Human Diversity requirement. See A.A.S model on page 52).

\section*{Required Program Core}

Chemistry (073)
201 General Chemistry I 5
203 General Chemistry II 5
205 Organic Chemistry I 6
207 Organic Chemistry II 6
217 Intro to Instrumental Analysis 4
Mathematics (045)
207 Calculus \& Analytical Geometry I 5
Electives 16 CH
Select a minimum of four courses from the following:
CIS (032)
120 Intro to Microcomputers (3)
Math (045)
141 Plane Trigonometry (3)
208 Calculus \& Analytical Geometry II (5)
Physics (077)
235 Engineering Physics I/Mechanics \& Wave Motion (4)
236 Engineering Physics II/Electricity \& Magnetism (4)

TOTAL PROGRAM MINIMUM CREDIT HOURS
63 CH

\section*{PROCRAMS of STUDY \\ (1a) ® 사 \\ (10) \\ © \\ (ㄷ) \\ (A) \\ (n)}

SOILSIDOT GNV
NOIL日gIYLSIG NOILVLYOdSNVYL

\section*{Programs of Study}

Transportation Distribution and Logistics

\section*{AUTOMOTIVE (TECHNOLOGY) 125 \\ Associate in Applied Science (A.A.S) 66 Credit Hours (CH)}

The A.A.S. degree program in Automotive Technology provides the necessary foundation and practical experience to pursue entry-level positions that meet the changing demands of the automotive industry. Entry-level positions may be found in automotive dealerships, automotive franchises, independent service repair shops, auto part stores, or through self-employment. Students will learn the technical skills essential to employment in the field of maintenance technology, auto body care, chassis, diesel, and power train, leading to employment in service, maintenance, and areas of technological specialty such as detailing, auto body paint and refinishing, as well as management occupations or selfemployment. Students will also be able to consider Industrial Engineering Technology transfer of credits from the program core courses to state universities.

\section*{General Education}

18 CH
Students should meet with a college Academic Advisor for selection of specific course requirements for the general education portion of the A.A.S. degree.
See page 52 for A.A.S. general education degree requirements.

\section*{Required Program Core}

38 CH
Automotive Technology (105)
101 Introduction to Automotive Technology
103 Engine Concepts
104 Electrical Systems \& Power Accessories
109 Automotive Brakes
209 Steering \& Suspension Systems
215 Automotive Temperature Control Systems

Option 1 or Option 2:
(minimum) 10

\section*{Option 1}

Automotive Technology (105)
105 Fuel Management I (4)
205 Fuel Management II (4)
206 Fuel Management III (4)
OR

\section*{Option 2}

Automotive Technology (105)
106 Fuel Systems (5)
210 Performance \& Drivability (5)
Option 1 or Option 2:

\section*{Option 1}

Automotive Technology (105)
211 Auto Service Management (4)
OR

\section*{Option 2}

Automotive Technology (105)
212 Manual Drive Train \& Axles (4)

\section*{}

\section*{Electives}
(minimum) 10 CH
Automotive Technology (105)
Work-Based Learning I (3-6)
204 Electrical Systems II (4)
207 Transmissions, Transaxle \& Driveline (4)

\section*{CIS (032)}

120 Introduction to Microcomputers (3)
TOTAL MINIMUM PROGRAM CREDIT HOURS
66 CH

\section*{AUTOMOTIVE (TECHNOLOGY) 130}

Advanced Certificate (A.C.) 46 Credit Hours (CH)

\section*{Required Program Core}

46 CH
Automotive Technology (105)
101 Introduction to Automotive Technology (4)
103 Engine Concepts (4)
104 Electrical Systems \& Power Accessories (4)
109 Automotive Brakes (4)
204 Electrical Systems II (4)
209 Steering \& Suspension Systems (4)
215 Automotive Temperature Control Systems (4)
Basic Core (28)
Option 1 or Option 2 (18)

Option 2
105 Fuel Management I (4)
205 Fuel Management II (4)
206 Fuel Management III (4)
108 Work Based Learning I (6)
MINIMUM PROGRAM CREDIT HOURS

\section*{AUTOMOTIVE (TECHNOLOGY) 116}

Basic Certificate (B.C.) 20 Credit Hours (CH)

\section*{Required Program Core}

20 CH
4 Automotive Technology (105)
101 Introduction to Automotive Technology 4
103 Engine Concepts 4
104 Electrical Systems \& Power Accessories 4
109 Automotive Brakes
209 Steering \& Suspension Systems 4
TOTAL PROGRAM MINIMUM CREDIT HOURS 20 CH

\title{
Programs of Study \\ Transportation Distribution and Logistics
}
```

AUTOMOTIVE BODY RECONSTRUCTION
TECHNOLOGY 112
Basic Certificate (B.C.) }25\mathrm{ Credit Hours (CH)
Required Program Core
Automotive Technology (105)
1 0 1 Introduction to Automotive Technology
107 Automotive Body Welding
117 Auto Body Reconstruction I
211 Auto Service Management
217 Auto Reconstruction II
220 Collision Estimating
Cooperative Work Experience (008)
101Cooperative Education Exploration

```
TOTAL PROGRAM MINIMUM CREDIT HOURS
AUTOMOTIVE BODY REPAINTING TECHNOLOGY 111
Basic Certificate (B.C.) 26 Credit Hours (CH)

\section*{Required Program Core}

Automotive Technology (105)
101 Introduction to Automotive Technology
118 Auto Body Repainting I
119 Auto Body Detailing
211 Auto Service Management
218 Auto Body Repainting II
220 Collision Estimating
Cooperative Work Experience (008)
101Cooperative Education Exploration
TOTAL PROGRAM MINIMUM CREDIT HOURS

AUTOMOTIVE CHASSIS MAINTENANCE 134
Basic Certificate (B.C.) 19 Credit Hours (CH)

\section*{Required Program Core}

Automotive Technology (105)
101 Introduction to Automotive Technology
104 Electrical Systems \& Power Accessories
109 Automotive Brakes
209 Steering \& Suspension Systems
Cooperative Work Experience (008)
101Cooperative Education Exploration
TOTAL PROGRAM MINIMUM CREDIT HOURS26 CH
AUTOMOTIVE COLLISION TECHNOLOGY 133Advanced Certificate (A.C.) 44 Credit Hours (CH)
Required Program Core44 CH
25 CH
101 In (105)
101 Introduction to Automotive Technology ..... 4
4 ..... 44
107 Automotive Body Welding ..... 4
3109 Automotive Brakes ..... 4
4117 Auto Body Reconstruction I ..... 3
3118 Auto Body Repainting I ..... 3
4 119 Automotive Body Detailing ..... 5
209 Steering \& Suspension Systems ..... 4
3217 Auto Reconstruction II ..... 3
218 Auto Body Repainting II ..... 3
220 Collision Estimating ..... 4
Cooperative Work Experience (008)3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 44 CH
4
AUTOMOTIVE FUEL MANAGEMENT TECHNOLOGY 136Basic Certificate (B.C.) 27 Credit Hours (CH)
Required Program Core ..... 27 CH
Automotive Technology (105)
101 Introduction to Automotive Technology ..... 44
104 Electrical Systems \& Power Accessories ..... 4
3 105 Fuel Management I ..... 4
205 Fuel Management II ..... 4
206 Fuel Management III ..... 4
Cooperative Work Experience (008)101Cooperative Education Exploration3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 27 CH
Automotive Technology (105)
101 Introduction to Automotive Technology ..... 4
3 to4 Electrical Systems \& Power Accessories ..... 4
AUTOMOTIVE MAINTENANCE 128
Basic Certificate (B.C.) 27 Credit Hours (CH)
109 Automotive Brakes ..... 4
209 Steering and Suspension Systems ..... 4
211 Auto Service Management ..... 4
215 Automotive Temperature Control Systems ..... 4
Cooperative Work Experience (008)
101Cooperative Education Exploration3
TOTAL PROGRAM MINIMUM CREDIT HOURS ..... 27 CH

\section*{Programs of Study}

\section*{Transportation Distribution and Logistics}

\begin{abstract}
PUBLIC PASSENGER VEHICLE TRAINING/TAXI 715
Basic Certificate (B.C.) 6 Credit Hours (CH)
The Basic Certificate program for Public Passenger Vehicle Training/Taxi is designed to prepare individuals to become public chauffeurs in the City of Chicago and to take the Public Chauffeur License examination issued by the Chicago Department of Business Affairs \& Consumer Protection. This two week comprehensive training program covers Chicago Geography/Navigation, Departmental Rules and Regulations, Accessibility Training, and Professional Development.
\end{abstract}

\section*{Required Program Core}

330BSCM
100 Public Passenger Vehicle Training/Taxi
TOTAL PROGRAM MINIMUM CREDIT HOURS

\section*{SUPPLY CHAIN MANAGEMENT 390}

Advanced Certificate (A.C.) 38 Credit Hours (CH)

The Supply Chain Management Program is designed to provide students with entry-level and advanced instructional training that will enable them to seek entry-level employment within the Transportation, Distribution and Logistics industry. Core courses focus on competencies that are industry specific; providing students with specified courses to enhance their career pathway.

\section*{Required Program Core}

38 CH
Business (030)
155 Working in the Warehousing Environment3.0
156 Warehousing Workforce Skills ..... 2.0
158 Warehousing \& Distribution Process ..... 2.5
159 Warehousing Technology Skills ..... 2.0
162 Representative Warehousing Skills ..... 2.5
164 Warehousing \& Distribution Co-op ..... 2.0
165 Fundamentals of Supply Chain Management I ..... 4.0
166 Fundamentals of Supply Chain Management II ..... 4.0
167 Fundamentals of Supply Chain Management III ..... 4.0
168 Field Experience:Intro to 21st Century Ground Transportation8.0
Math (045)
118 General Education Math ..... 4.0

\section*{SUPPLY CHAIN MANAGEMENT 385 \\ Basic Certificate (B.C.) 18 Credit Hours (CH)}

The Basic Certificate program for Supply Chain Management is designed for individuals interested in entry- level employment in the warehousing and distribution industry. Students will review the current rules, regulations and requirements to which all warehousing and distribution centers adhere. Upon completion of the program students will understand the responsibilities of supply chain, material handlers, and freight inventory.

\section*{Required Program Core 18 CH}

6 CH
Business (030)
155 Working in the Warehousing Environment 3.0
156 Warehousing Workforce Skills 2.0
158 Warehousing \& Distribution Process 2.5

159 Warehousing Technology Skills 2.0
162 Representative Warehousing Skills 2.5
164 Warehousing \& Distribution Co-op 2.0
Mathematics (045)
118 General Education Math
TOTAL PROGRAM MINIMUM CREDIT HOURS 18 CH

\section*{TOTAL PROGRAM MINIMUM CREDIT HOURS}

\section*{PROCRAMS of STUDY \\ © \\ © \\ © \\ © \\ (a)}

\title{
Programs of Study \\ Continuing Education
}

\section*{CONTINUING EDUCATION (CE)}

The City Colleges of Chicago, Continuing Education Division, offers short-term certificate programs and individual courses for students who want to improve their skills or start a new career. Programs and classes are designed for students with varying educational backgrounds and academic goals. Shortterm programs and classes are available days, evenings, and on weekends. Continuing Education attracts parttime students who seek lifelong learning opportunities that include personal development, career advancement, job readiness, customized training for businesses, community organizations, public agencies and certificate training. Continuing Education can also work as a service provider at off-site locations.

Continuing Education short-term occupational certificates are approved by the Illinois Community College Board (ICCB). The related courses are applicable to the certificate program award but cannot be applied towards an Associate degree. Continuing Education also offers a series of "Special Interest" classes that do not carry ICCB approval. Special Interest classes are customized to meet emerging community trends and needs of the City of Chicago constituents. Classes include financial planning, fine arts, computer training, developmental courses, music, photography, sign language, world language, aerobics, dance, mathematics and reading. Special Interest classes are also designed to meet the needs of children, in which "Summer Camps" and "College for Kids" programs are offered at some colleges.

> Students should consult with the Continuing Education department and/or obtain the course schedule published each academic term for the College where the student will take her/his courses. The CE course schedule can also be downloaded at http://www.ccc.edu.
> Listed below are the Continuing Education ICCB approved short-term occupational certificate programs:

\section*{A+ CERTIFIED COMPUTER TECHNICIAN 806 6 Credit Hours (CH) <NON-TRANSFERABLE>}

The A+ Certified Computer Technician certificate program is an internationally recognized credential backed by major computer hardware and software companies. As a CompTIA Certified A+ Technician, graduates will be able to: analyze computer problems; disassemble any computer for rebuild or upgrade; design and operate a company's computer maintenance; recommend compatible hardware and software; and limit downtime and expensive repairs by providing immediate in- house action.
For college offerings, see Program/Plan Cluster Grid, page 27 under "Information Technology".

\section*{COMPUTER LITERACY 852}

7 Credit Hours (CH) <NON-TRANSFERABLE>
The Computer Literacy certificate program is a comprehensive hands-on introduction to personal computing, hardware, operating systems, general business and an overview of the Internet.
For college offerings, see Program/Plan Cluster Grid, page 27 under "Information Technology".

COMPUTER NUMERIC CONTROL (CNC) TECHNICIAN 826 15 Credit Hours (CH) <NON-TRANSFERABLE>
The instructor certified CNC certificate program is for students interested in manufacturing in the area of Computer Numeric Control. By enrolling in 200 hours of training to become a machinist CNC set-up or operator, students will learn the safety and maintenance procedures of manufacturing; operate machinery such as drill press, lathes and mills; learn CNC machining such as writing G/M code, and run simulations of writing and running programs on the CNC machinery.
For college offerings, see Program/Plan Cluster Grid, page 28 under "Manufacturing".

\section*{COMMERCIAL DRIVER TRAINING 876 \\ 12 Credit Hours (CH) <NON-TRANSFERABLE>}

The Commercial Driver Training certificate program is designed for individuals with little or no commercial driving experience. The Commercial Driver Training program trains students for entry level employment as commercial motor vehicle operators. In partnership with the Illinois Department of Transportation, this program prepares students to obtain a Commercial Driver's License in the State of Illinois.

\section*{Basic Requirements to enter the program:}
- Must be at least 21 years of age
- Have a valid Illinois Driver's License
- Have a good driving record
- Provide a current Court-Purpose Motor Vehicle Report (MVR) can be obtained from Secretary of State - cost \(\$ 12.00\)
- Be able to pass a DOT Physical and Drug Screen
- Must be able to read, write \& understand English

For college offerings, see Program/Plan Cluster Grid, page 29 "Transportation, Distribution \& Logistics".

\title{
PROGRAMS OF STUDY \\ CONTINUING EDUCATION
}

\section*{COMMERICIAL PASSENGER DRIVER-CLASS/B 875}

9 Credit Hours (CH) <NON-TRANSFERABLE>
The Commercial Passenger Driver Class B certificate program is designed for students with minimum experience who are trained to operate Class \(B\) passenger and nonpassenger motor vehicles. In partnership with the Illinois Department of Transportation, the program prepares students for a Class B Commercial Driver's License in the State of Illinois.

Basic Requirements to enter the program:
- Must be at least 21 years of age
- Have a valid Illinois Driver's License
- Have a good driving record
- Provide a current Court-Purpose Motor Vehicle Report (MVR) can be obtained from Secretary of State - cost \(\$ 12.00\)
- Be able to pass a DOT Physical and Drug Screen
- Must be able to read, write \& understand English

For college offerings, see Program/Plan Cluster Grid, page 29
"Transportation, Distribution \& Logistics".

\section*{DEFENSIVE DRIVING/ATTITUDINAL 890}

\section*{1 Credit Hour (CH) <NON-TRANSFERABLE>}

The Defensive Driving Attitudinal certificate program comprises an eight-hour workshop which addresses the needs of those individuals who are repeat violators of traffic rules and regulations and newly licensed chauffeurs who have driven in the United States for at least three years. This training component is certified by the National Safety Council. Topics include the violation of rules and regulations, cultural sensitivity, anger management and conflict resolution as well as behavior modification approaches for effective customer service. Additionally, the training also reviews the Illinois Rules of the Road Handbook and prepares the inexperienced chauffeur driver for the road. Students will receive National Safety Council certificates of completion once they successfully complete the workshop program.

For college offerings, see Program/Plan Cluster Grid, page 29
"Transportation, Distribution \& Logistics".

\section*{DENTAL ASSISTANT 868}

4 Credit Hours (CH) <NON-TRANSFERABLE>
In the Dental Assistant certificate program, students learn the comprehensive and varied duties of a dental assistant. This career choice will enable students to become part of the dental healthcare team. Students will learn office procedures, inventory, dental charting, and the basics of assisting the dentist. Topics will include the introduction to definition, cavity classification, instruments, oral surgery, procedures, and techniques, as well as basic tray setups, aseptic practices, and restoration methods.

For college offerings, see Program/Plan Cluster Grid, page 26 under "Health Science".

\section*{EKG TECHNICIAN 830 \\ 2 Credit Hours (CH) <NON-TRANSFERABLE>}

This comprehensive 33-hour EKG Technician certificate program provides, hands-on training experience using an EKG arm. Students will also learn to take and interpret EKG readings. Topics cover anatomy and physiology of the heart, medical disease processes, medical terminology, medical ethics, legal aspects of patient contacts, and the use of the EKG monitor.

For college offerings, see Program/Plan Cluster Grid, page 26 under "Health Science".

\section*{EMERGENCY MEDICAL TECHNICIAN (EMT) 867 9 Credit Hours (CH) <NON-TRANSFERABLE>}

The EMT certificate program provides training to recognize the nature or extent of patients' condition, administer appropriate emergency medical care to stabilize their condition, and transport them safely to the proper medical facility. The curriculum follows the United States Department of Transportation (DOT) guidelines for EMT-B Training. Students receive appropriate in-class clinical, lecture, CPR training/ certification and ten (10) hours of hands-on in a hospital clinical setting.

For college offerings, see Program/Plan Cluster Grid, page 26 under "Health Science".

\section*{EMERGENCY 911 DISPATCH 897}

\subsection*{2.5 Credit Hours (CH) <NON-TRANSFERABLE>}

The Emergency 911 Dispatch certificate program provides basic tools to help students seek and maintain an "Emergency Services Telecommunication" position with any public safety agency in the country (Police, Fire, EMS or Stand-alone Dispatch Center). Students will be exposed to samples of state-of-the-art computer equipment commonly used in many dispatch centers nationwide and will also learn call taking and dispatch skills as well as hear 911 calls.

For college offerings, see Program/Plan Cluster Grid, page 28 under "Law, Public Safety, Corrections \& Security".

\section*{FAMILY CHILD CARE BUSINESS 831}
1.5 Credit Hours (CH) <NON-TRANSFERABLE>

The Family Child Care Business certificate program trains, advises, and prepares potential providers of the process involved in opening a quality home child care center. State licensing requirements, programming, staffing, health/ nutrition, and child safety are covered.
For college offerings, see Program/Plan Cluster Grid, page 25 under "Education \& Training".

\title{
Programs of Study \\ Continuing Education
}

\section*{FOOD SERVICE SANITATION/RECERTIFICATION 891 1 Credit Hour (CH) <NON-TRANSFERABLE>}

The Food Service Sanitation Recertification certificate program offers training in food service sanitation in three languages (English, Spanish, Chinese/Cantonese/Mandarin) and prepares personnel from food establishments for "Certification" and "Re-Certification" by the City of Chicago and the State of Illinois. This program also trains and certifies food vendors participating in outdoor summer festivals.

For college offerings, see Program/Plan Cluster Grid, page 26 under "Hospitality \& Culinary".

\section*{FORK LIFT OPERATION AND SAFETY 848 2 Credit Hours (CH) <NON-TRANSFERABLE>}

The Fork Lift Operation and Safety certificate program prepares students to become safe and effective forklift operators. Upon completion of the program, students will have working knowledge of the basic use of lift truck as well as the ability to safely inspect and operate lift trucks. The curriculum includes theory and practical training.

For college offerings, see Program/Plan Cluster Grid, page 29
"Transportation, Distribution \& Logistics".

\section*{HOMEMAKER/HOME HEALTH AIDE 895}
4.5 Credit Hours (CH) <NON-TRANSFERABLE>

The Homemaker/Home Health Aide certificate program is a nationally accredited program through the National Homecare Council and the Foundation for Hospice and Home Care which prepares individuals to work as Certified Home Health Aides. This program provides students with the knowledge and skills in personal care to evaluate and address the psychological, emotional, and physical needs of the older patient. The curriculum includes 17 skills mandated by The National Homecare Council, including all elements of personal care, vital signs, body mechanics, safety measures, resident's rights, infection control, communication, and observation. This program is ideal for students interested in employability in the home healthcare field, individuals in career transition, and selected high school students interested in the healthcare field.

For college offerings, see Program/Plan Cluster Grid, page 27 "Human Services".

\section*{HORTICULTURE (SUSTAINABLE URBAN) 828 \\ 31 Credit Hours (CH) <NON-TRANSFERABLE>}

The Sustainable Urban Horticulture certificate program is designed to provide students with cutting edge opportunities in the area of green technologies. Topics will include green roofs, xeriscaping, rain gardens, and other new emerging technologies in the green industry.

\section*{For college offerings, see Program/Plan Cluster Grid, page 24 under "Agriculture, Food \& Natural Resources."}

\section*{LIMOUSINE RESTRICTED CHAUFFEUR TRAINING 889 1 Credit Hour (CH) <NON-TRANSFERABLE>}

The Limousine Restricted Chauffeur Training certificate program is an intensive one-day training that prepares individuals to become restricted public chauffeurs. Students participating in this training are eligible to become licensed to drive a livery/limousine. The training is offered four times each month and is intended to serve as a preparatory course to assist individuals with the successful completion of the restricted public chauffeur's license exam. Students learn current chauffeur rules and regulations as well as information on new cultural attractions, buildings, hospitals and hotels.
For college offerings, see Program/Plan Cluster Grid, page 29 "Transportation, Distribution \& Logistics".

\section*{MANUFACTURING (BASIC) 825 \\ 14.5 Credit Hours (CH) <NON-TRANSFERABLE>}

In the Basic Manufacturing certificate program students learn to use machine tools to produce precision metal parts. In order to gain employment, students use their knowledge of the working properties of metals and their skill with machine tools to plan and carry out the operations needed to make machined products that meet precise specifications.
For college offerings, see Program/Plan Cluster Grid, page 29 under "Manufacturing".

\section*{MEDICAL BILLING \& CODING (COMPUTERIZED) 862 15 Credit Hours (CH) <NON-TRANSFERABLE>}

The Computerized Medical Billing \& Coding certificate program curriculum includes courses in computer concepts, medical terminology, anatomy and physiology, and computerized medical billing and coding.
For college offerings, see Program/Plan Cluster Grid, page 26 under "Health Science".

\title{
PROGRAMS OF STUDY \\ CONTINUING EDUCATION
}

\section*{NURSING ASSISTANT (BASIC) 801 \\ 10 Credit Hours (CH) <NON-TRANSFERABLE>}

This Illinois Department of Public Health approved certificate program for Basic Nursing Assistant (BNA) prepares students to work in the health care industry as a Certified Nursing Assistant (CNA). Students will be introduced to the discipline of nursing and the basic approaches to patient care. The role of the CNA as an assistant to the licensed nurse and member of the health care team is studied and practiced in the classroom, laboratory and clinical setting. Upon successful completion of all components of the program, the graduate must pass the State competency exam to become certified as a Nursing Assistant in the State of Illinois.
For college offerings, see Program/Plan Cluster Grid, page 26 under "Health Science".

\section*{PARALEGAL 829}

\subsection*{11.5 Credit Hours (CH) <NON-TRANSFERABLE>}

The Paralegal certificate program is designed to prepare students for immediate employment. Students learn the necessary skills required to assist attorneys and law firms in need of paralegals or legal secretaries. Note: Students must successfully complete Part I and Part II to receive a basic certificate for Paralegal. Part I will provide students with an in-depth theoretical exploration of the legal field and basic tools to become a successful legal secretary or a paralegal. Students will also learn how to prepare standard legal documents and to understand standard legal processes, such as establishing contracts, the criminal law process, and courtroom behavior and procedures. Part II will provide students with the legal knowledge and writing skills to be successful in the world of corporate and family law. Students will also gain essential information to assist attorneys in document review and the preparation process.

For college offerings, see Program/Plan Cluster Grid, page 28 "Law, Public Safety, Corrections \& Security".

\section*{PERSONAL TRAINER PREPARATION 896 \\ 1.5 Credit Hours (CH) <NON-TRANSFERABLE>}

The Personal Trainer Preparation certificate program provides the theoretical knowledge and practical skills required to prepare for the "American Council on Exercise" national certification exam on personal training. Topics include the guidelines for instructing safe, effective and purposeful exercises, conducting health and fitness assessments, and designing and implementing appropriate exercise programs.
For college offerings, see Program/Plan Cluster Grid, page 26 "Health Science".

\author{
PHARMACY TECHNICIAN 802 \\ 8.5 Credit Hours (CH) <NON-TRANSFERABLE>
}

The Pharmacy Technician certificate program provides comprehensive training that prepares students to enter the pharmacy field to work in hospitals, community, and retail pharmacies. Emphasis is placed on definitions of drugs by name and the reading and interpretation of medical prescriptions. Students will also learn I.V. flow rate, dosage calculations, drug compounding and dose conversions, inventory control and much more. Clinical experience will be included. The program is designed to prepare students for the national certification examinations.

\section*{For college offerings, see Program/Plan Cluster Grid, page 26 "Health Science".}

\section*{PHLEBOTOMY (ACCELERATED) 866 15 Credit Hours* (CH) <NON-TRANSFERABLE>}

The Accelerated Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis in a seven month timeframe. Course work includes proper specimen collection and handling, communication skills, health and safety, anatomy and physiology and medical terminology. Students successfully completing the program may qualify for employment in hospitals, clinics, physician's offices, and other healthcare settings. Successful completers will be eligible for national certification as Phlebotomy Technicians through the American Society of Clinical Pathologists (ASCP).

For college offerings, see Program/Plan Cluster Grid, page 26 "Health Science".

\section*{PHLEBOTOMY TECHNICIAN 803 \\ 12 Credit Hours* (CH) <NON-TRANSFERABLE>}

The Phlebotomy Technician 90-hour program prepares professionals to collect blood specimens for laboratory analysis. Students will become familiar with all aspects of blood collection and will develop comprehensive skills to perform venipunctures completely and safely. Classroom and lab work includes terminology, anatomy and physiology, blood collection procedures, specimen hands-on practice, and training in skills and techniques to perform puncture methods. As part of the learning objectives for the coursework, students will take on the role of patient and technician. Also, the coursework includes extensive handson laboratory and preparation for the national certification.

For college offerings, see Program/Plan Cluster Grid, page 26 "Health Science".

\title{
Programs of Study \\ Continuing Education
}

\section*{PRECISION SHEET METAL TECHNICIAN (BASIC) 835 \\ 18 Credit Hours (CH) <NON-TRANSFERABLE>}

The Precision Sheet Metal Technician program trains students how to function as mechanics who provide maintenance, repair, and overhaul (MRO) on operational aircraft. Students learn to be responsible for the removal, inspection, repair/fabrication, and replacement of aircraft skin and structural components that make up the fuselage, engine cowlings/nacelles, and aircraft control surfaces. Program completion requires mastery of three courses: Aircraft Structural Mechanics I (Basic Sheet Metal), Aircraft Structural Mechanics II (Advanced Sheet Metal) and Essential Skills for the Workplace.

For college offerings, see Program/Plan Cluster Grid, page 28 under "Manufacturing".

\section*{REAL ESTATE BROKER PRE-LICENSURE 833* 7.0 Credit Hours (CH) <NON-TRANSFERABLE>}

The Real Estate program meets the required course content and hours for the Illinois Department of Financial and Professional Regulations (IDFPR). Students who successfully complete the Real Estate Broker's course work and hours are eligible to apply for the state licensure exam. The program is for individuals without any prior IDFPR Real Estate license.
- Real Estate Broker Pre-License Topics
(75 classroom hours)
- Real Estate Broker Pre-License Applied Real Estate Principles
(15 classroom hours)
For college offerings, see Program/Plan Cluster Grid, page 25 under "Business, Management, Administration \& Finance".

\section*{SUPPLY CHAIN MANAGEMENT}
(SCM) 832 (FUNDAMENTALS OF)
4 Credit Hours (CH) <NON-TRANSFERABLE>
In the Supply Chain Management certificate program, students will gain the skills and knowledge needed to "green" an organization's supply chain through a preparation online training program. The curriculum is designed to provide specialized knowledge to enable a company to achieve its environmental sustainability goals through global sourcing, material management, procurement/buying, transportation and logistics, and new product development. Although there are no specific prerequisites for this program, students should have basic keyboarding and computer skills and be comfortable navigating the Internet; must also have an understanding of a word processing computer program (Microsoft Word recommended) as well as e-mailing capabilities.

\footnotetext{
For college offerings, see Program/Plan Cluster Grid, page 29 Transportation, Distribution \& Logistics
}

\section*{UNARMED SECURITY GUARD 898 \\ 2 Credit Hours (CH) <NON-TRANSFERABLE>}

In this comprehensive 20-hour Unarmed Security Guard certificate program, students will cover officer training as an introduction to public security and basic patrol tactics.

For college offerings, see Program/Plan Cluster Grid, page 28 Law, Public Safety, Corrections \& Security.

\section*{WEB DESIGN 811}

5 Credit Hours (CH) <NON-TRANSFERABLE>
In the Web Design certificate program, students explore the essential elements of web design and utilize practical activities and step-by-step procedures to design, build, and post a website. Students will create templates for page layout and learn techniques for fine-tuning and modifying prepackaged Web page development software. They will learn how to convert and scale artwork and photographs for Web publication and use tables and templates to organize layouts.

For college offerings, see Program/Plan Cluster Grid, page 27 Information Technology.

\section*{WELDING (INDUSTRIAL TECHNOLOGY) 827} 13 Credit Hours (CH) <NON-TRANSFERABLE>

The Industrial Welding Technology certificate program providesstudents with welding skills in a shop setting. Students are taught ARC, MIG, and TIG welding and all welding positions. Plasma and oxy-gas cutting are also taught. In addition, students examine job safety, ethics, and metallurgy. Graduates find entry-level employment as welders, solderers, and braziers. Upon program completion, students will receive Scaffold Safety Certification and the 10-Hour OSHA Construction Certification.

For college offerings, see Program/Plan Cluster Grid, page 24 "Architecture \& Construction".

\title{
OTHER PROCRAMS of STUDY \\ © \\ © \\ © \\ (I0) \\ (1)
}

NOILVOीGヨ LTกGV

\title{
OTHER PROGRAMS OF STUDY \\ AdUlt EdUCATION
}

\section*{ADULT EDUCATION (AE)}

The Adult Education Program offers tuition-free courses in Adult Basic Education/General Educational Development (ABE/GED) in both English and Spanish, English as a Second Language (ESL), Citizenship Preparation, and workforce bridge courses, including employment readiness, sector specific bridge classes, career assessment and exploration. To enroll in adult education classes, students must be at least 18 years of age. Students who are 16 or 17 years of age may enroll if they are no longer enrolled in other secondary educational programs and have been officially released from their high school. Classes are offered in a variety of schedules and credit hour formats at each college. Classes are also available at several off-campus locations in each college's service area. Before enrolling in classes, all students must complete a placement and/or progress examination to determine student placement. For more information about classes and schedules please call the colleges listed below or visit the Adult Education website at: http://www.ccc.edu/student/AdultEducationPrograms.asp.

\section*{Northside}

Truman College
1145 W. Wilson Avenue
Chicago, Illinois 60640
(773) 907-4350

\section*{Central}

Malcolm X College 1900 W. Van Buren Street
Chicago, Illinois 60612
(312) 850-7300

\section*{Southeast}

Olive-Harvey College
10001 S. Woodlawn Avenue
Chicago, Illinois 60628
(773) 291-6690

\section*{Northwest}

Wright College
4300 N. Narragansett
Chicago, Illinois 60634
(773) 481-8821

\section*{Southside}

Kennedy-King College 6301 S. Halsted Street Chicago, Illinois 60621
(773) 602-5340

\section*{Southwest}

Daley College
7500 S. Pulaski Road Chicago, IL 60652
(773) 838-7803

The Adult Education Program offers the following classes:

\section*{ADULT BASIC EDUCATION (ABE)}

For students who have tested at the 1st through 8th grade levels, the Adult Basic Education (ABE) courses are a great way to improve basic skills.

\section*{BEGINNING LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

Beginning ABE Literacy-The Beginning ABE Literacy reading course is the first course in the reading comprehension series for students who have little or no basic decoding or sight word skills. The student learns and reviews concepts and the skills to develop the ability to hear separate sounds in the spoken language (i.e., phonemic awareness). The student recognizes, reads, and writes letters and numbers. At the upper level of this course, the student is introduced to the connections between writing and reading. The student is also introduced to book aids (e.g., dictionary, thesaurus, encyclopedia, Atlas, internet, etc.). Pre-requisites: None.

Beginning Basic Education ABE - The Beginning Basic Education reading course reinforces basic vocabulary development for school, work, and life situations. The student predicts outcomes, draws conclusions, and understands main ideas. The student develops the ability to figure out new words, recognize high frequency and irregular words on sight. At the upper level of the course, the student applies decoding and cognitive skills, recognizes how text is organized to increase comprehension, and develops awareness of connections between writing and reading. Pre-requisites: Successful completion of the Beginning ABE Literacy reading course or Reading TABE Score of 2.0-3.9.

\section*{Writing:}

Beginning ABE Literacy - The Beginning ABE Literacy writing course is the first course in the beginning stage of the writing process for students. The student's focus is on writing simple sentences with appropriate word choices to form phrases and clauses. At the upper level of the course, the student constructs simple paragraphs, recognizes sentence fragments and correctly uses capitalization and ending punctuations. Finally, the student is introduced to the skills necessary to use book aids (e.g. dictionary, thesaurus, encyclopedia, Atlas, internet, etc.). Pre-requisites: None.

\title{
Other Programs of Study \\ AdUlt EdUCATION
}

Beginning Basic Education ABE - The Beginning Basic Education writing course enhances the writing process. The student constructs complete sentences, composes coherent paragraphs, recognizes sentence fragments, and uses correct capitalization and ending punctuations to produce basic writing samples. At the upper level of the course, the student begins to use correct tense endings, develops basic summarization, correctly uses plural forms of regular nouns and common irregular nouns, and begins to use appropriate language in formal and informal writing. The student continues to develop book aid skills. Prerequisites: Successful completion of the Beginning ABE Literacy writing course or Language TABE Score of 2.0-3.9.

\section*{Mathematics:}

Beginning ABE Literacy - The Beginning ABE Literacy mathematics course introduces the student to basic concepts, terms and symbols in mathematics. The student develops skills using basic computations in addition, subtraction, multiplication and division. The student also develops concepts to solve one-step word problems. At the upper level of this course, the student learns the difference between whole numbers, fractions, and decimals. Mathematical lessons reflect real-life situations. Pre-requisites: None.

Beginning Basic Education ABE - The Beginning Basic Education mathematics course reinforces the four math operations, introduce simple decimals, fractions and the ability to identify two and three-dimensional shapes. At the upper level of the course, the student uses number sense, placement value, and whole number computations to perform single-step word problems. The student also learns to apply vocabulary, mental math, basic calculator skills, and mathematical concepts in weights and measurements to solve real-life math problems. Pre-requisites: Successful completion of the Beginning ABE Literacy math course or Math TABE scores of 2.0-3.9.

\section*{General Studies:}

Beginning ABE Literacy-The Beginning ABE Literacy general studies course provides foundation in reading, writing, communication, and computation skills. At the upper level of the course, the student is able to read simple and compound sentences in a single paragraph, write simple notes, begin to correctly use basic grammar and demonstrate consistent use of basic punctuation. The student is also able to add and subtract three digit numbers, write multiplication tables through 12, identify simple fractions and perform simple arithmetic operations. By the end of the course, the student is able to perform basic workplace competencies such as read simple directions, signs, maps, fill out simple forms requiring basic personal information, and complete simple job applications. Pre-requisites: None.

Beginning Basic Education ABE - The Beginning Basic Education general studies course strengthens fundamental reading, writing, and mathematical skills. The student is able to use grammar and demonstrate consistent use of punctuation, compose basic paragraphs, interpret short stories, identify and use basic mathematical symbols. At the upper level of the course, the student is able to read and comprehend text on familiar subjects, write simple paragraphs with main and supporting details on familiar topics, perform all four basic math operations using whole numbers up to three digits and identify and use basic mathematical symbols. By the end of the course, the student is able to demonstrate workplace competencies such as complete forms and applications, read simple graphs, charts, payroll stubs, take routine measurements, and write short reports to fellow workers. Pre-requisites: Successful completion of the Beginning ABE Literacy general studies course or TABE Reading, Math, and Language scores of \(2.0-3.9\).

\section*{Computer Literacy:}

Beginning Computer Literacy - The Beginning Computer Literacy course introduces the use of technology to develop literacy skills.

\section*{INTERMEDIATE LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

Low Intermediate Basic Education ABE - The Low Intermediate reading course reinforces reading skills. The student begins to identify and use vocabulary in the content areas (i.e. Language Arts, Science, Math, Social Studies, U.S. Civics, etc.) The student effectively applies strategies to construct meaning from a variety of topics while using various materials in new situations. At the upper level of the course, the student reviews the skills necessary for independent reading and effectively uses book aids. Prerequisites: Successful completion of the Beginning Basic Education ABE reading course or Reading TABE Score of 4.0-5.9.

High Intermediate Basic Education ABE - The High Intermediate reading course prepares the student to transition smoothly into the Low Adult Secondary reading course. The student interprets meaning from context clues, makes inferences, interprets figurative language and correctly applies comparing and contrasting strategies. The student also develops an understanding of plot, character, and motivation in stories and dramas while recognizing the author's viewpoint. At the upper level of the course, the student increases reading speed with fluency to become a more strategic test-taker. Pre-requisites: Successful completion of the Low Intermediate reading course or Reading TABE Score of \(6.0-8.9\).

\title{
OTHER Programs of Study \\ adult Education
}

\section*{Writing:}

Low Intermediate Basic Education ABE-The Low Intermediate writing course teaches the student to recognize and apply spelling patterns, possessives, parts of speech, grammar and punctuation rules. The student develops composition skills to transition between paragraphs and topic sentences, gathers ideas, forms opinions, and responds in writing to stimuli (e.g., literature, music, art, images.) At the upper level of the course, the student correctly applies skills needed to recognize and use common spelling rules, suffixes and prefixes. Before exiting the course, the student is able to demonstrate basic summarization skills. Pre-requisites: Successful completion of the Beginning Basic Education ABE writing course or Language TABE Score of \(4.0-5.9\)

High Intermediate Basic Education ABE - The High Intermediate writing course prepares the student to smoothly transition into the Low Adult Secondary writing course. The student correctly applies the stages of the writing process to compose longer and more difficult academic writings. The student develops research techniques to collect information and opinions through interviews and observations to construct research and other professional academic reports. At the upper level of the course, the student is introduced to the correct use of quotes and indirect quotes in paraphrasing. Pre-requisites: Successful completion of the Low Intermediate writing course or Language TABE Score of 6.0-8.9.

\section*{Mathematics:}

Low Intermediate Basic Education ABE - The Low Intermediate mathematics course assists the student in applying mathematical knowledge, critical thinking skills and vocabulary strategies to solve multi-step word problems dealing with symbols, dimensional shapes, pre-algebra, pregeometry, whole numbers, decimals and fractions. At the upper level of the course, the student develops the skills to interpret tables, charts, and graphs and applies knowledge of number skills, multiple-digit computation skills, mental math skills, and basic calculator skills in a variety of lessons that reflect real-life situations. Pre-requisites: Successful completion of the Beginning Basic Education ABE math course or Math TABE scores of 4.0-5.9

High Intermediate Basic Education ABE - The High Intermediate mathematics course prepares the student to transition smoothly into the Low Adult Secondary math course. The student develops test-taking skills, study skills, and job readiness skills. At the upper level of the course, the student applies vocabulary; mathematical concepts, and sound critical thinking skills to complete lessons that reflect real-life situations. The student also learns to use the four math operations to solve multi-step word problems, using ratios, probability, proportions, and estimations with and without the aid of the calculator. Pre-requisites: Successful completion of the Low Intermediate math course or Math TABE scores of \(6.0-8.9\)

\section*{General Studies:}

Low Intermediate Basic Education ABE - The Low Intermediate general studies course strengthens the student's reading, writing, and mathematical skills. This course also introduces the student to literature, critical thinking, and beginning essay writing. At the upper level of the course, the student is able to read and write short essays on familiar topics, make minimal inferences, compare and contrast information, and demonstrate consistent use of basic punctuation. The student is also able to perform the four math operations with whole numbers and fractions, determine correct math operation for solving one and two-step word problems, and convert decimals and fractions. By the end of the course, the student is able to demonstrate workplace competencies such as follow multi-step diagrams, read simple procedural texts and employee handbooks, reconcile a bank statement, and follow written instructions and diagrams. Pre-requisites: Successful completion of the Beginning Basic Education ABE general studies course or TABE Reading, Math, and Language scores of \(4.0-5.9\).

High Intermediate Basic Education ABE - The High Intermediate general studies course prepares the student to smoothly transition into the Adult Secondary Education general studies course by reinforcing the student's skills in reading comprehension, composition writing, and mathematics. Vocabulary, comprehension, and problem-solving are emphasized. At the upper level of the course, the student is able to identify spelling, punctuation, and grammatical errors, comprehend a variety of complex materials on common topics, listen to oral instructions and write an accurate description of them, write using a complex sentence structure, perform the four math functions with decimals, interpret and solve simple algebraic equations, use math in business transactions, and interpret and create tables and graphs. By the end of the course, the student is able to demonstrate workplace competencies such as read legal forms and manuals, follow multi-step directions, integrate information from texts, charts, and graphs, and perform jobs that require interpreting information from various sources. Pre-requisites: Successful completion of the Low Intermediate general studies course or TABE Reading, Math, and Language scores of \(6.0-8.9\).

ABE Constitution - The Intermediate Constitution course is a competency-based course in American Government. The course maximizes preparation for the Public Law Exam 195 (U.S. Constitution). Instruction covers modern political and economic systems of government, the origins of the United States, and the federal system of government. Topics also include the Declaration of Independence, the American Flag, amendments to the constitution, political parties, the electoral process, and the role that public opinion and pressure groups play in American politics. The course concludes with an in-depth study of the three branches of the federal government, the U.S. and Illinois State Constitutions (TABE Reading 4.0-8.9).

\section*{Computer Literacy:}

Intermediate Computer Literacy - This course enhances student's literacy skills through the use of computer technology.

\section*{SPANISH ADULT BASIC EDUCATION (ABE)}

For students who have tested at the 1st through 8th grade levels, the Adult Basic Education (ABE) courses are a great way to improve basic skills.
Important Note: The TABE Pre and Post-tests must be given to all students enrolled in the Spanish ABE Program.

\section*{BEGINNING LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

Beginning ABE Literacy - The Spanish Beginning ABE Literacy reading course is the first course in the reading comprehension series for students who have little or no basic decoding or sight word skills. The student learns and reviews concepts and the skills to develop the ability to hear separate sounds in the spoken language (i.e., phonemic awareness). The student recognizes, reads, and writes letters and numbers. At the upper level of this course, the student is introduced to the connections between writing and reading. The student is also introduced to book aids (e.g. dictionary, thesaurus, encyclopedia, atlas, and the internet). Pre-requisites: None.
Beginning Basic Education ABE - The Spanish Beginning Basic Education reading course reinforces basic vocabulary development for school, work, and life situations. The student predicts outcomes, draws conclusions, and understands main ideas. The student develops the ability to figure out new words, recognize high frequency and irregular words on sight. At the upper level of the course, the student applies decoding and cognitive skills, recognizes how text is organized to increase comprehension and develops awareness of connections between writing and reading. Pre-requisites: Successful completion of the Spanish Beginning ABE Literacy reading course or Reading TABE Score of 2.0-3.9.

\section*{Spanish ABE Writing:}

Beginning ABE Literacy - The Spanish Beginning ABE Literacy writing course is the first course in the beginning stage of the writing process for students. The student's focus is on writing simple sentences with appropriate word choices to form phrases and clauses. At the upper level of the course, the student constructs simple paragraphs, recognizes sentence fragments and correctly uses capitalization and ending punctuations. Finally, the student is introduced to the skills necessary to use book aids (e.g. dictionary, thesaurus, encyclopedia, Atlas, and the internet). Pre-requisites: None.

Beginning Basic Education ABE - The Spanish Beginning Basic Education writing course is designed to enhance the writing process. The student constructs complete sentences, composes coherent paragraphs, recognizes sentence fragments, and uses correct capitalization and ending punctuations to produce basic writing samples. At the upper level of the course, the student begins to use correct tense endings, develops basic summarization, correctly uses plural forms of regular nouns and common irregular nouns, and begins to use appropriate language in formal and informal writing. The student continues to develop book aid skills. Pre-requisites: Successful completion of the Spanish Beginning Basic Education ABE Literacy writing course or Language TABE Score of 2.0-3.9.

\section*{Spanish ABE Mathematics:}

BeginningABELiteracy-TheSpanishBeginningABE Literacy mathematics course introduces basic concepts, terms and symbols in mathematics. The student develops skills using basic computations in addition, subtraction, multiplication and division. The student also develops concepts to solve one-step word problems. At the upper level of this course, the student learns the difference between whole numbers, fractions, and decimals. Mathematical lessons reflect reallife situations. Pre-requisites: None.
Beginning Basic Education ABE - The Spanish Beginning Basic Education mathematics course is designed to reinforce the four math operations, introduce simple decimals, fractions and the ability to identify two and three-dimensional shapes. At the upper level of the course, the student uses number sense, placement value, and whole number computations to perform single-step word problems. The student also learns to apply vocabulary, mental math, basic calculator skills, and mathematical concepts in weights and measurements to solve real-life math problems. Pre-requisites: Successful completion of the Spanish Beginning ABE Literacy math course or Math TABE scores of 2.0-3.9.

\section*{Spanish ABE General Studies:}

Beginning ABE Literacy - The Spanish Beginning ABE Literacy general studies course provides a foundation in reading, writing, communication, and computational skills. At the upper level of the course, the student is able to read simple and compound sentences in a single paragraph, write simple notes, begin to correctly use basic grammar and demonstrate consistent use of basic punctuation. The student is also able to add and subtract three digit numbers, write multiplication tables through 12, identify simple fractions and perform simple arithmetic operations. By the end of the course, the student is able to perform basic workplace competencies such as read simple directions, signs, maps, fill out simple forms requiring basic personal information, and complete simple job applications. Pre-requisites: None.

\title{
OTHER PROGRAMS OF STUDY \\ adult Education
}

Beginning Basic Education ABE - The Spanish Beginning Basic Education general studies course strengthens fundamental reading, writing, and mathematical skills. The student is able to use grammar and demonstrate consistent use of punctuation, compose basic paragraphs, interpret short stories, identify and use basic mathematical symbols. At the upper level of the course, the student is able to read and comprehend text on familiar subjects, write simple paragraphs with main and supporting details on familiar topics, perform all four basic math operations using whole numbers up to three digits and identify and use basic mathematical symbols. By the end of the course, the student is able to demonstrate workplace competencies such as complete medical forms, order forms, and job applications, read simple graphs, labels, charts, payroll stubs, take routine measurements, and write short reports and messages to fellow workers. Pre-requisites: Successful completion of the Beginning ABE Literacy general studies course or TABE Reading, Math, and Language scores of \(2.0-3.9\).

\section*{INTERMEDIATE LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

Low Intermediate Basic Education ABE -The Spanish Low Intermediate Basic Education reading course reinforces reading skills. The student begins to identify and use vocabulary in the content areas (i.e. Language Arts, Science, Math, Social Studies, U.S. Civics, etc.) The student effectively applies strategies to construct meaning from a variety of topics while using various materials in new situations. At the upper level of the course, the student reviews the skills necessary for independent reading and effectively uses book aids. Pre-requisites: Successful completion of the Spanish Beginning Basic Education ABE reading course or Reading TABE Score of \(4.0-5.9\).

High Intermediate Basic Education ABE - The Spanish High Intermediate Basic Education reading course prepares the student to transition smoothly into the Spanish Low Adult Secondary reading course. The student interprets meaning from context clues, makes inferences, interprets figurative language and correctly applies comparing and contrasting strategies. The student also develops an understanding of plot, character, and motivation in stories and dramas while recognizing the author's viewpoint. At the upper level of the course, the student increases reading speed with fluency to become a more strategic test-taker. Pre-requisites: Successful completion of the Spanish Low Intermediate reading course or Reading TABE Score of 6.0-8.9.

\section*{Spanish ABE Writing:}

Low Intermediate Basic Education ABE - The Spanish Low Intermediate Basic Education writing course is designed to teach the student to recognize and apply spelling patterns, possessives, parts of speech, grammar, and punctuation rules. The student develops composition skills to transition between paragraphs and topic sentences, gathers ideas, forms opinions, and responds in writing to stimuli (e.g., literature, music, art, and images). At the upper level of the course, the student correctly applies skills needed to recognize and use common spelling rules, suffixes and prefixes. Before exiting the course, the student is able to demonstrate basic summarization skills. Pre-requisites: Successful completion of the Spanish Beginning Basic Education ABE writing course or Language TABE Score of 4.0-5.9.

High Intermediate Basic Education ABE - The Spanish High Intermediate Basic Education writing course prepares the student to smoothly transition into the Spanish Low Adult Secondary writing course. The student correctly applies the stages of the writing process to compose longer and more difficult academic writings. The student develops research techniques to collect information and opinions through interviews and observations to construct research and other professional academic reports. At the upper level of the course, the student is introduced to the correct use of quotes and indirect quotes in paraphrasing. Pre-requisites: Successful completion of the Spanish Low Intermediate writing course or Language TABE Score of 6.0-8.9.

\section*{Spanish ABE Mathematics:}

Low Intermediate Basic Education ABE - The Spanish Low Intermediate Basic Education mathematics course assists the student in applying mathematical knowledge, critical thinking skills and vocabulary strategies to solve multi-step word problems dealing with symbols, dimensional shapes, pre-algebra, pre-geometry, whole numbers, decimals and fractions. At the upper level of the course, the student develops the skills to interpret tables, charts, and graphs, and applies knowledge of number skills, multiple-digit computation skills, mental math skills, and basic calculator skills in a variety of lessons that reflect real-life situations. Pre-requisites: Successful completion of the Spanish Beginning Basic Education ABE math course or Math TABE scores of \(4.0-5.9\).

\section*{Other Programs of Study \\ Adult Education}

High Intermediate Basic Education ABE - The Spanish High Intermediate Basic Education mathematics course prepares the student to transition smoothly into the Spanish Low Adult Secondary math course. The student develops testtaking skills, study skills, and job readiness skills. At the upper level of the course, the student applies vocabulary, mathematical concepts, and sound critical thinking skills to complete lessons that reflect real-life situations. The student also learns to use the four math operations to solve multistep word problems using ratios, probability, proportions, and estimations with and without the aid of the calculator. Pre-requisites: Successful completion of the Spanish Low Intermediate math course or Math TABE scores of 6.0-8.9.

\section*{Spanish ABE General Studies:}

Low Intermediate Basic Education ABE - The Spanish Low Intermediate Basic Education general studies course continues to strengthen reading, writing, and mathematical skills. This course also introduces the student to literature, critical thinking, and beginning essay writing. At the upper level of the course, the student is able to read and write short essays on familiar topics, make minimal inferences, compare and contrast information, and demonstrate consistent use of basic punctuation. The student is also able to perform the four math operations with whole numbers and fractions, determine correct math operation for solving one and twostep word problems, and convert decimals and fractions. By the end of the course, the student is able to demonstrate workplace competencies such as follow multi-step diagrams, read simple procedural texts and employee handbooks, reconcile a bank statement and follows written instructions and diagrams. Pre-requisites: Successful completion of the Spanish Beginning Basic Education ABE general studies course or TABE Reading, Math, and Language scores of 4.0 -5.9.

High Intermediate Basic Education ABE - The Spanish High Intermediate Basic Education general studies course prepares the student to smoothly transition into the Adult Secondary Education general studies course by reinforcing skills in reading comprehension, composition writing, and mathematics. Vocabulary, comprehension, and problemsolving are emphasized. At the upper level of the course, the student is able to identify spelling, punctuation, and grammatical errors, comprehend a variety of complex materials on common topics, listen to oral instructions and write an accurate description of them, write using a complex sentence structure, perform the four math functions with decimals, interpret and solve simple algebraic equations, use math in business transactions, and interpret and create tables and graphs. By the end of the course, the student is able to demonstrate workplace competencies such as read legal forms and manuals, follow multi-step directions, integrate information from texts, charts, and graphs, and perform jobs that require interpreting information from various sources. Pre-requisites: Successful completion of the Spanish Low Intermediate general studies course or TABE Reading, Math, and Language scores of \(6.0-8.9\).

Spanish ABE Constitution - The ABE Spanish Constitution course is a competency-based course in American Government. The course maximizes preparation for the Public Law Exam 195 (U.S. Constitution). Instruction covers modern political and economic systems of government, the origins of the United States, and the federal system of government. Topics also include the Declaration of Independence, the American Flag, amendments to the constitution, political parties, the electoral process, and the role that public opinion and pressure groups play in American politics. The course concludes with an in-depth study of the three branches of the federal government, the U.S. and Illinois State Constitutions (TABE Reading 4.0-8.9).

\title{
OTHER Programs of Study \\ adult Education
}

\section*{ADULT SECONDARY EDUCATION/GENERAL EDUCATIONAL DEVELOPMENT (ASE/GED)}

The General Educational Development (ASE/GED) courses prepare students to pass the GED Exam. Courses cover reading, writing, math, social studies, science and the Constitution. Students also learn test taking and study skills. Classes are offered in English and Spanish. The GED exam is administered through the Cook County GED Testing Program. Students interested in applying for a GED test date or for additional information on the GED test, should contact the Cook County GED Testing Center directly by calling 1-847-328-9795 or visiting their website at www. cookcountyged.org. The fee for the GED test is \(\$ 50.00\); the GED test is approximately eight hours in length and may be taken over a two-day period.

\section*{ASE/GED LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

Low Adult Secondary Education - The Low ASE reading course develops reading skills with relatively challenging technical and non-technical workplace, employment and academic-related materials. At the upper level of the course, the student applies critical thinking skills to a variety of more difficult documents. In addition, the student who has not previously passed the U.S. Civics test on the high school level will prepare to successfully pass the Civics test on the U.S. and Illinois Constitutions, Declaration of Independence and the U.S. flag before exiting the course. Pre-requisites: Successful completion of the High Intermediate reading course or Reading TABE Score of \(9.0-10.9\).
High Adult Secondary Education - The High ASE reading course, the student reviews, reinforces, and applies vocabulary enrichment, critical thinking skills, and independent reading competencies learned from previous levels. The student studies advanced content area texts, in addition to technical and non-technical workplace, employment and academic-related materials. At the upper level of the course, the student takes practice tests and analyzes the results in preparation to successfully pass the Official GED Language Arts, Reading Test. The coursework also prepares the student to make a seamless transition into career readiness and college-level reading courses. Pre-requisites: Successful completion of the Low ASE reading course or Reading TABE Score of 11.0-12.9.

\section*{Writing:}

Low Adult Secondary Education - The Low ASE writing course develops writing skills. The student composes using a complex sentence structure, writes correspondence that accurately reflects thoughts and composes cohesive and organized essays with few mechanical errors. The student develops proficiency in collecting information from various sources, effectively uses quotes, indirect quoting and paraphrasing. At the upper level of the course, the student applies strategies to analyze, compare, contrast, synthesize and discriminate information from multiple sources using the internet. Pre- requisites: Successful completion of the High Intermediate writing course or Language TABE Score of 9.0 - 10.9.

High Adult Secondary Education - The High ASE writing course enhances academic writing skills. When provided with a prompt, the student will apply the writing process to compose a well-written, five-paragraph essay that demonstrates well-focused main points, clear organization, specific development of ideas, refined sentence structure, use of appropriate word choices, relevant details and grammatical accuracy. Before exiting the course, the student is able to demonstrate skills needed to successfully pass the Official GED Language Arts, Writing Tests and smoothly transition into career readiness and college-level writing courses. Pre-requisites: Successful completion of the Low ASE writing course or Language TABE Score of 11.0-12.9.

\section*{Mathematics:}

Low Adult Secondary Education - The Low ASE mathematics course provides a foundation for college-level studies. The student demonstrates an understanding of mathematical concepts and operations by applying advanced strategies and critical thinking skills to solve multi-step word problems using integers, the number line, powers, square roots, scientific notations, algebraic equations, fractions, decimals, percentages, geometry, statistics, proportions and ratios in mathematical lessons that reflect real-life situations with and without the aid of the calculator. Pre-requisites: Successful completion of the High Intermediate Math course or TABE scores of 9.0-10.9.

High Adult Secondary Education - The High ASE mathematics course prepares the student to incorporate test-taking techniques to successfully pass the GED Math Tests and to make a seamless transition into career readiness and college-level math courses. The student reviews and applies advanced strategies to more difficult mathematical problems. As the student progresses through the course, the student applies the Pythagorean Theorem, utilizes formulas to solve multi-step word problems, recognizes number pattern series, calculates measures of central tendency, interprets and performs various math operations using graphs. Math calculations are performed with and without the aid of the calculator. Pre-requisites: Successful completion of the Low ASE Math course or Math TABE scores of 11.0-12.9.

\section*{General Studies:}

Low Adult Secondary Education - The Low ASE general studies course enhances academic reading, writing, mathematical, and critical thinking skills. At the upper level of this course, the student writes correspondence that accurately reflects thoughts and composes cohesive and organized essays with few mechanical errors, effectively uses quotes, indirect quoting and paraphrasing, and develops proficiency in collecting, comparing, contrasting, synthesizing, and discriminating information from multiple sources which includes use of the internet. The student also demonstrates an understanding of mathematical concepts and operations by applying advanced strategies, formulas, geometry principles, and critical thinking skills to solve multistep word problems. By the end of the course, the student is able to demonstrate workplace competencies such as read and comprehend technical information, complex manuals, and some college-level books, function in most job situations involving higher order thinking, operate complex machinery, and work productively. Pre-requisites: Successful completion of the High Intermediate general studies course or TABE Reading, Math, and Language scores of 9.0 - 10.9.
High Adult Secondary Education - The High ASE general studies course enhances academic reading, writing, mathematical, and critical thinking skills. When provided with a prompt, the student will apply the writing process to compose a well-written, five-paragraph essay, apply advanced strategies to more difficult mathematical problems, and comprehend advanced content area texts, in addition to technical and non-technical workplace, employment and academic-related materials. Before exiting the course, the student is able to demonstrate skills needed to successfully pass the 5 -subject Official GED Test in Language Arts, Reading; Language Arts, Writing; Mathematics; Social Studies; and Science. The student is also able to smoothly transition into career readiness and college-level courses. Pre-requisites: Successful completion of the Low ASE general studies course or TABE Reading, Math and Language scores of 11.0 - 12.9.

ASE/GED Constitution - The ASE/GED Constitution course is a secondary education competency-based course in American Government. The course is designed to maximize preparation for the Public Law Exam 195 (U.S. Constitution). Instruction covers modern political and economic systems of government, the origins of the United States, and the federal system of government. Topics also include the Declaration of Independence, the American Flag, amendments to the constitution, political parties, the electoral process, and the role that public opinion and pressure groups play in American politics. The course concludes with an in-depth study of the three branches of the federal government, the U.S. and Illinois State Constitutions (TABE Reading 9.0-12.9).

\section*{Spanish Adult Secondary Education/General Education Development (ASE/GED)}

\section*{SPANISH GED LEVEL COURSES}

\section*{Reading, Literacy, and Communication Skills:}

GED Reading - The lower level of the Spanish GED Reading course develops reading skills with relatively challenging technical and non-technical workplace, employment and academic-related materials. At the upper level of the course, the student applies critical thinking skills to a variety of more difficult documents. In addition, the student who has not previously passed the U.S. Civics test on the high school level will prepare to successfully pass the Civics test on the U.S. and Illinois Constitutions, Declaration of Independence and the U.S. flag before exiting the course. Pre-requisites: Successful completion of the High Intermediate Reading course or Reading TABE Score of 9.0 - 10.9.

GED Advanced Reading - The Spanish GED Advanced Reading course reviews, reinforces, and applies vocabulary enrichment, critical thinking skills, and independent reading competencies learned from previous levels. The student studies advanced content area texts, in addition to technical and non-technical workplace, employment and academicrelated materials. At the upper level of the course, the student takes practice tests and analyzes the results in preparation to successfully pass the Official GED Language Arts, Reading Test. The coursework also prepares the student to make a seamless transition into career readiness and college-level reading courses. Pre-requisites: Successful completion of the lower level of the Spanish GED Reading course or Reading TABE Score of 11.0-12.9.

\section*{Spanish GED Writing:}

GED Writing - The lower level of the Spanish GED Writing course develops academic writing skills. The student composes, using a complex sentence structure, writes correspondence that accurately reflects thoughts, and composes cohesive and organized essays with few mechanical errors. The student develops proficiency in collecting information from various sources, effectively uses quotes, indirect quoting and paraphrasing. At the upper level of the course, the student applies strategies to analyze, compare, contrast, synthesize and discriminate information from multiple sources using the internet. Pre-requisites: Successful completion of the High Intermediate Writing course or Language TABE Score of 9.0 - 10.9.

\title{
Other Programs of Study \\ adult Education
}

GED Advanced Writing - The Spanish GED Advanced Writing course enhances academic writing skills. When provided with a prompt, the student will apply the writing process to compose a well-written, five-paragraph essay that demonstrates well-focused main points, clear organization, specific development of ideas, refined sentence structure, use of appropriate word choices, relevant details and grammatical accuracy. Before exiting the course, the student is able to demonstrate skills needed to successfully pass the Official GED Language Arts, Writing Tests, and smoothly transition into career readiness and college-level writing courses. Pre-requisites: Successful completion of the lower level Spanish GED Writing course or Language TABE Score of 11.0-12.9.

\section*{Spanish GED Mathematics:}

GED Mathematics - The lower level of the Spanish GED Mathematics course provides a foundation for college-level studies. The student demonstrates an understanding of mathematical concepts and operations by applying advanced strategies and critical thinking skills to solve multi-step word problems using integers, the number line, powers, square roots, scientific notations, algebraic equations, fractions, decimals, percentages, geometry, statistics, proportions and ratios in mathematical lessons that reflect real-life situations with and without the aid of the calculator. Pre-requisites: Successful completion of the High Intermediate Math course or TABE scores of 9.0 -10.9.

GED Advanced Mathematics - The Spanish GED Advanced Mathematics course prepares the student to incorporate testtaking techniques to successfully pass the GED Math Tests and to make a seamless transition into career readiness and college-level math courses. The student reviews and applies advanced strategies to more difficult mathematical problems. As the student progresses through the course, the student applies the Pythagorean Theorem, utilizes formulas to solve multi-step word problems, recognizes number pattern series, calculates measures of central tendency, interprets and performs various math operations using graphs. Math calculations are performed with and without the aid of the calculator. Pre-requisites: Successful completion of the lower level Spanish GED Math course or Math TABE scores of 11.0 - 12.9.

\section*{Spanish GED General Studies:}

GED General Studies - The lower level Spanish General Studies course enhances academic reading, writing, mathematical, and critical thinking skills. At the upper level of this course, the student writes correspondence that accurately reflects thoughts and composes cohesive and organized essays with few mechanical errors, effectively uses quotes, indirect quoting and paraphrasing, and develops proficiency in collecting, comparing, contrasting, synthesizing, and discriminating information from multiple sources which includes use of the internet. The student also demonstrates an understanding of mathematical concepts and operations by applying advanced strategies, formulas, geometry principles, and critical thinking skills to solve multistep word problems. By the end of the course, the student is able to demonstrate workplace competencies such as read and comprehend technical information, complex manuals, and some college-level books, function in most job situations involving higher order thinking, operate complex machinery, and work productively. Pre-requisites: Successful completion of the High Intermediate General Studies course or TABE Reading, Math, and Language scores of 9.0-10.9.

GED Advanced General Studies - The Spanish GED Advanced General Studies course enhances academic reading, writing, mathematical, and critical thinking skills. When provided with a prompt, the student will apply the writing process to compose a well-written, fiveparagraph essay, apply advanced strategies to more difficult mathematical problems, and comprehend advanced content area texts, in addition to technical and non-technical workplace, employment and academic-related materials. Before exiting the course, the student is able to demonstrate skills needed to successfully pass the 5-subject Official GED Test in Language Arts, Reading; Language Arts, Writing; Mathematics; Social Studies; and Science. The student is also able to smoothly transition into career readiness and college-level courses. Pre-requisites: Successful completion of the lower level Spanish GED General Studies course or TABE Reading, Math and Language scores of 11.0-12.9.
Spanish GED Constitution - The Spanish GED Constitution course is a secondary education competency-based course inAmerican Government. The course is designed to maximize preparation for the Public Law Exam 195 (U.S. Constitution). Instruction covers modern political and economic systems of government, the origins of the United States, and the federal system of government. Topics also include the Declaration of Independence, the American Flag, amendments to the constitution, political parties, the electoral process, and the role that public opinion and pressure groups play in American politics. The course concludes with an in-depth study of the three branches of the federal government, the U.S. and Illinois State Constitutions (TABE Reading 9.0-12.9).

\title{
Other Programs of Study \\ AdUlt EdUCATION
}

\section*{ASE/GED \& TRANSITION LEVEL COURSES AND/OR PROGRAMS}

GED College Prep - GED College Prep courses are designed to accelerate the progression of those students who are nearly ready to pass the GED and who are clearly motivated to transition beyond Adult Education into a credit, non-credit, or career/technical program at CCC. GED College Prep courses offer individualized GED preparation instruction, transition skill-building curriculum components (to include reading, writing and mathematics), and transition support services. To be eligible for GED College Prep, applicants must register on campus and score 10.5 or above in reading, writing and math on the TABE placement tests.
i -Pathways (formerly known as GED-i) - The i-Pathways Online course integrates a broader variety of curriculum options, a solid study plan and helpful tips that are designed to prepare students for their Official GED credentials, transition into higher education or transition into the workforce. To be eligible for i-Pathways, applicants must register on campus and score 7.0 or above in math on the TABE math placement test and 9.0 or above in reading on the TABE reading placement test.

Gateway Transition Program - The Gateway Program helps advanced ESL and GED students make the transition to college by allowing outstanding students to begin taking some credit courses with financial assistance while dually enrolled in Adult Education. Academic and career planning are hallmarks of this program.

Accelerating Opportunity - The Accelerating Opportunity Program at Richard J. Daley College helps students to earn certificates that are valued by employers. Students improve their basic skills while learning the math, vocabulary, and writing used for healthcare or manufacturing and earn college credit while receiving academic support.

\section*{ENGLISH AS A SECOND LANGUAGE (ESL)}

The English as a Second Language courses teach English language and civics skills to foreign born non-native English speakers. Courses are offered at all skill levels and include speaking, listening, reading, writing, vocabulary development, grammar and civics.

\section*{BEGINNING ESL LEVEL COURSES}

Beginning ESL Literacy - The Beginning Literacy ESL course is designed for beginning students with less than six years of formal education in their native countries, students with little or no English proficiency, and students from countries where the written language does not utilize the Roman alphabet. The student attains sufficient language skills in listening, speaking, reading and writing in order to function in limited real-life situations. Course objectives include mastery of
alphabets in lower and upper case letters, mastery of basic sight words, and recognizing numbers one to one hundred. The student also learns to say basic personal information (i.e. name, address, telephone numbers, etc.). As the student progresses in the course, the student builds literacy concepts such as directionality, spacing, and alignment.
Low Beginning ESL - The Low Beginning ESL course is designed for the student with limited knowledge of the English language. The course will emphasize the development of listening, speaking, reading, writing and life-skills, which include employment readiness using the English language. The course also emphasizes an introduction to basic vocabulary, grammar and writing simple sentences. The student also develops the skills to ask and answer simple questions, ask for clarification, state likes and dislikes, and read and comprehend a short passage of simple sentences. The student also attains better comprehension to be capable of understanding most conversations on familiar subject matters. At the upper level of the course, the student begins to read and write English for a variety of personal and workrelated purposes.
High Beginning ESL - The High Beginning ESL course is an extension of the skills learned previously in the Low Beginning ESL course. This course focuses on continued vocabulary development, reading, listening comprehension, speaking and pronunciation skills. The student is introduced to the use of a thesis statement and supportive elements. At the High Beginning ESL level, the student continues to write complete sentences and a standard paragraph that demonstrates organization of ideas. At the upper level of this course, the students begin to develop reading strategies, expand oral comprehension, and utilize the conventions of English grammar and punctuation with errors. Life skills, including employment readiness, are also emphasized.

\section*{ESL Citizenship/Naturalization:}

High Beginning - The Citizenship course is designed to prepare adults for the USA Citizenship and Naturalization examination. The content of the citizenship course includes English language, vocabulary and concepts that are associated with U.S. history, the Constitution, federal, state, and local government, and the naturalization process.

\section*{Computer Literacy:}

Beginning Computer Literacy - This course introduces the use of technology to develop literacy skills.

\section*{INTERMEDIATE ESL LEVEL COURSES}

Low Intermediate ESL - The Low Intermediate ESL course introduces academic language skills, including more emphasis on reading, writing, life-skills, and employment readiness. More complex grammar structures are introduced. As the student progresses through the ESL Low Intermediate course, he or she develops the skills to define vocabulary from context, identify topic sentences, and write narrative

\section*{OTHER Programs of STUDY \\ adult Education}
and descriptive paragraphs. At the upper level of the course, the student begins to develop the skills necessary to write clear, well-organized topic sentences, identify main ideas, identify details in short lectures and compose narrative, descriptive, and persuasive two-paragraph compositions.

High Intermediate ESL - The High Intermediate ESL course exposes the student to extensive listening, speaking, reading and writing using the English language. The student can accurately produce basic language structures in oral and written forms. In addition, the student is able to participate in simple conversations on unfamiliar topics, can read silently for brief periods of time, and identify the main idea and some supporting details from short reading and listening passages. At the upper level of the course, the student enhances writing skills, including development of paragraphs, incorporating topic sentences and some supporting details with fewer errors. Before exiting the High Intermediate ESL course, the student will be able to produce a three-paragraph composition. Life skills, including employment readiness, are also emphasized.

\section*{ESL Citizenship/Naturalization:}

Low Intermediate - The Citizenship course prepares adults for the USA Citizenship and Naturalization examination. The content of the citizenship course includes English language, vocabulary and concepts that are associated with U.S. history, the Constitution, federal, state, and local government, and the naturalization process.

High Intermediate - The Citizenship course prepares adults for the USA Citizenship and Naturalization examination. The content of the citizenship course includes English language, vocabulary and concepts that are associated with U.S. history, the Constitution, federal, state, and local government, and the naturalization process.

\section*{Computer Literacy:}

Intermediate Computer Literacy - This course enhances student's literacy skills through the use of computer technology.

\section*{ADVANCED ESL LEVELS COURSES}

Advanced ESL - The Advanced ESL course's primary objective is language immersion, emphasizing life-skills, including employment readiness and academic skills. At this level, emphasis is placed on the student's developing organization, sentence structure, and writing mechanics. As the student continues to progress, he or she composes one and one-half page narrative, descriptive, and persuasive compositions and compares and contrasts ideas in writing. At the upper level of the course, the student acquires competencies in English to use, interpret, and produce language and paralanguage, enabling him or her to move comfortably and confidently into a non-ESL environment academically, professionally, and socially. The primary emphasis of this Advanced ESL segment is to reinforce
previously learned structures and skills and to prepare the student to implement learned skills for an academic career.

\section*{ESL Citizenship/Naturalization:}

Advanced ESL - The Citizenship course is designed to prepare adults for the USA Citizenship and Naturalization examination. The content of the citizenship course includes English language, vocabulary, and concepts that are associated with U.S. history, the Constitution, federal, state, and local government, and the naturalization process.

\section*{COLLEGE ESL TRANSITION LEVEL COURSES}

ESL College Transition - The ESL College Bridge Transition course prepares the Advanced-level ESL student to pass college-entrance examinations and develop the skills necessary for successful college-ready transition. In addition to enhancing language skills, the student focuses on developing study and test-taking skills. With extensive exposure to classroom instruction in English, the students expand on and reinforce skills acquired in the Advanced ESL course through a practicum. The student's competencies in English will be further expanded through presentations, written assignments, and enhanced study and test- taking skills. Prerequisite: High school or GED diploma.

\section*{WORKFORCE PREPARATION}

\section*{ESL WORKFORCE PREPARATION COURSES}

ESL Workforce Preparation courses familiarize and prepare ESL students for career and credit programs. The courses assist in developing the basic skills necessary to seek gainful employment.
Employment Readiness - The Employment Readiness course helps the ESL student develop language and other skills related to job search and self-marketing. The course also includes instruction in assessing the student's own employment skills, filling out job applications, and preparing for job interviews.

CareerAssessment and Exploration-The CareerAssessment and Exploration course engages the ESL student in the process of matching his or her experiences and skills with appropriate employment options and environments. The student will be acquainted with jobs and careers that are currently in demand for skilled workers, along with developing the language and vocabulary skills necessary for these jobs and careers.

Workforce Preparation - The Workforce Preparation course provides the student with the language, study, and career management skills necessary for successful completion of the college-level occupational and/or technical courses he or she is concurrently enrolled in, or is about to enroll in.

\section*{ABE/GED WORKFORCE PREPARATION COURSES}

ABE/GED Workforce Preparation courses familiarize and prepare students for career and credit programs. The courses assist in developing the basic skills necessary to seek gainful employment.

Employment Readiness - The Employment Readiness course helps the ESL student develop language and other skills related to job search and self-marketing. The course also includes instruction in assessing the student's own employment skills, filling out job applications, and preparing for job interviews.
CareerAssessment and Exploration-The CareerAssessment and Exploration course engages the ESL student in the process of matching his or her experiences and skills with appropriate employment options and environments. The student will be acquainted with jobs and careers that are currently in demand for skilled workers, along with developing the language and vocabulary skills necessary for these jobs and careers.

Workforce Preparation - The Workforce Preparation course provides students with the language, study, and career management skills necessary for successful completion of the college-level occupational and/or technical courses they are concurrently enrolled in, or will register for in the future.

\section*{CAREER BRIDGE FOR WORKFORCE PREPARATION}

Career Bridge classes prepare students for entry into a specific career sector by teaching the vocabulary and basic concepts necessary for success in that field. These free courses can be taken alone or in combination with other Adult Education classes.

\section*{Contextualized Healthcare Preparation Courses:}

Language Arts Contextualized for Healthcare Career Exploration The course teaches oral and written communication skills in contexts that are relevant to healthcare occupations. It is part of a program of study developed: to prepare students to use oral and written communication as a tool in study, work, and life; to empower students to attain the education needed for a career in healthcare; and to introduce students to various healthcare career opportunities.

\section*{Contextualized Mathematics for Healthcare}

The course teaches mathematical skills in contexts that are relevant to healthcare occupations. It is part of a program of study developed to prepare students to use these skills as tools in study, work, and life, to empower students to attain the education needed for a career in healthcare, and to introduce students to various healthcare career opportunities.

\section*{Sector Bridge Workforce Courses:}

Healthcare Bridge High Intermediate Language Arts
The Healthcare Bridge High Intermediate Language Arts course is designed to further develop basic skills in reading, writing, communication, readiness, and technology through healthcare-focused instruction. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education and finally into meaningful employment.

\section*{Healthcare Bridge High Intermediate Mathematics}

The Healthcare Bridge High Intermediate Mathematics course teaches mathematical skills in contexts that are relevant to healthcare occupations. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education and finally into meaningful employment.

\section*{Healthcare Bridge Low Adult Secondary Education Language Arts}

The Healthcare Bridge Low Adult Secondary Education Language Arts course further develops basic skills in reading, writing, communication, readiness, and technology through healthcare-focused instruction. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education and finally into meaningful employment.

\section*{Healthcare Bridge Low Adult Secondary Education Mathematics}

The Healthcare Bridge Low Adult Secondary Education Mathematics course teaches mathematical skills in contexts that are relevant to healthcare occupations. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education and finally into meaningful employment.

\section*{Healthcare Bridge Transition High ASE Language Arts}

The Healthcare Bridge Transition High ASE Language Arts course further develops skills in reading, writing, communication, readiness, and technology through healthcare-focused instruction. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education and finally into meaningful employment.

\title{
OTHER PROGRAMS OF STUDY \\ adult Education
}

\section*{Healthcare Bridge Transition High ASE Mathematics}

The Healthcare Bridge Transition High ASE Mathematics course teaches mathematical skills in contexts that are relevant to healthcare occupations. It is part of a sequence of courses that transition students from basic skill development into technical training, postsecondary education, and finally into meaningful employment

\section*{Health Related Skills and Knowledge}

The Health Related Skills and Knowledge course is designed to develop knowledge of the human body and practical healthcare skills. It is part of a sequence of courses that transition students from basic skill development, in a healthcare context, into technical training, postsecondary education and finally into meaningful employment.

\section*{Contextualized Manufacturing Preparation Courses:}

Currently offered at Daley College as a part of Accelerating Opportunity, the Adult Education Workforce Bridge to Careers in Manufacturing is designed to develop reading written and oral communication, mathematics, technology and workforce readiness skills of students who have achieved a high intermediate level of proficiency on the Test of Adult Basic Education (TABE). This series of courses provides a pathway to postsecondary education and finally, to meaningful employment through contextualized workforce-focused instruction. Students will earn certificates of economic value including the CNC Certificate courses in the Continuing Education division, and will be prepared to enter credit programs leading to an A.A.S. Degree in Manufacturing.

\section*{Career Assessment and Exploration}

\section*{High Intermediate Language Arts for Manufacturing}

\section*{High Intermediate Mathematics for Manufacturing}

\section*{Manufacturing Work Readiness Skills}

\section*{Manufacturing Computer Skills}

\section*{Career Development and College Success}

Career Assessment and Exploration prepares students to assess their skills in order to identify career options and provides college success skills. The course includes applying foundational skills for critical thinking, problem solving, and decision-making.

\section*{Transition Language Arts for Manufacturing}

Transition Language Arts for manufacturing teaches reading, writing, and communication skills in contexts that are relevant to the manufacturing sector. It prepares students to use oral and written communication skills as tools in study, work, and life; empowers students to attain the education needed for a career in manufacturing; prepares students to use critical
thinking skills; introduces students to the vocabulary used in various manufacturing career opportunities; and helps adult learners successfully transition from ABE/GED courses into postsecondary courses in the manufacturing industry; and helps students earn one or more industry credentials.

\section*{Transition Mathematics for Manufacturing}

The Transition Mathematics for Manufacturing course teaches mathematical skills in contexts that are relevant to the manufacturing sector. It may be partially co-taught by an adult education and a credit instruction as an I-CAPS course. It prepares students to use mathematical skills as tools in study, work, and life; prepare students to use critical thinking skills; introduces students to the math used in various manufacturing career opportunities; helps adult learners successfully pass the GED math test and transition from ABE/GED courses into postsecondary courses in the manufacturing industry; and helps students earn one or more industry credentials.

\section*{Manufacturing Technology Skills}

Helps adult learners successfully transition from ABE/GED courses into postsecondary courses in the manufacturing industry; and helps students earn one or more industry credentials.

\section*{Vocational Adult Education Courses: Introduction to Computers}

The Introduction to Computers course covers computer basic architecture, principles of networking, fundamentals of operating systems, and internet concepts. It also provides an introduction to office productivity applications, such as word processing, spreadsheets, and presentation software. This course covers the skills outlined in all three sections of the IC3 Certification Exam

\section*{Introduction to File Management and Office Productivity Software}

The Introduction to File Management and Office Productivity Software course is taught as a continuation of the course "Introduction to Computers." This course covers intermediate topics in Operating Systems and office productivity applications, such as word processing, spreadsheets, and presentation software. This course covers the skills outlined in two sections of the IC3 Certification Exam.

\section*{Introduction to A+ Certification}

The Introduction to \(A+\) Certification course is a preparation for the A+ certification course. It covers intermediate concepts in operating systems, computer configuration (softwarel hardware), troubleshooting (software/hardware), studying techniques, and test-taking skills.

\section*{Introduction to Flooring/Floor Covering}

The Introduction to Flooring and Floor Covering course covers the basic skills used to install finish flooring. Course content includes: strip flooring, plank flooring, block flooring, resilient flooring tile, self-adhesive tiles, and ceramic floor tile.

\section*{Other Programs of Study}

\section*{ADULT EDUCATION}

The following Vocational Courses are offered at Kennedy-King's Dawson Technical Institute:

\section*{Introduction to Carpentry Maintenance}

This course covers the basic skills used in building maintenance and repair. Course content includes using measuring tools and estimating costs.

\section*{Introduction to Electrical Maintenance}

The Introduction to Electrical Maintenance course covers basic electrical skills used in building maintenance and repair. Course content includes troubleshooting, testing, and repairing devices and controls. Use of electrical test meters and devices will also be covered in the course.

Introduction to Plumbing Maintenance
The Introduction to Plumbing Maintenance course covers basic plumbing skills used in building maintenance and repairs. Course content includes troubleshooting, testing, repairing, and replacing faulty plumbing and fixtures.

\section*{Alternative High School - Middle Colleges}

Students between the ages of 16-21 who have dropped out of school but are interested in earning a high school diploma may take advantage of the Middle Colleges. Students may enroll at Olive-Harvey Middle College, Truman Middle College, or one of the alternative high schools funded through this program.
For more information about these programs contact the middle colleges or the program directly:

\author{
Olive-Harvey Middle College \\ 10001 South Woodlawn Avenue \\ (773) 291-6518
}

\section*{Truman Middle College 1145 W. Wilson Avenue (773) 907-4840}

Academy of Scholastic Achievement
4651 West Madison Street
(773) 921-1315

Aspira, Inc. of Illinois - Antonia Pantoja H.S.
3121 N. Pulaski Road
(773) 252-0970

Association House of Chicago - El Cuatro Ano
1116 North Kedzie Avenue
(773) 276-0084

Austin Career Education Center
5352 West Chicago Avenue
(773) 626-6988

Community Christian Academy
1231 South Pulaski Road
(773) 762-2272

Innovations High School
220 West 45th Place
(773) 538-0059

Lakeview Academy
716 West Addison Street
(773) 281-3065

Prologue, Inc.
1135 North Cleaver Street
(773) 935-9925

Sullivan House
8164 South Chicago Avenue
(773) 978-8680

\title{
OTHER \\ PROGRAMS \%STUDY. \\ © \\ ® \\ (Mi) \\ ©
}

Center for Distance Learning (CDL)

Child Development
Lab Centers

Foundational Studies

Workforce Institute

\section*{CENTER FOR DISTANCE LEARNING (CDL)}

Students who need more options than a traditional classroom setting may enroll in courses offered by the Center for Distance Learning (CDL). CDL offers a wide variety of college credit courses, including courses in business, child development, computer science, economics, English, world languages, geography, geology, history, humanities, mathematics, philosophy, political science, psychology, science and sociology. Distance learning courses have the same prerequisites, academic requirements, credits, and transferability as courses taught in the traditional classroom format.

CDL offers two types of delivery modes: Teleweb and Web. In the distance-learning model, students learn through instructor-facilitated courses delivered by various media such as the Internet and television. Students log-on to the course web site, read required materials, submit homework assignments, view weekly television/video programs and take exams. Instructors and students communicate via e-mail and telephone. Some courses have live, required on-site conferences at designated times throughout the semester. Courses may require students to take exams in a proctored setting.

Teleweb (TW)
Teleweb courses combine TV/video programs with course materials and interaction on the Internet. Students logon to the course's website to gain access to the course material, submit homework assignments, communicate with their instructor, and take exams. Students access the video component of the course by watching the programs on WYCC-WISE TV/Channel 20 or by renting DVDs or videocassettes.

\section*{Web (WW)}

Web courses take place primarily on the Internet. Students log-on to the course website to gain access to the course material, submit homework assignments, communicate with their instructor, and take exams
For more information about distance learning courses and CDL, refer to the CDL brochure at http://cdl.ccc.edu/files/ cdl_brochure.pdf and visit our website at http://cdl.ccc.edu. Students may also contact us at cdl@ccc.edu or (312) 553-5975.

Students can register for any CDL course at any of the City Colleges of Chicago. Tuition is paid to, and grades and transcripts are issued by, the campus where registration took place. Upon registration, students are directed to the CDL website at http://cdl.ccc.edu for further instructions.

\section*{CHILD DEVELOPMENT LAB CENTERS}

City Colleges of Chicago operates Child Development Lab Centers for children 3-5 years of age at five campus locations offering full and part-time child care for students, staff, faculty and the community. Sliding fee scale and tuition subsidies are available for eligible families. Programs are available through Head Start at no cost for parents who qualify. All Centers are accredited or in the process of reaccreditation by the National Association for the Education for Young Children (NAEYC).

Children are cared for in a nurturing learning environment by highly skilled and qualified staff who provide a developmentally appropriate program that promotes the child's cognitive language, social-emotional, and physical development. Daily activities foster exploration and learning in reading, math and science, encouraging children to become enthusiastic life long learners. Parents are viewed as a critical partner in their child's learning and are encouraged to be actively involved, just as the program works to be responsive to family needs.

The Child Development Lab Centers also serve as Academic Lab Centers providing experiential learning opportunities including clinical observation and practicum for students in Child Development, Nursing and other programs of study.

Child Development Lab Centers are located in the following colleges: (Hours vary by location; please contact the center directly for more information.)
Daley College - (773) 838-7561
Kennedy-King College - (773) 602-5481
Malcolm X College - (312) 850-7176
Olive Harvey College - (773) 291-6317
Truman College - (773) 907-4740

\title{
OTHER Programs of STUDY
}

Foundational Studies | WORkforce institute

\section*{FOUNDATIONAL STUDIES}

Designed to help students in college, the Foundational Studies program offers students who score below the minimum standard score on the placement test the opportunity to study in a non-credit environment.

The program requires instruction in mathematics, reading and writing, with additional instruction in study skills. Because class size in this program is carefully monitored, students receive individual attention and have access to tutors.

In addition to tuition and fees, students also must purchase books and supplies. At the end of the semester, students retake the placement test. Scores on the placement test determine at which level the student is prepared or if the student is academically eligible to enter the credit program.

\section*{WORKFORCE INSTITUTE}

The mission of the Workforce Institute is to design, develop, and deliver high quality training programs and services to businesses and the community. The Institute achieves its mission by identifying and addressing the ever changing needs of industries, employers, and their workforce. The goal of the Workforce Institute is to be the preferred, in-primary provider of training and educational services of quality and value for businesses, industry, and government.

The Workforce Institute brings workforce development training into the workplace, which helps Chicagoland businesses grow through employee development. The Institute provides companies with the solutions necessary for a successful future. Incumbent and entry level workers learn outside of the traditional classroom through innovative delivery systems and a hands-on approach.

For more information visit the Workforce institute website at: http://www.cccworkforceinstitute.com.

\section*{Customized Training for Business and Industry}

The City Colleges of Chicago workforce training branch for local businesses and industries has been successfully instructing students for over 10 years. Each college's Business and Industry Service Division is now combined into the Workforce Institute, operated by Harold Washington College, which continues to provide quality, affordable training programs tailored specifically to the needs of Chicago companies and organizations.

Our customized training includes, but is not limited to:
- Business and Professional Writing
- Computed Numerically Controlled (CNC)
- English as a Second Language (ESL)
- External \& Internal Customer Service
- Industry Standard Certifications: NIMS, AWS, OSHA and More
- LEAN Enterprise Coaching and Mentoring
- Microsoft Suite
- Non-Profit Board Development and Improvement
- Six Sigma Development and Implementation
- Succession and Strategic Planning
- Time and Meeting Management
- Website Creation and Maintenance

\section*{Industries and Organizations that have accessed Workforce Institute resources include:}
- American Bar Association
- Blue Cross Blue Shield
- Chicago Department of Planning \& Development
- Chicago Public Library
- Club Quarters
- Commonwealth Edison
- Freedman Seating
- Instituto del Progreso Latino
- Midwest Metal Forming
- Northwestern Memorial Hospital
- Solo Cup Company
- S \& C Electric
- University of Chicago Hospital Academy
- Vienna Beef, Ltd.
- YMCA of the USA


Note: Some courses may not be offered every semester. Thus, students should select their courses with consultation from an Academic Advisor or Department Chairperson. Students should also obtain the course schedule published each academic term or semester for the CCC College from where the student will take courses. The course schedule can also be downloaded from the CCC website at: http://www.ccc.edu.

\section*{Course Descriptions}

\section*{Department Prefix Codes}
\begin{tabular}{|c|c|c|}
\hline PSSA ALPHA CODE & TITLE & ICCB NUMERIC CODE \\
\hline HEALTH & Health & 0001 \\
\hline HOSPTLY & Hospitality & 0003 \\
\hline CMMEDIA & Communication Media & 0004 \\
\hline ARCHITC & Architecture & 0005 \\
\hline COOP EX & Cooperative Work Experience & 0008 \\
\hline VIS COM & Visual Communications & 0009 \\
\hline ART & Art & 0010 \\
\hline MEDIACM & Media Communications & 0011 \\
\hline DIET TC & Dietetic Technician & 0012 \\
\hline CE013 & CE013 & 0013 \\
\hline CE014 & CE014 & 0014 \\
\hline CE015 & CE015 & 0015 \\
\hline SURG TC & Surgical Technology & 0016 \\
\hline REN TC & Renal Technology/ Nephrology & 0018 \\
\hline CLN LAB & Clinical Laboratory Technology & 0019 \\
\hline DIAGSON & Diagnostic Medical Sonography & 0020 \\
\hline RADIOGR & Radiography & 0021 \\
\hline BIOLOGY & Biology & 0023 \\
\hline MCROBIO & Micro Biology & 0024 \\
\hline BOTANY & Botany & 0025 \\
\hline ENVR ST & Environmental Studies & 0026 \\
\hline ENVR TC & Environmental Technology & 0027 \\
\hline PHARM & Pharmacology & 0028 \\
\hline ZOOLOGY & Zoology & 0029 \\
\hline BUSINES & Business & 0030 \\
\hline CIS & Computer Information Systems & 0032 \\
\hline ELECTRN & Electronics & 0033 \\
\hline ENGR & Engineering & 0034 \\
\hline ENGLISH & English & 0035 \\
\hline LIT & Literature & 0036 \\
\hline READING & Reading & 0037 \\
\hline FOODSRV & Food Service Administration & 0038 \\
\hline LIS & Library and Information Science & 0039 \\
\hline HUM & Humanities & 0041 \\
\hline FIN ART & Fine Arts & 0042 \\
\hline PHIL & Philosophy & 0043 \\
\hline MATH & Mathematics & 0045 \\
\hline POLISH & Polish & 0046 \\
\hline CAD TECH & CAD Technology & 0049 \\
\hline LIB TECH & Library Technology & 0050 \\
\hline FRENCH & French & 0051 \\
\hline ITALIAN & Italian & 0052 \\
\hline JAPANES & Japanese & 0054 \\
\hline SPANISH & Spanish & 0057 \\
\hline MUSIC & Music & 0060 \\
\hline RESP TC & Respiratory Therapy & 0061 \\
\hline
\end{tabular}

\section*{COURSE DESCRIPTIONS}
\begin{tabular}{|c|c|c|}
\hline PSSA ALPHA CODE & TITLE & ICCB NUMERIC CODE \\
\hline PHAR TC & Pharmacy Technology & 0062 \\
\hline NURSING & Nursing & 0063 \\
\hline PHYS ED & Physical Education & 0065 \\
\hline FOODMGT & Food Management & 0066 \\
\hline PUB SRV & Public Service & 0069 \\
\hline OCEAN & Oceanography & 0070 \\
\hline ASTROMY & Astronomy & 0071 \\
\hline CHEM & Chemistry & 0073 \\
\hline GEOLOGY & Geology & 0075 \\
\hline PHY SCI & Physical Science & 0076 \\
\hline PHYSICS & Physics & 0077 \\
\hline CRM JUS & Criminal Justice & 0080 \\
\hline ANTHRO & Anthropology & 0081 \\
\hline ECON & Economics & 0082 \\
\hline EDUC & Education & 0083 \\
\hline GEOG & Geography & 0084 \\
\hline HISTORY & History & 0085 \\
\hline POL SCI & Political Science & 0086 \\
\hline PSYCH & Psychology & 0087 \\
\hline SOC SCI & Social Science & 0088 \\
\hline SOC & Sociology & 0089 \\
\hline CHLD DV & Child Development & 0090 \\
\hline SOC SER & Social Service & 0091 \\
\hline AIR CON & Air Conditioning & 0094 \\
\hline SPEECH & Speech & 0095 \\
\hline HORTIC & Horticulture & 0096 \\
\hline THR ART & Theater Art & 0099 \\
\hline DENTHYG & Dental Hygiene & 0100 \\
\hline INTDSP & Inter-Disciplinary Studies & 0104 \\
\hline AUTOTECH & Automotive Technology & 0105 \\
\hline PHLEB & Phlebotomy & 0113 \\
\hline FIRE TC & Fire Science Technology & 0116 \\
\hline AFRO AM & African American Studies & 0117 \\
\hline MENHLTH & Mental Health & 0118 \\
\hline EMT & Emergency Medical Technician & 0120 \\
\hline HLT TEC & Health Information Technology & 0121 \\
\hline OTA & Occupational Therapy Assistant & 0122 \\
\hline HLTH SCI & Health Science & 0124 \\
\hline MOR SCI & Mortuary Science & 0128 \\
\hline PHY AST & Physician's Assistant & 0129 \\
\hline PT KAPPA & Phi Theta Kappa & 0131 \\
\hline LING & Linguistics & 0132 \\
\hline RELIGN & Comparative Religion & 0133 \\
\hline PS REHB & Psychiatric Rehabilitation & 0134 \\
\hline ESLWRIT & ESL Writing & 0135 \\
\hline ESLINTG & ESL Integrated & 0136 \\
\hline
\end{tabular}

\section*{Course Descriptions}

\section*{Department Prefix Codes}
\begin{tabular}{|c|c|c|}
\hline PSSA ALPHA CODE & TITLE & ICCB NUMERIC CODE \\
\hline ESLREAD & ESL Reading & 0137 \\
\hline DMD & Digital Multimedia & 0138 \\
\hline INTCOMM & Integrated Communication & 0139 \\
\hline CHINESE & Chinese & 0141 \\
\hline LATIN & Latin & 0142 \\
\hline ENTRE & Entrepreneurship & 0143 \\
\hline ARABIC & Arabic & 0144 \\
\hline COMPSFI & Computer Security and Forensic Investigation & 0162 \\
\hline NET TEC & Networking Technologies & 0165 \\
\hline OPH TC & Ophthalmic Technology & 0167 \\
\hline HDFS & Human Development \& Family Studies & 0168 \\
\hline ABE GED & ABE GED & 0170 \\
\hline BR175 & Bridge & 0175 \\
\hline VC175 & Vocational 175 & 0175 \\
\hline CTX175 & Contextual & 0175 \\
\hline ESL & ESL & 0180 \\
\hline ESLSPCH & ESL Speech & 0195 \\
\hline 330BKPS & Baking \& Pastry & 0330 \\
\hline 330BSCM & Business and Commercial TechTC1 & 0330 \\
\hline 330 CUL & Culinary & 0330 \\
\hline 330TECH & Technology & 0330 \\
\hline 330TRNS & Logistic/Transportation/Distribution & 0330 \\
\hline 332ENGR & Engineering \& Industrial TC1 & 0332 \\
\hline 432ENGR & Engineering \& Industrial TC6 & 0332 \\
\hline 332TECH & Technology & 0332 \\
\hline 334HLTH & Health Technology & 0334 \\
\hline 340MFGT & Manufacturing & 0340 \\
\hline 340PRTE & Process Technology & 0340 \\
\hline 430BSCM & Business and Commercial Tech TC6 & 0430 \\
\hline 432CMGT & Construction Management & 0432 \\
\hline 432CNMT & Construction Materials Technician & 0432 \\
\hline 432ELEV & Elevator & 0432 \\
\hline 432IBEW & IBEW & 0432 \\
\hline 432INSP & Inspector & 0432 \\
\hline 432PDT & Painting \& Decorating & 0432 \\
\hline 434HLTH & Health Technology TC6 & 0434 \\
\hline CE HLTH & CE Health & 0500 \\
\hline CE BSMT & CE Business Management & 0502 \\
\hline CE TRDE & CE Trade/Industrial/Trans & 0504 \\
\hline CE HECN & CE Home Economics & 0506 \\
\hline FS WRIT & Foundational Studies Writing & 0810 \\
\hline FS READ & Foundational Studies Reading & 0820 \\
\hline FS MATH & Foundational Studies Math & 0830 \\
\hline FS ESL & Foundational Studies ESL & 0840 \\
\hline
\end{tabular}

Note: Alpha codes preceded by a 300 or 400 level number can be found by the alpha code, e.g., 330CUL, see Culinary, or 432CMGT, see Construction Management.

\section*{COURSE DESCRIPTIONS}

\section*{[AFRO AM] AFRICAN-AMERICAN STUDIES (117)}

\section*{AFRO-AMERICAN STUDIES 101}

\section*{Introduction to African-American Studies}

Survey of African-American Studies from an inter-disciplinary perspective; team-taught course utilizing expertise of African- American Studies staff, embraces five basic categories of the African-Studies program/plan. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{AFRO-AMERICAN STUDIES 214}

\section*{Hip Hop: Culture and Politics}

The political significance, globalization, and history of Hip- Hop will be examined. Four of the multitude of musical permutations of American Hip-Hop (Rap, consciousness / social awareness, gangsta rap, and commercial hip-hop) and their relative/ potential impact will be outlined. The materials/ social culture that has come to be associated with HipHop will be the primary focus. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and African American Studies 101.
150 minutes per week. 3 credit hours.

\section*{[AIR CON] AIR CONDITIONING (094)}

\section*{AIR CONDITIONING 101}

\section*{Introduction Air Conditioning I}

Fundamentals of heat and measurement; intensity, quantity, and modes of flow; factors of comfort studied and explored in relation to design of a system in connection with the function of that system. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 102}

\section*{Introduction Air Conditioning II}

Refrigeration, its theory, systems, components, and control as applied to air conditioning; study of refrigeration equipment, including function, selection, proper installation, maintenance, and service. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 103}

\section*{Duct Design and Layout}

Conventional low velocity duct design; high velocity air distribution design and systems using sophisticated design techniques; layout techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Air Conditioning 101 and Air Conditioning 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 104}

\section*{Equipment and Systems Controls}

Pneumatic, electric, electronic controls, and control systems; selection and design of control systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 105}

\section*{Owner-Contractor Management}

Fundamentals of management techniques for air conditioning dealers, contractors, and entrepreneurs. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 106}

\section*{Sheet Metal I}

Fabrication and installation of ducts used in air conditioning, ventilation and heating systems. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{AIR CONDITIONING 107}

\section*{Welding I}

Techniques of welding and cutting different metals under a variety of conditions. Students will learn to weld, butt, edge, lap and fellet joints. Oxy-acetylene, oxy-propane, and carbon arc methods are employed. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{AIR CONDITIONING 120}

\section*{Introductory Laboratory}

Shop and laboratory safety, use of hand tools for air conditioning, refrigeration and heating, use of meters, instruments, and gauges. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 121}

\section*{Advanced Laboratory}

Covers meters, instruments, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 150}

\section*{Introduction to Refrigeration}

Servicing, installation, reinstallation, warranty, and troubleshooting of home and commercial systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 151}

\section*{Commercial Refrigeration}

Selection, maintenance, installation of commercial refrigeration. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Air Conditioning 150.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 155}

\section*{Refrigeration Laboratory}

Gauges, meters, and troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 156}

\section*{Domestic Refrigeration Laboratory}

Domestic and hermetic servicing. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{AIR CONDITIONING 157}

\section*{Analysis Laboratory}

Analysis of domestic and commercial hermetic systems; mechanical and electrical servicing. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 158}

\section*{Commercial Refrigeration Laboratory}

Installation of components and complete systems; service and maintenance of those components and systems. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 160}

\section*{Introduction to Principles of Heating}

Warm air systems, hot water systems, steam systems, gas fuel, oil fuel, and coal fuel at both residential and commercial levels; control systems and their installation, maintenance, service; and sub-electrical systems and their service. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{AIR CONDITIONING 165}

\section*{Heating Laboratory}

General study of domestic and commercial systems. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{AIR CONDITIONING 204}

\section*{Advanced Control Systems}

Theory, maintenance, and repair of advanced electrical, mechanical and electronic controls and control systems. Design techniques of control systems explored. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Air Conditioning 104.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{[ANTHRO] ANTHROPOLOGY (081)}

\section*{ANTHROPOLOGY 201}

\section*{Introduction to Biological and Cultural Evolution of Humans}

Survey and analysis of the fundamentals of prehistoric archaeology, fossil primates and primate evolution, primate behavior, human genetics and the variations of human populations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ANTHROPOLOGY 202}

\section*{Cultural Anthropology}

Comparative study of human societies and cultures of the world; crosscultural investigation of social organization and political, economic, religious and family systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ANTHROPOLOGY 210}

\section*{North American Archaeology}

Prehistoric cultural evolution in North America, including the first arrival of people, distribution, beginnings of settled life and formation of politicalreligious states; prehistory of Eastern and Western United States and Eastern, Central and Southern Mexico until arrival of Europeans. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{[ARABIC] ARABIC (144)}

\section*{ARABIC 101}

\section*{Arabic for Beginners I}

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary and structure needed for elementary speaking, listening, and reading. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ARABIC 102}

\section*{Arabic for Beginners II}

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary and structure needed for elementary speaking, listening, reading and translating. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Arabic 101, passing the Placement Test, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ARABIC 103}

\section*{Intermediate Arabic I}

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary and structure needed for elementary speaking, listening, reading and translating. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Arabic 102 with a grade of \(C\) or better, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ARABIC 104}

\section*{Intermediate Arabic II}

Introduction to Arabic language with emphasis on language of everyday conversation. Focus is on alphabet, vocabulary and structure needed for elementary speaking, listening, reading and translating. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Arabic 103 with a grade of \(C\) or better, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{[ARCHITC] ARCHITECTURE (005)}

\section*{ARCHITECTURE 104}

\section*{History of Architecture I}

The study of the development of early architecture through the mid-18th century. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{ARCHITECTURE 105}

\section*{History of Architecture II}

The study of architecture since the mid-18th century. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ARCHITECTURE 115}

\section*{Architectural Communications}

Blueprint Reading - Study of contract documents for building industry, interpretation and interrelating of floor plans, elevations, sections; analysis of construction details, techniques and procedures. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ARCHITECTURE 121}

\section*{Architectural Drawing I}

Introduction to techniques of graphic expression, emphasis on using graphic means for communication. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ARCHITECTURE 122}

\section*{Architectural Drawing II}

Continuation of Architecture 121. Emphasis on developing skills in shading, proportion, pencil, and introduction to pictorial and other rendering techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 121, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ARCHITECTURE 123}

\section*{Architectural Drawing III}

Continuation of Architecture 122. Emphasis on developing skills in pictorial and perspective drawing and sketching, color, form, and presentation skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 121, or Architecture 122, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ARCHITECTURE 166}

\section*{Concepts of Planning}

In-depth examination of criteria which influence architecture; programming, site analysis, mechanical and structural considerations; applications of delineation techniques; examination of philosophy of significant architects and their work. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{ARCHITECTURE 170}

\section*{Computer-Aided Design for Architectural Drafting Tech.}

Introduction to design and drafting techniques using computer-aided design (CAD) systems; use of basic command structures, keyboard and menu tablets; text, dimensioning and pen and layer selection.W riting assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 121, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ARCHITECTURE 171}

\section*{Computer-Aided Design II for Architectural Drafting Tech.}

Intermediate drafting and design techniques using computer- aided design (CAD) systems; dimensioning and text,
3-D geometric constructs, advanced editing techniques, file handling, and plotter utilization. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 170, or CAD Technology 170.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ARCHITECTURE 172}

\section*{Computer-Aided Design III for Architectural Drafting Tech.}

Advanced drafting and design techniques using computer- aided design/ drafting (CAD) programs; techniques of file handling, 3D drawing, solid modeling and rendering. Hardware and software requirements will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 171, and CAD Technology 171, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ARCHITECTURE 173}

\section*{Architecture-CAD with Third Party Applications}

Introduction to third party programs used to develop architectural designs and construction documents via computer-aided design (CAD). Addon programming to the base Drafting package AutoCAD. The student will have hands-experience with automated architectural programs that streamline management of file handling and the basic command structure. Utilization of comprehensive library symbols with smart features. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 171.

\section*{ARCHITECTURE 174}

\section*{Computer Aided Design V for Architectural Drafting}

Introduction to Third Party programs used to develop architectural designs and construction documents via computer-aided design (add on program to the base drafting package AutoCAD). Students will have experience with 3-D studio. This course will include three-dimensional modeling with complete rendering. The model will include texture of materials, various lighting schemes with shade and shadow. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 172, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ARCHITECTURE 202}

\section*{General Construction}

Study of materials used in residential building construction, their growth or manufacture, preparation and application; emphasis on frame and masonry construction types; working drawings and structural details. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 121, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\author{
ARCHITECTURE 204 \\ \section*{General Construction, Advanced} \\ Continuation of Architecture 202. Emphasis on advanced structural detailing and working drawings. Writing assignments, as appropriate to the discipline, are part of the course. \\ Prerequisite: Grade of C or better in Architecture 202, or Consent of Department Chairperson. \\ 2 lecture and 4 lab hours per week. 4 credit hours.
}

\section*{ARCHITECTURE 266}

\section*{Architectural Planning}

Application of planning concepts to basic architectural problems through development of selected design projects emphasizing relation of form to function; project presentation will employ models and pictorial rendering techniques in various media; current architectural thought explored through examples of various building types. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 166, or Consent of Department Chairperson.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{[ART] ART (010)}

\section*{ART 103}

\section*{Art Appreciation}

Appreciation of art works taken from all cultures and periods. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ART 115}

\section*{Photography}

Basic principles of black and white photography. 35 mm cameras, exposure, development and printing processes, composition and presentation. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours, or
1 lecture and 2 lab hours per week. 2 credit hours

\section*{ART 116}

\section*{Advanced Photography}

Advanced techniques in development and printing. Introduction to other formats. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 115, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 117}

\section*{Beginning Color Photography}

Introduction to techniques, art and theory of color photography; printing from color negatives and/or transparencies, developing color negatives and/or transparencies; characteristics of different color film types, lighting for color photography; covers color theory and use of color in composition. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 115, and Art 116, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 118}

\section*{Cinematography I}

Fundamentals of film making; editing, photography, and sound; basic and experimental uses of the camera; student shoots and edits film, adds sound. Laboratory and field trips. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 119}

\section*{Cinematography II}

Continuation of Cinematography I. Laboratory and field trips. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 118.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 126}

\section*{Printmaking I}

Processes of lithography and relief printmaking; includes line, shape, texture, value, and color in stone lithography, wood, linoleum printmaking. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 127}

\section*{Printmaking II}

Processes of intaglio, dry point, and screen printmaking; includes line, shape, texture, value and color in printmaking process. Writing assignments, as appropriate to the discipline, are part of the course. 6 lab/studio hours per week. 3 credit hours.

\section*{ART 130}

\section*{African-American Art}

Survey of African-American art over last 150 years; covers AfricanAmerican crafts and sculpture during the 19th Century; realistic painters of early 20th Century; cubistic and abstractionist influences on painting and sculpture; non-revolutionary artists such as Charles White, Henry O. Tanner, Aaron Douglas, and Hughie Lee-Smith. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ART 131}

\section*{General Drawing}

Still-life, landscape, and human figure; experimentation with various media. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 132}

\section*{Advance General Drawing}

This course builds on and refines the experiences of Art
131 focusing on a variety of color media. Emphasis is on invention and formal concerns. Explorations into abstraction, non-objective, and fabricated image making are covered in this class. Course includes vocabulary development, critical analysis activities, and reference to historic models of drawing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 131.
6 lab/studio hours per week. 3 credit hours.

\section*{CoURSE DESCRIPTIONS}

\section*{ART 141 \\ Introduction to the Visual Arts}

Practical application of fundamentals of the visual arts. Includes study of line, texture, color, shape, and volume in various media. Recommended for pre-teachers. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours, or
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 142}

\section*{Figure Draw and Composition}

Study of the human figure in action and still poses; rapid sketching, long poses, memory work, and portraiture. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 131, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 143}

\section*{Advanced Figure Drawing}

Development of skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 142.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 144}

\section*{Two Dimensional Design}

A studio course exploring the fundamentals of the formal systems and basic elements of visual organization through two-dimensional design principles and theories using a variety of media. Fundamental design and experimentation in relationship to line, shape, textures, and color. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 145}

\section*{Three Dimensional Design}

Study of the fundamentals of the formal systems and basic elements of visual organization through three-dimensional design principles and theories; use of a variety of media, including recent and traditional materials, such as clay and plaster. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 144, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 150}

\section*{Crafts Workshop}

Creation and construction of art forms in clay, metal, cloth, fibers, plaster and wood; art process in both two and three dimensions; recommended for pre-teachers. Writing assignments, as appropriate to the discipline, are part of the course.

\section*{ART 161}

\section*{Freehand Drawing}

Elementary drawing in charcoal and pencil from simple groups of block forms, still life, and architectural ornament; includes developing pencil technique. No previous drawing experience necessary. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab/studio hours per week. 3 credit hours. or
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 162}

\section*{Architectural Representations}

Continuation of Art 161. Experimentation with water colors and their use in rendering of architectural representation of building materials, textures and nature; includes exterior and interior perspectives. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 141, and Art 161, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 163}

\section*{Water Color Painting}

Elementary painting and sketching including still life, landscape, and figure painting. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 166}

\section*{Oil Painting Techniques}

A studio course that serves as an introduction to basic painting techniques and color principles applied to the exploration of oil and acrylic painting media. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 131, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours

\section*{ART 167}

\section*{Advanced Oil Painting Techniques}

Advanced techniques and experimentation in use of materials and the development of creative styles in oil painting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 166, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 172}

\section*{Communications Design I}

Design application and merchandising of products and ideas; theory of design of form and function applied to products, brochures, packaging, display, and other commercial designs; application of design in television, newspapers, magazines, billboards, and posters for advertising industry. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 144, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ART 176}

\section*{Graphics Design I}

Creative approach to graphics, using traditional and modern media, such as drawing, painting, photography, constructed and sculptured art; includes reproduction of illustrations relating to advertising, periodical, and book publishing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 144.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ART 177}

\section*{Graphics Design II}

Continuation of Art 176. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Grade of C or better in Art 176.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\author{
ART 196 \\ \section*{Ceramics} \\ Ceramics formed by coil, slab, or free form methods. Writing assignments, as appropriate to the discipline, are part of the course. \\ 6 lab/studio hours per week. 3 credit hours, or \\ 1 lecture and 2 lab hours per week. 2 credit hours.
}

\section*{ART 197}

\section*{Advanced Ceramics \& Sculpture}

Advanced work in pottery and sculpture, use of molds and various materials; individual experiments in pottery and sculpture. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 196, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 198}

\section*{Sculpture I}

The creation of sculpture using the formal systems and elements of visual organization in a study of materials and processes; this is done using a variety of tools and media, including but not limited to contemporary and traditional materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment or grade of C or better in Art 145, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{ART 200}

\section*{Individual Art Projects}

For advanced students who have completed beginning level studies in the corresponding discipline specific course, or an equivalent course at another institution, or who can demonstrate proficiency through portfolio review in the skills taught in the corresponding prerequisite course. Work is completed on an independent project, the subject of which is designed through dialogue between the student and instructor. Writing assignments, as appropriate to the discipline, are part of the course.
Allowed Repeatable Course: Not more than an accumulated six hours will be counted towards graduation.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ART 272}

\section*{Communications Design II}

Story boards for television commercials, graphics design for television, and development and making of television commercials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 172, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ART 275}

\section*{Computer Art and Applications}

An introduction and exploration of electronic imaging through hands-on experience of applications in computer graphics. A variety of software packages pertaining to art will be utilized, as well as input and output devices. The goal of the course is to begin to develop imaging skills in graphics systems. Students will also be introduced to computer concepts of design, color, image importing and exporting, image manipulation, and sequencing techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Art 144, and Art 131, and Art 115, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{[ASTROMY] ASTRONOMY (071)}

\section*{ASTRONOMY 201}

\section*{Descriptive Astronomy I}

Descriptive survey of major astronomical facts, concepts, and relationships, starting with the solar system and extending to stars, galaxies, and cosmogonies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ASTRONOMY 202205}

\section*{Astronomy for Educators}

This course is designed to provide educators with a descriptive survey of major astronomical facts, concepts, and relationships starting with the solar system and extending to stars, galaxies, and cosmology. Planets, stars, galaxies, and the Big Bang model will be explored and mapped to Illinois State Learning Goals for astronomy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102, Eligibility for Math 140, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[AUTOTECH] AUTOMOTIVE TECHNOLOGY (105)}

\section*{AUTOMOTIVE TECHNOLOGY 101}

\section*{Introduction to Automotive Technology}

Lecture and laboratory course covering the operating principles of the modern automobile systems. Subjects will include preventive maintenance of the cooling system, fuel system, electrical system, tires and wheels, lubrication system and accessories. Course will include career exploration and automotive academics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, OR grade of C or better in English 100, OR Consent of Department Chairperson
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 103}

\section*{Engine Concepts}

Disassembly, inspection, and service of automotive engines with major emphasis on operational diagnostics and service. Students gain skills based on industry standards to perform precise diagnostics to solve operational issues related to the automotive engine. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C orbetter OR Concurrent enrollment in AUTOTEC 101 OR Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 104}

\section*{Electrical Systems and Power Accessories}

Introduction to theory, diagnosis, and repair of automotive electrical and electronic components and systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C orbetter OR Concurrent enrollment in AUTOTEC 101 OR Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{AUTOMOTIVE TECHNOLOGY 105}

\section*{Fuel Management 1}

Service techniques and theories of operations necessary to maintain modern fuel delivery systems. Service will be performed on modern fuel injection systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 103, or Automotive Technology 104, or Consent of Department Chairperson. 2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 106}

\section*{Fuel Systems}

This further study of the fuel system provides students with an opportunity to acquire knowledge of the construction, operating principles and components of automotive fuel systems. Students perform service on carburetors as well as fuel injection systems in accordance with established industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in AUTOTEC 101 and AUTOTEC 104. 2 lecture and 9 lab hours per week. 5 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 107}

\section*{Automotive Body Welding}

Students will acquire knowledge and skills in using MIG, TIG and spot welding equipment before welding operations in repairing damaged auto bodies. Proficiencies will be developed in butt and lap welding on light-gauge metal. Course will include replacement of body panels using adhesive techniques. All work performed must be in accordance with established collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 108}

\section*{Work Based Learning I}

Introduction to applied automotive technology in an actual work setting. Provides hands-on experience in an automotive shop. Students work on actual vehicles, carrying jobs from assignment through completion. Business operators will supervise students at the worksite. Instructors will supervise all on-campus and also visit off-campus worksites to observe, monitor, and critique student performance. Writing assignments, as appropriate to the discipline, are part of the course.
1-2 lecture and 10-20 lab hours per week. 3-6 credit hours

\section*{AUTOMOTIVE TECHNOLOGY 109}

\section*{Automotive Brakes}

Theory of operation and servicing of braking systems, both conventional and computerized anti-lock brake systems. Emphasis on diagnostic procedures; inspection techniques and service. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better OR Concurrent enrollment in AUTOTEC 101 OR Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 111}

\section*{Automotive Parts Specialist I}

Lecture and Laboratory course covering the principles of selling automotive parts in retail and wholesale parts establishments. Subjects will include customer relations, parts identification and usage, stocking control, product knowledge, telephone ethics, selling skills, and cataloging. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 9 lab hours per week. 6 credit hours.

\begin{abstract}
AUTOMOTIVE TECHNOLOGY 112
Automotive Parts Specialist II
Lecture and laboratory course covering skills necessary to manage an automotive parts retail store. Subjects will include customer relations, building team staff, inventory control, corporate relationships, conflict resolution, and business analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 111.
2 lecture and 6 lab hours per week. 4 credit hours.
\end{abstract}

\section*{AUTOMOTIVE TECHNOLOGY 117}

\section*{Auto Body Reconstruction I}

Study of the principles and techniques of auto body metal corrections, use and care of basic tools, types and application of fillers, analysis of the extent of damage, and perform required repair operations. Student develops skills in repairing and/or removing and replacing damaged body panels. Emphasis is placed on developing proficiency in repairing body damage according to established collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite Grade of C or better in Automotive Technology 107, or Consent of Department Chairperson.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 118}

\section*{Auto Body Repainting I}

Students will execute the techniques of preparing body surfaces, selecting and mixing paint, and spraying. Refinishing techniques will be performed on individual body panels until each student demonstrates competency to refinish a live vehicle. Course will also emphasize recognizing and performing repair techniques for damage paint finishes in accordance with collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 119}

\section*{Auto Body Detailing}

Study of principles of auto body detailing preparation for post collision repaired vehicles and new and used car delivery service. Students will develop skills in selection and use of proper cleaning and polishing materials, proper buffing and polishing techniques, preparation of plastic bumpers and accessories, steam cleaning of engine components and care of rubber parts and interior cleaning. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 9 lab hours per week. 5 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 204}

\section*{Electrical Systems II}

This course is designed to provide the necessary knowledge and skills to service today's automotive electrical systems. Selected topics include reading wiring diagrams, diagnosing electrical accessories, theory, diagnosis in operation and design of the ignition system. Students learn circuit testing on today's modern multiplex and CAN/BUS system protocol. Course will emphasize proper handling of advanced solid- state electronics such as air bags and computers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in AUTOTEC 101 or AUTOTEC 104, or Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{AUTOMOTIVE TECHNOLOGY 205}

\section*{Fuel Management II}

Emphasis on servicing of computerized engine and body controlled modules. Emphasis on service techniques for OBD II foreign and domestic computer control systems. Students will gain skills in the use and interpretation of data related to modern diagnostic test equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 105.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 206}

\section*{Fuel Management III}

This course builds upon the knowledge gained in previous fuel management courses with emphasis on Diagnosis and repairs to sensors and actuators that control engine performance. Students will gain advanced diagnostic skills to interpret waveform patterns through the use of laboratory scopes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 205.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 207}

\section*{Transmissions/Transaxles and Drivelines}

This course will cover three, four, and five speed transmissions/ transaxles and all automotive transmissions/transaxles used on front wheel drive passenger cars. Diagnosis and repair procedures will be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in AUTOTEC 101 AND AUTOTEC 212. 2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 208}

\section*{Work-Based Learning II}

Advanced hands-on experience in an automotive shop. Students work on actual vehicles, carrying jobs from assignment through completion. Business operators will supervise students at the worksite. Instructors will supervise all on-campus work based learning students, and also visit off-campus worksites to observe, monitor, and critique student performance. Writing assignments, as appropriate to the discipline, are part of the course.
1-2 lecture and 10-20 lab hours per week. 3-6 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 209}

\section*{Steering and Suspension Systems}

Theory of operation and servicing of suspension systems both rear and front wheel drive systems. Students gain skills in the use of computerized four-wheel alignment equipment, servicing McPherson struts, shock absorbers, rack and pinion and conventional steering systems. Diagnosis and service of Tire Monitoring Systems (TMS) is now part of the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C orbetter OR Concurrent enrollment in AUTOTEC 101 OR Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 210}

\section*{Performance and Drivability}

This course covers the construction, operation, and testing of the ignition systems. Training is offered on the use of oscilloscopes, infrared gas analyzers, and other diagnostic equipment such as scan tool testing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in AUTOTEC 101, AUTOTEC 104, AUTOTEC 106 AND AUTOTEC 204.
2 lecture and 9 lab hours per week. 5 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 211}

\section*{Auto Service Management}

Instruction in management skills related to inventory control, writing estimates and repair orders, billing, employee relations, time management, vendor-relations, business financials and customer relations. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 212}

\section*{Manual Drive Train and Axles}

Upon successful completion of this course, students will demonstrate understanding of design, construction, operation and service principles of automotive clutches, manual transmissions, drivelines, differentials, and rear axles. Service work includes using appropriate repair and test equipment, determining problems or extent of damage, and performing corrective work in accordance with established industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C orbetter OR Concurrent enrollment in AUTOTEC 101 OR Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 215}

\section*{Auto Temperature Control Systems}

Service procedures and theory of operation of both manual and electronically controlled heating and air conditioning systems. Emphasis will be on diagnosis, service, and replacement of air conditioning components. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 217}

\section*{Auto Body Reconstruction II}

Students will increase their knowledge and skills by repairing more complex, extensive auto body damages. Removal and installation of trim, body panels, welding, aligning various body components of the body, repairing of body hardware and accessories. Repairing or replacement of mechanical components as required for complete reconstruction of the vehicle is emphasized in this course. Students will utilize estimating skills to determine the extent of damaged, repair time and cost of repairs and repair strategies. All work will be performed in accordance with established collision industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 117. 1 lecture and 6 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{AUTOMOTIVE TECHNOLOGY 218}

\section*{Auto Body Repainting II}

Students will build on their refinishing skills learned in Automotive Technology 118. Advanced refinishing techniques are emphasized through practical application of auto body refinishing techniques on live vehicles as well as panels. As refinishing skills increase in proficiency students will acquire skills to perform color matching to refinish weathered finishes and localized panel damage repairs. Students will be evaluated on their ability to complete refinishing assignments in accordance with industry standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Automotive Technology 118.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 220}

\section*{Collision Estimating}

Estimating for automotive insurance claims and adjusting damages. Emphasis will be on appraisal procedures, flat rate computations, use of computerized collision estimator software and preparation of insurance claim forms. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 221}

\section*{Service Consultant}

This course will examine the responsibilities of an automotive service consultant, including procedures for day-to-day operations and how service techniques are used to maximize satisfaction and profitability. The course content follows the tasks identified for Automotive Service Consultant (C1). ASE terminology is used throughout to describe the people and businesses servicing the driving public. Coverage examines communications specific to customer relations and sales as well as internal communications, relations, and supervision. Customer delivery and follow up round out this thorough exploration of the functions of a successful automotive service consultant. Writing assignment, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Computer Information Systems 120. 150 minutes per week. 3 credit hours.

\section*{AUTOMOTIVE TECHNOLOGY 222}

\section*{Managing an Automotive Business}

The success of any organization most often depends on the execution and management of such strategic issues as business development, personnel, and fiscal operations. This course will introduce students to the duties and practices assigned to service managers in the successful operation of an automotive service facility. Coverage begins with a general discussion of the management structure and the service manager's role in facility operations. Consideration is then given to navigation of the personnel process from, the recruitment of workers to supervision of their performance. The financial business practice of a service manager familiarizes students with the importance of fiscal responsibility in the operation of a successful automotive service business. Writing assignment, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Computer Information Systems 120, and Business 111.
150 minutes per week. 3 credit hours.

\section*{[330BKPS] BAKING \& PASTRY}

\section*{330BKPS 765}

\section*{Introduction to Baking}

An introduction to culinary history with emphasis on baking and pastry; instruction in principles and procedures of basic equipment and its use and beginning fundamentals of baking. A look at the contemporary employment options in this field will compare restaurant, specialty, e.g. wedding cakes, retail and wholesale careers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, Reading 125, and Math 098; concurrent enrollment in 330BKPS 766, and 330BKPS 767, and 330BKPS 768, and 330BKPS 769.
150 minutes per week. 3 credit hours.

\section*{330BKPS 766}

\section*{Baking Safety and Sanitation}

An introduction to safe food production practices. Topics will include prevention of food-borne illness, HACCP procedures, facility sanitation, legal guidelines, kitchen safety, and safe food preparation, storing, and reheating guidelines. The National Restaurant Association ServSafe examination will be a part of this course. Students who pass the exam will receive the ServSafe certification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Math 098; concurrent enrollment in 330BKPS 765, and 330BKPS 767, and 330BKPS 768, and 330BKPS 769.
150 minutes per week. 3 credit hours.

\section*{330BKPS 767}

\section*{Baking Techniques}

An introduction to the functions of baking ingredients (flour, sugar, fat, eggs, and liquids) and mixing methods for doughs, fermentation techniques, and bread baking. Special emphasis will be placed on lean dough production and enriched dough methods (laminating, rubbing, and cut-in). Training in evaluation techniques of finished products will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Math 098; concurrent enrollment in 330BKPS 765, and 330BKPS 766, and 330BKPS 768, and 330BKPS 769.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 768}

\section*{Pastry Techniques}

An introduction to pastry products and methods, including lamination, short crust, liaison, meringue, pastry cream, pate a choux, vanilla sauce, ganache, custard and mousse. Assembling the various components into completed pastries will include filling, glazing, garnishing, and making a variety of sauces. Students will learn to evaluate the quality of the items that are produced. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Mathematics 098; concurrent enrollment in 330BKPS 765, and 330BKPS 766, and 330BKPS 767, and 330BKPS 769.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{330BKPS 769}

\section*{Cookies and Tarts}

An introduction to a variety of mixing methods, doughs, batters, fillings, and glazes with emphasis on preparing unfilled and filled cookies, mignardises, tarts, a variety of petit fours, and other one bite items. Emphasis will be on production and will include specialty preparations, e.g., gingerbread houses. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Math 098; concurrent enrollment in 330BKPS 765, and 330BKPS 766, and 330BKPS 767, and 330BKPS 768.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 770}

\section*{Basic and Classical Cakes}

Course emphasizes different mixing and assembly methods where students will prepare a variety of classical cakes, from simple pound cakes to elaborate filled cakes and tortes. Classical preparations will include Sacher Torte, Dobos Torte, Opera Torte, Marjolaine, Gateaux St. Honore, and Charlottes. Piping skills will be introduced and practiced. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS 768 and 330BKPS 769; concurrent enrollment in 330BKPS 771, and 330BKPS 772, and 330BKPS 773.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 771}

\section*{Special Occasions Cakes}

Decorating techniques will be practiced, including flowers and borders, royal icing, fondant draping, crimping and ruffling and gum paste flowers. Students will prepare special occasion cakes, seasonal cakes, and classical and contemporary wedding cakes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in \(330 B K P S\) 767, and 330BKPS 768 and 330BKPS 769; concurrent enrollment in 330BKPS 770, and 330BKPS
772, and 330BKPS 773.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 772}

\section*{Individual Pastries}

Quantity production will be a key element of this course. From scaling recipes and calculating yields to working a pastry station, each student will be exposed to volume production for pastry buffet tables and retail operations. Emphasis will include presentation and plate designs for banquet desserts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS768 and 330BKPS 769; concurrent enrollment in 330BKPS 770, and 330BKPS
771, and 330BKPS 773.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 773}

\section*{Confectionary Arts}

This course will serve as an introduction to chocolate, sugar, marzipan, finishing techniques, molds, and templates - display pieces which are an important art in the pastry chef's repertoire. Each student will create a centerpiece utilizing the skills learned. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS 768 and 330BKPS 769; concurrent enrollment in 330BKPS 770, and \(330 B K P S ~ 771\), and 330BKPS 772.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 774}

\section*{Hearth Breads and Rolls}

Students will learn to mix, shape, bake, and store breads and rolls. Emphasis will be on efficiency and increased speed in production of quality products including use of traditional fermentation methods, equipment, and methods to emphasize flavor, texture, and appearance as well as techniques that increase shelf life. Students will learn to evaluate the quality of the items that are produced. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in 330BKPS 767, and 330BKPS 768, and 330BKPS 769; concurrent enrollment in 330BKPS 775 and 330BKPS 776.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330BKPS 775}

\section*{Specialty Breads}

An introduction to advanced bread principles and techniques, including regional and ethnic breads. Production will include multi-grain breads, sourdoughs, bagels, pretzels, holiday or seasonal breads, and flat breads. Special emphasis will be placed on mixing, shaping, and finishing specialty breads, and innovative baking methods. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in \(330 B K P S\) 767, and 330BKPS 768, and 330BKPS 769; concurrent enrollment in 330BKPS 774 and \(330 B K P S ~ 776\).
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330BKPS 776}

\section*{Advanced Baking Principles}

Course examines baking methods and principles from a nutritional and chemical/physical point of view to accommodate a world where many people have special dietary needs. Topics to be covered include: diets such as vegan, diabetic, low carb, and gluten-free, nutritional analyses, and preparation of items for persons with special dietary needs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS 768, and 330BKPS 769; concurrent enrollment in BKPS 774 and 330BKPS 775.

1 lecture and 6 lab hours per week. 3 credit hours.

\section*{330BKPS 777}

\section*{Chocolate and Confections}

An introduction to the tempering chocolate, creation of chocolate sculptures and simple centerpieces, and production of chocolates and other confections including fudge, fondant, nougat, caramel, toffee and truffles. Emphasis will be on creating confections by hand and with special equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS 768, and 330BKPS 769, and 330BKPS 773, and 330BKPS 776; concurrent enrollment in 330BKPS 778.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{330BKPS 778}

\section*{Contemporary Desserts}

Assembled and decorated with a modern approach, desserts will be produced using the latest technology and equipment. Students will use specialized equipment, practice new presentation methods, and focus on freshness, simplicity of style, and ease of production. Each student will produce a plated dessert and centerpiece using a variety of the techniques learned throughout the program and showing key elements of production, design, freshness of flavor, and consistency. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330BKPS 767, and 330BKPS 768, and 330BKPS 769, and 330BKPS 773, and 330BKPS 776; concurrent enrollment in 330BKPS 777.
1 lecture and 15 lab hours per week. 6 credit hours.

\section*{[BIOLOGY] BIOLOGY (023)}

\section*{BIOLOGY 100}

\section*{Critical Readings in Biology}

Prepares students to read in the life sciences. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 101}

\section*{General Course Biology I}

Basic principles and concepts of biology; general considerations of biological processes, including cellular and organismic levels. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BIOLOGY 102}

\section*{General Course Biology II}

Continuation of Biology 101. Basic principles and concepts of biology, including how organisms reproduce and inherit; how life on earth evolved and how present day organisms relate to each other. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 103}

\section*{Biology of Human Sexuality}

Structure and function in human sexuality; sexuality related to physical, mental, and emotional health; the relationships between sexual behavior and human ecology, population, gene frequencies, and society. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BIOLOGY 107}

\section*{Nutrition-Consumer Education}

Science of food as it relates to health, including food composition and utilization, food preparation and preservation, nutrition, special diets, fad foods, and foods of the future; social and political aspects of food in the world's future. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 109}

\section*{Human Genetics and Evolution}

Basis of inheritance; analysis of human pedigrees; sex- linkage; physical and behavioral aspects of human evolution. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BIOLOGY 110}

Human Ecology
Effects of dense population, effect of humans on air, minerals, noise, and how these affect humans. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 113}

\section*{The Biology of Women}

A comprehensive look at the human female throughout her entire life span. Deals with biological sex differentiation, fetal development, and reproductive anatomy. Explains events of a woman's reproductive life from menarche to menopause, sexuality, birth control, infertility, and pregnancy. Discusses transmitted diseases, gynecological problems, breast cancer, controversial treatments, and health care. Examines sociological and cultural health factors that influence a woman's nutrition, physical activity, use of cosmetics, use and abuse of drugs. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BIOLOGY 114}

\section*{General Education Biology}

A laboratory course emphasizing scientific inquiry through selected concepts of biology, such as organization, function heredity, evolution, and ecology. Biological issues with personal and social implications will be introduced to enable students to make informed decisions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{BIOLOGY 115}

\section*{Human Biology}

Examines practical aspects of selected concepts in biology and their application to technology. Concepts may include heredity, growth, development, and ecology. Human systems may be studied as they relate to the major topics. Emphasis will be placed on the relationship of the issues to the individual and society. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{BIOLOGY 116}

\section*{Anatomy and Physiology}

Laboratory studies in gross and microscopic mammalian anatomy. Lectures correlating human anatomy and physiology. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 119}

\section*{Environmental Biology}

This general education laboratory course is geared for both environmental science majors as well as non-science majors. The environment and impacts on natural resources, pollution, and ecosystems are emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: : Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{BIOLOGY 120}

\section*{Terminology For Medical Careers}

Basic medical vocabulary for allied health professionals and others with minimal background in anatomy and physiology; includes study of the human body systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 121}

\section*{Biology I}

Cellular and Molecular Biology. Introduction to biochemistry, molecular genetics, cell structure, function and processes. Laboratory required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{BIOLOGY 122}

\section*{Biology I}

Organismal Biology, Ecology and Evolution. Continuation of Biology 121. An introduction to structure and function of major groups of microorganisms, fungi, animals, and plants. Emphasis on evolutionary relationships and ecological principles. Laboratory required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 121, or Consent of Department Chairperson.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{BIOLOGY 130}

\section*{Human Cadaver Anatomy I}

Student-directed learning experiences designed to enhance histology and human cadaver competence; includes osteology, articulations, skeletal muscles and neurology. The course will satisfy the 30 contact hour requirement for Occupational Therapy, Physical Therapy, and other medical programs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 226.
5 lecture and 1 lab hours per week. 1 credit hour.

\section*{BIOLOGY 131}

\section*{Human Cadaver Anatomy II}

Continuation of Biology 130. Directed learning experiences are designed to enhance histology and human cadaver competence. The course primarily stresses the following areas: cardiovascular, thoracic, and abdominal cavity systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 226, and Biology 227, or Consent of Department Chairperson.
5 lecture and 1 lab hours per week. 1 credit hour.

\section*{BIOLOGY 132}

\section*{Clinical/Lab Procedures Med Offices}

Clinical and Laboratory Procedures in Medical Office for Medical Assistants is a classroom and laboratory course for in depth study of clinical principles and procedures and medical office laboratory techniques to aid in making a diagnosis. The course is recommended for students contemplating a career in the healthcare professions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 5 credit hour.

\section*{BIOLOGY 200}

Field Biology
Natural history of local biota. Laboratory and field identification of plants and animals with a study of their habitats and relationships. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{BIOLOGY 201}

\section*{Individual Topics in Biology}

Students may conduct laboratory research, engage in library projects, and attend seminars. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 2 credit hours will be counted towards graduation. 1 lecture and .5 lab hours per week. 1 credit hour.

\section*{BIOLOGY 209}

\section*{Biochemistry}

Biochemistry is designed to give the student in life sciences, allied health fields, and biotechnology a basic understanding of the biological processes at the molecular, cellular and organismic level. An emphasis is placed on the use of laboratory tools and equipment in order to familiarize the student with current biochemical techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 114 and Chemistry 205 and 206, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 210}

\section*{Survey of Biotechnology}

This course will serve to introduce students to modern biotechnology, which is based on recent developments in molecular biology, especially, those in genetic engineering and bioengineering. Students will explore the diversity of the field focusing on such areas as medicine, biohazard, bioremediation, biocatalysis, biosafety, agriculture, forensics, quality control and assurance, testing, regulation, law and policy, intellectual property, proteomics, pharmacogenomics, nutrition, and product development. This course will incorporate speakers who are representative of specific areas in biotechnology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 121, and Chemistry 121. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{BIOLOGY 226}

\section*{Human Structure and Function I}

Human anatomy and physiology. This laboratory course is recommended for those contemplating a career in the health professions and emphasizes the structure and function of the human body. Microscopic and gross anatomy are correlated with physiology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 114, or Biology 115, or Biology 121, or Consent of Department Chairperson. (Previous completion of Biology 120 Terminology for Medical Careers strongly suggested).
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 227}

\section*{Human Structure and Function II}

Continuation of Biology 226. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 226, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{Course Descriptions}

\section*{BIOLOGY 236}

\section*{Environmental Biology}

This course is a continuation of Biology 119. Environmental sampling and analysis techniques will be taught in the laboratory. Topics such as environmental toxicology, bioremediation, genetic contamination of plant species, conservation biology, and environmental law, policy and ethics may be covered in the lecture. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 119.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 241}

\section*{Genetics}

Principles of heredity, structure of genetic material, mechanism of transmission, and the role of genetics in evolution. Application of these principles to human and other organisms is included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 101, and Biology 102, or Biology 114 and Biology 115, or Consent of Department Chairperson. 2-3 lecture and 4 lab hours per week. 3-4 credit hours.

\section*{BIOLOGY 242}

\section*{Evolution}

Origin, history and development of plants and animals. Includes evidence from anatomy, paleontology, comparative physiology, biochemistry, immunology, and genetics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 101, and Biology 102, or Biology 114, and Biology 115, or Consent of Department Chairperson. 50 to 150 minutes per week. \(1-3\) credit hours.

\section*{BIOLOGY 250}

\section*{Introduction to Molecular Biology}

The first course in a three-part series in the biotechnology program/ plan 215. This course stresses an introduction to current concepts and progress in modern molecular biology with emphasis on DNA science and genetic engineering as it applies to molecular, cellular, and organismic biology. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
Prerequisite: Grade of C or better in Biology 121, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 251}

\section*{Molecular Biology I}

The second course in a three-part series in the biotechnology program/ plan 215. The course stresses the theory and practice of separation techniques and safety procedures that are employed in the purification and essay of such biomolecules as nucleic acids, proteins and other related substances, and the relationship of these molecules to living organisms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 250, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 252}

\section*{Molecular Biology II}

The third course in a three part series, stresses the practice of current techniques used in DNA science, protein isolation, immunology and introduces selected biotechnology protocols. An emphasis is placed on the use of laboratory tools and equipment in order to familiarize the student with current biochemical techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 251, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{BIOLOGY 253}

\section*{Plant Molecular Biology}

This course is designed for students in the life sciences and biotechnology to understand how plants function at the molecular level, including the current advances in plant molecular biology and genetic engineering. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Biology 121,or Biology 250 with a grade of \(C\) or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BIOLOGY 260}

\section*{Introduction to Bioinformatics}

This course will cover a range of bioinformatics research using a casebased, problem solving approach. The course will consist of a combined lecturer-computer laboratory format to provide hands-on experience in applying bioinformatics to a variety of research problems, including genomic analysis, DNA microarray analysis, phylogenetics, threedimensional structure prediction, and proteomics. Special attention will be paid to ethical, legal and personal concerns in the practice of bioinformatics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 121, 122, and Biology 210, and Math 140, and Computer Information Systems 142, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{BIOLOGY 299}

\section*{Special Topics in Biology}

Special topics in biology and biotechnology will be discussed along with appropriate lab and/or field trip activities. New developments will be emphasized, especially materials useful in K-12 education and industry. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.
.5 to 5 lectures and 1 to 2 lab hours per week.
1-6 credit hours

\section*{[BOTANY] BOTANY (025)}

\section*{BOTANY 201}

\section*{General Botany I}

General biological principles applied to anatomy, physiology, reproduction, and heredity of seed plants. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{[BUSINES] BUSINESS (030)}

\section*{BUSINESS 110}

\section*{Development of Modern Business}

Survey course covering world background of business and the economic status of the United States, corporate history in America, areas of business development of American business institutions, business leaders, government in business. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 111}

\section*{Introduction to Business}

Survey of modern U.S. business, analyzing organization and types of businesses, major business functions, business and the environment, roles played by business and consumers in the economy, and various economic systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 141}

\section*{Business Mathematics}

Review of basic arithmetic principles, application of arithmetic operations to business forms and to analysis and solution of problems of percentage, markup, and markdown, discounts, interest, prorating, life and property insurance, taxation, and payrolls. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 147}

\section*{Introduction to Paralegal Studies}

This course is the first of the required courses in the Paralegal AAS program/plan 304. It provides an overview of the American legal system. It explores the paralegal field, including the basic skills, concepts, and reasoning processes for success in a paralegal career. This course explores basic paralegal roles and responsibilities and specific limitations as they relate to the legal system and the law office environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Math 099 with a C grade or better. Business 147 can be taken concurrently with Business 148 and Business 149.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 148}

\section*{Civil Litigation}

This course is one of the requirements of the Paralegal AAS program/ plan 304. It introduces the student to procedural concepts of the civil litigation process, in state and federal courts with an emphasis on Illinois and federal civil codes. It examines the role of the paralegal from the initial phases of the pre-trial investigation and discovery through the appeals process while emphasizing legal theory and practical skills. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Math 099 with a C grade or better. Business 148 can be taken concurrently with Business 147 and Business 149.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 149}

\section*{Family Law}

This course is one of the requirements of the Paralegal AAS program/ plan 304. It is an overview of the basic principles of family law and domestic relations, with an emphasis on Illinois law. It examines the areas of marital contracts, divorce, annulment, issues affecting children,
and other legal matters relating to domestic relations. It also covers client interviews, the drafting of necessary pleadings and supporting documents, and the performance of basic research relating to family law and domestic relations as well as the role of the paralegal in family law. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and college level math. Students not meeting college level math eligibility must complete Math 099 with a C grade or better. Business 149 can be taken concurrently with Business 147 and Business 148.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 150}

\section*{Legal Research and Writing I}

This course is one of the requirements of the Paralegal AAS program/ plan 304. It provides an overview of the fundamentals of legal research and writing. This course covers the use of primary and secondary source materials to research legal questions. It examines different types of legal documents and provides training in legal analysis. The course also includes principles and techniques in legal writing and their application to legal correspondence and documents as well as the role of the paralegal in legal research and writing. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102 and Business 220 and Business 223.
150 minutes. 3 credit hours.

\section*{BUSINESS 155}

\section*{Working in Warehousing Environment}

This course is an overview for the functional and instructional components of warehousing and distribution centers, including product flow, warehousing processes, safe working conditions in the warehouse environment, and principles of business operations, workplace ethics, and employees effect on the bottom line. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Students must be at least eighteen (18) years of age, able to life a minimum of twenty-five (25) pounds unassisted, and must be rug free. Students will be required to submit behavior assessment and drug test prior to placement in the course.
2 lecture and 2 lab hours per week. 3 credit hours

\section*{BUSINESS 156}

\section*{Warehousing Workforce Skills}

This course provides training in successful workplace practices. Students will participate in workplace learning opportunities to apply workforce skills to the warehousing and supply chain management environment and will participate in warehouse workplace job shadowing. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{BUSINESS 158}

\section*{Warehousing and Distribution Process}

This course provides learners with the knowledge and core skills associated with warehousing and distribution. Writing assignments, as appropriate to the discipline, are part of the course.
125 minutes per week. 2.5 credit hours.

\section*{BUSINESS 159}

\section*{Warehousing Technology Skills}

Warehousing technology skills are those practices important to working in a technical environment. This course covers the use of scanners and data applications along with the understanding of industrial controls and computers and automation. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\title{
Course Descriptions
}

\section*{BUSINESS 162}

\section*{Representative Warehousing Skills}

This course discusses mathematical concepts used in Supply Chain Management (SCM) warehousing and distribution. It also focuses on powered material handling equipment and safety requirements. Warehousing simulations provide the opportunity to use new skills. Writing assignments, as appropriate to the discipline, are part of the course.
125 minutes per week. 2.5 credit hours.

\section*{BUSINESS 164}

\section*{Warehousing and Distribution Coop}

This course will enable students to use the skills they have learned in the other Warehousing and Distribution classes. This coop will also demonstrate student' readiness for full time employment by working in a warehouse under close supervision. Writing assignments, as appropriate to the discipline, are part of the course. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{BUSINESS 165}

\section*{Fundamentals of Supply Chain Management I}

An overview of Supply Chain Management with a special emphasis on supply chain strategy and the management and improvement of the supply chain. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 155, 156, 158, 159, 162,
164 and Math 118 or Consent of Department Chairperson.
4 lecture and 0 lab hours per week. 4 credit hours.

\section*{BUSINESS 166}

\section*{Fundamentals of Supply Chain Management II}

A continuation of Business 165, emphasizing demand planning, produce design considerations, manufacturing planning and controls, and logistics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 165 or Consent of Department Chairperson.
4 lecture and 0 lab hours per week. 4 credit hours.

\section*{BUSINESS 167}

\section*{Fundamentals of Supply Chain Management III}

This course examines the fundamental relationship among the activities that comprise supply chain management, including Customer Relationship Management (CRM), Supplier Relationship Management (SRM), and the integrated management relationship between customers and suppliers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 166 or Consent of Department Chairperson.
4 lecture and 0 lab hours per week. 4 credit hours.

\section*{BUSINESS 168}

\section*{Field Experience: Intro.to the 21st Century Ground Transportation}

An in-depth analysis of the functional and operational components that constitute ground transportation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Must be at least 21 years of age, possess a valid Illinois Driver's License, maintain a good driving record, have the ability to sit/ stand for extended periods of time, obtain a Department of Transportation Medical Card, and pass all required State of Illinois exams, and adhere to all rules, regulations, and guidelines of the program.
4 lecture and 8 lab hours per week. 8 credit hours.

\section*{BUSINESS 176}

\section*{Records Management}

This course provides an introduction to the increasingly comprehensive field of records and information management. It emphasizes the principles and practices of effective records management for manual systems while offering practical information. Basic manual systems concepts needed for understanding retrieval methods are discussed and applied. Emphasis is placed upon control for ensuring that the records system achieves its stated goals. Includes introduction to the electronic file management system. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 177}

\section*{Clerical Bookkeeping}

This is an applied course that prepares students for the functions of clerical bookkeeping duties within the accounting department of an organization. It focuses on the procedures of how to handle accounts receivables, accounts payables, sales and receipts, depreciation and inventory. Basic bank teller processes, the role of the bookkeeper as an agent, and along with internal control procedures are introduced. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment in Business 176, or Consent of Department Chairperson
150 minutes per week. 3 credit hours.

\section*{BUSINESS 178}

\section*{Bookkeeping Computer Applications}

This is an applied bookkeeping course that prepares students for the functions of pre-accounting duties within the accounting department of an organization. It focuses on the responsibilities of a bookkeeper and will include learning how accounts are categorized via the elements of the accounting equation. Students will gain knowledge of the trial balance, end-of-period procedures and closing the books. A familiarity with key financial statements will be obtained. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Business 176 and 177, or concurrent enrollment in Business 176 and 177 or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{BUSINESS 180}

\section*{Fundamentals of Accounting}

This course emphasizes basic accounting principles and other business concepts as they apply to the reporting of financial data and other economic events of a business enterprise. Emphasis is on recording, analyzing, and interpreting historical data and showing its financial effect on businesses. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 181}

\section*{Financial Accounting}

This course presents accounting as an information system that produces summary financial statements, primarily for users external to a business or other enterprise. Students study the forms of business organization and the common transactions entered into by businesses. The emphasis is on understanding and applying basic accounting principles and other concepts that guide the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. How to analyze and interpret historical financial statements and the limitations of using these in making forward-looking business decisions are included. The primary content emphasis will be accounting for current assets and liabilities, long-term assets and liabilities,

\section*{CoURSE DESCRIPTIONS}
corporations, cash flow statements and financial statement analysis. Writing assignments, as appropriate to the discipline, are part of the course
Prerequisite: Grade of C or better in Business 111 or Business 141 or Mathematics 098 or higher; or concurrent enrollment in Business 141; or placement test; or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{BUSINESS 182}

\section*{Managerial Accounting}

This course presents accounting as a system of producing information for use in internally managing a business. The course emphasizes the identification, accumulation, and interpretation of information for planning, controlling and evaluating the performance of the separate components of a business. Included is the identification and measurement of the costs of producing goods or services and how to analyze and control these costs. Decision models commonly used in making specific short-term and long-term business decisions are included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 181, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{BUSINESS 183}

\section*{Payroll Accounting}

A comprehensive course that prepares students for the functions of payroll within an organization. Introduces principles, procedures, and terminology for business applications of payroll methods. Emphasizes federal and state payroll records and forms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 178, or Business 181, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 184}

\section*{Principles of Medical Office Administration}

This course for Medical Assistants encompasses the administrative principles of the medical office. This administrative course is recommended for those contemplating a career in the healthcare professions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
300 minutes per week. 6 credit hours.

\section*{BUSINESS 200}

\section*{Business Ethics}

This course explores the ways in which the failure to consider the ethical aspects of decisions can bring managerial careers to an end. It distinguishes right versus wrong ethical conflicts from right versus right conflicts and develops guidelines and frameworks that leaders can use to resolve conflicts. The cases highlight the need to appreciate the ethical complexity of the social environments of business and to think through all the ramifications of decisions. Specific topics include honesty and deception in negotiations, the use and abuse of trust, products safety and target marketing with the creation of productive and ethical workplaces as a continuing challenge to modern leaders. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 203}

\section*{Introductory Cost Accounting}

General accounting principles applied to factory operations. Includes methods of finding costs of specific orders, lots and processes, and basis of allocating overhead expenses. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 181, or Business 182. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 204}

\section*{Computer Applications for Intermediate Accounting}

Utilizes a computer to perform major accounting tasks such as recording entries, posting to ledgers, generation of trial balances and financial statements, as well as special reports, all encountered in Business 205. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment in Business 205.
50 minutes per week. 1 credit hour.

\section*{BUSINESS 205}

\section*{Intermediate Accounting}

Application of funds, analysis of working capital, investments, inventories, amortization and depreciation, and cost expirations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 182 and concurrent enrollment in Business 204.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 206}

\section*{Auditing}

Includes external balance-sheet audits, recent developments in techniques of auditing cash, receivables, inventories, investments, fixed assets, and liabilities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 205, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 207}

\section*{Intermediate Accounting II}

Accounting for the rights of creditors and stockholders; principles of fund accounting; statement analysis; special problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 205.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 208}

\section*{Federal Income Tax}

Study of the principles of the Internal Revenue Code, practical application of tax rules to the preparation of returns, and application of accounting rules to tax matters. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 182, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 211}

\section*{Business Law I}

Laws of business transactions, including contracts, agency, employment and partnerships, and study of the Uniform Commercial Code. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{BUSINESS 212}

\section*{Business Law II}

Continues study of laws covering corporations, negotiable instruments, sales, real estate, and bailments. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 214}

\section*{The Legal and Social Environment of Business}

A study of the legal and social environment of business with emphasis on business ethics and corporate social responsibilities. Areas of focus include governmental regulation of business, securities law, consumer protection law, labor law, and employment law. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 216}

\section*{Entrepreneurship}

Entrepreneurial skills, organization, promotion and management in self-employment or administration in occupations and organizations; research and discussions with successful owners and managers in the business community. Students receive practice in planning, decisionmaking, and self-evaluation. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 219}

\section*{Real Estate Law for the Paralegal}

This course is one of the requirements of Paralegal A.A.S. program/plan 304. It introduces the fundamentals of real estate law, with emphasis on Illinois law, and provides a basic understanding of the elements of the real estate industry. The course covers real property law, categories of ownership, legal descriptions, contracts, financial aspects, and special issues in real law. It also examines the real estate transaction from the beginning of the process to the closing. It emphasizes the drafting of legal descriptions of property, preparing closing documentation, and performing a title search. It also examines the role of the paralegal in a law office, financial institution, or title company. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 147, and Business 148 with a grade of \(C\) or better.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 220}

\section*{Criminal Law for the Paralegal}

This course is one of the requirements of the Paralegal A.A.S. program/ plan 304. It explores the Illinois and federal court systems as well as defines the categories of crime and the types of legal defenses. It introduces the concepts involved in criminal proceedings and explores the stages of criminal litigation, from the arrest through post-trial procedures. It enables the student to understand all procedural aspects of criminal cases and the role of the paralegal in aiding an attorney in trial preparation, the trial itself, and post-trial procedures and appeals. (This is a writing intensive course.) Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 147, and Business 148 with a grade of \(C\) or better.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 221}

\section*{Insurance}

Preparation for the agents' or brokers' licensing examination. Includes life and casualty insurance, automobile, fire, health and accident, and workers compensation. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 222}

\section*{Business Law for the Paralegal}

This course is one of the requirements of the Paralegal A.A.S. program/ plan 304. It provides the student with an in-depth analysis of the law pertaining to types of business organizations, contract formation, resolution of contract disputes and the impact of the Uniform Commercial Code on traditional contract theory. The role of a corporate paralegal is covered as it relates to the business environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 147, and Business 148. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 223}

\section*{Tort Law}

This course is one of the requirements of the Paralegal A.A.S. program/ plan 304. It examines the fundamental elements of tort law and the principles of tort litigation. It introduces the different categories of torts and focuses on the role of the paralegal in tort litigation from the point of view of both the plaintiff and defendant. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 147, and Business 148. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 224}

\section*{Wills, Trusts and Probate}

This course is one of the requirements of the Paralegal program/plan 304. It covers both the theoretical and practical knowledge needed in the estate planning and probate processes. It covers wills, trusts, and estate administration. The course emphasizes the role of the paralegal in the drafting of estate planning documents and carrying out probate procedures. Emphasis is placed on applicable Illinois law and Federal tax laws. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 149, and Business 219, and Business 222.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 225}

\section*{Legal Research and Writing II}

This course is one of the requirements of the A.A.S. Paralegal program/ plan 304. It is a continuation of Business 150 and provides a more indepth, hands-on exploration of legal research, writing, and analysis. It provides additional experience in legal research, reasoning, analysis, and writing. This course continues to explore the various legal reference sources, both traditional and non-traditional, and to develop legal reasoning skills and strategies to analyze legal authority in case law. This is a writing intensive course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 150.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{BUSINESS 226}

\section*{Internship for the Paralegal}

This course is the final requirement for the A.A.S. Paralegal program/ plan 304. It is designed to enable students to combine classroom training with practical paralegal work experience through supervised on-the-job training in a public or private legal setting. The course covers legal ethics, law office management, interviewing, and job placement skills. Periodic seminars are held to discuss experiences, concerns, and topical questions. Students are required to write summaries of current law articles, keep a journal, and prepare a portfolio which will include a resume, letters of recommendation, and other pertinent materials. A minimum number of hours of on-site time are required for this course. Internship placement must be approved by the Program Coordinator. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of all other Paralegal A.A.S. 304 program requirements with a grade of \(C\) or better, and Consent of Department Chairperson.
15 lab hours per week. 3 credit hours.

\section*{BUSINESS 227}

\section*{Elder Law}

This course is an overview of legal issues that are increasingly relevant as the older population increases. It covers a variety of legal documents and the many legal situations which affect the elderly. It also covers topics such as asset management, estate planning, health care, personal planning and protection, resources of both public and private agencies and organizations, and the court systems. It examines the role of the paralegal in interacting with elderly clients as well as in using the various resources available in elder law. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 149, and Business 219, and Business 222.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 228}

\section*{Environmental Law for the Paralegal}

This course examines the fundamental concepts of environmental law. It emphasizes both state and federal laws and regulations enacted to preserve and protect the environment. It covers the specific areas of air quality control, water quality control, toxic substance control, waste management, and hazardous releases. It also covers energy policy, natural resources, international environmental law, and current environmental issues. It focuses on the role of the paralegal in environmental law. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 219, and Business 222. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 229}

\section*{Immigration Law}

\section*{Replacement course description}

This course provides an overview of the federal immigration system and the concepts and procedures of immigration law for the paralegal. It examines immigration law and regulations as well as practical applications in immigration law including the naturalization process, visa procedures, and the rights and obligations of aliens in the United States. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of Business 219, 220, 222, and 223 with a grade of \(C\) or better or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 230}

\section*{E-Business Marketing}

Explores resources, knowledge, skills, practices and techniques necessary to conduct business online. Explores nature and impact of e-commerce on business and business operation, resources required and available, customer relationship management, ordering systems, end-to-end marketing and performance, and control systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111, or Computer Information Systems 120, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 231}

\section*{Marketing}

Examines the functions and objectives of marketing. Includes flow of industrial and consumer goods through the marketing system and the role of the consumer, the product, the market, the pricing policies, and promotion and distribution methods. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 232}

\section*{Fundamentals of International Business}

Analysis of problems stemming from the movement of goods, services, human resources, technology, finance, and ownership across national boundaries. Direct focus on the development of management skills in handling of multinational business. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 236}

\section*{Advertising}

Study of basic functions, principles, and techniques of advertising, including the role of advertising in the marketing system. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 237}

\section*{Selling}

Factors of successful selling of goods or ideas, buying motives, sales psychology, customer approach, and sales techniques. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 238}

\section*{Legal Ethics for the Paralegal}

This course is an elective in the Paralegal A.A.S. program/ plan 304. It provides the student with an overview of ethical considerations arising in the paralegal profession. This course discusses the regulation and discipline of attorneys and paralegals, issues related to confidentiality and conflicts of interest, unauthorized practice of law and other ethical issues that pertain particularly to paralegals. Students will discuss general ethical considerations and will work directly with the Illinois Rules of Professional Conduct. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 147, and Business 148, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{BUSINESS 239}

\section*{Business Organizations and Agency Law}

This course is an elective in the Paralegal A.A.S. program/ plan 304. It provides the student with an overview of the formation and operation of business enterprises, exposes the student to types of business organizations and to the law surrounding principal/agent relationships. Students will learn about sole proprietorships, general and limited partnerships, limited liability companies, and corporations. The role of a corporate paralegal is covered as it relates to the benefits and disadvantages of each type of entity as well as the formation, dissolution, and recordkeeping for each of these entities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 222, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 240}

\section*{Computers in the Law Office}

This course is an elective in the Paralegal A.A.S. program/plan
304 and can be taken in lieu of the Internship Requirement. The course is designed to be a general introduction to the use of computer software programs in the modern law office. Office organization, legal terminology, fees and billing procedures, e-filing, scheduling and calendaring, preparation and maintenance of case files, preparation of law office forms, and an introduction and survey of a variety of legal specific software and legal web resources are involved in this course. Students will develop a greater appreciation for computers by learning how computers can help paralegals complete tasks and assignments. This course includes hands on computer exercises using professional software programs and web resources used in the law office by paralegals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 223, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 241}

\section*{Introduction to Finance}

Surveys methods of financing business enterprises and their relationships to personal and company investment policies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 181, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 242}

\section*{Financial Markets and Institutions}

This course examines the different financial institutions and financial markets. Topics include interest rate determinants, monetary policy, federal reserve system, financial intermediaries, and regulatory agencies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 241, or Consent of Department Chairperson.

\section*{BUSINESS 243}

\section*{Fundamentals of Investments}

This course examines the institutional investment process. Emphasis on common stocks and other financial securities traded over the financial exchanges. Topics include risks, returns, portfolio selection, and portfolio performance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 241, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 244}

\section*{Personal Finance}

Personal investment programs including the sources and uses of investment information. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 250}

\section*{Computerized Accounting Systems}

Computerized Accounting focuses on exposing the student to various computerized accounting systems and how these systems accomplish the goals of accounting information system of a business entity. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 181, or Computer Information Systems 120 or equivalent, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 251}

\section*{Public Relations}

This course examines the organization's process of communication to the public. Topics include multicultural community relations, consumer relations, and crisis management. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 231, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 252}

\section*{Product Planning and Development}

This course examines the factors influencing product planning and development. Topics include new product strategies, idea generation, perceptual mapping, and product position. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 231, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 253}

\section*{Consumer Behavior}

This course examines the decision-making process of the consumer. Topics include perception, motivation, lifestyles, and attitudes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 231, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 254}

\section*{Integrated Marketing Communications}

This course examines the purposes of objectives integrated marketing communications. Emphasis on communication strategy formulation and development via various advertising and promotional tools, such as personal selling, public relations, trade promotions, and consumer promotions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 231, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{BUSINESS 255}

\section*{Corporate Finance}

This course examines the various factors that influence the financial decisions of corporations. Topics include risk and return analysis, capital budgeting, capital structure, dividend policies, and mergers and acquisitions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 241, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 257}

\section*{Principles of Retailing}

Functions of retailing, including current trends and problems. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 258}

\section*{Small Business}

Organization and operation of small-scale retail, trading, service or manufacturing business. Problems of location, financing, labor, accounting and production, taxes, and insurance. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 269}

\section*{Principles of Management}

Analysis of major functions and principles of management; emphasis on supervisory and operating levels of management; theories, policymaking, effective communications, and the art of decision-making. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Business 111, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 270}

\section*{Office Management}

Application of management principles to planning, organization, and controlling of office work. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 271}

\section*{Human Resources Management}

Employment techniques, wages and hours, job evaluation, training, employee ratings, collective bargaining, employment counseling and collateral benefits, such as pensions and fringe benefits. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{BUSINESS 272}

\section*{Sales Management}

Planning of sales efforts, management of sales and services, human resources, and controlling sales operations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111, and Business 237, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 273}

\section*{Organizational Behavior}

This course examines the theories and concepts related to human behavior in organizations. Topics include individual behavior, group behavior, and organizational structure and culture. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 269.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 274}

\section*{Industrial Management}

Characteristics of industrial enterprise, problems of materials procurement, plant organization and layout; labor relations and human resources policies, efficiency techniques, automation, and production development. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 278}

\section*{Compensation \& Benefits Administration}

This course examines the design and implementation of an organization's compensation systems. Topics include job analysis, base pay structure, incentives, and performance measurements. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 269, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 279}

\section*{Human Resources Planning \& Staffing}

This course examines the functions and objectives of human resources planning and staffing. Includes staffing models and strategies, recruitment, selection, employment and retention. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Business 271, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 281}

\section*{Office Procedures for Office Administrative Assistants}

Records management, editorial duties, correspondence and reports, and work simplification procedures. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 282}

\section*{Business Administration for Office Assistants I}

Current business problems, trends, and economic systems emphasizing basic concepts in free private enterprise, labor force, financial systems, government regulation of business, acts affecting labor, marketing and pricing, credit, banking and investment programs, and social responsibilities of business. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Business 111, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{BUSINESS 283}

Business Administration for Office Administrative Assistants II
Business administration of human resources policies, financing and investing, problems and trends in production, distribution, transportation, and various office functions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111, or Consent Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 284}

\section*{Business Communications}

Study of communication (including motivation, perception, language, distortions, organizations, listening) and its role in the administrative process. Patterns of mis-communications (such as by-passing, deception, generalizations, association, labeling) are examined for better understanding of communication process and to improve organizational environment. Consideration given to the psychological impact of various communications media. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 285}

\section*{Real Estate Principles}

Preparation for state real estate examination. Includes real property, deeds, agreements of sale, mortgages, financing, valuation and appraisal, leases, and closing statements. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 111, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 287}

\section*{Real Estate Practice and Procedure}

Sales contracts, closing statements, finance, insurance, and the Illinois real estate brokers and salesman's laws. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Business 111, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 288}

\section*{Real Estate Appraisal}

Functions and purposes of appraisals, including neighborhood and area trends, site valuation, building cost estimates, and depreciation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 285, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 289}

\section*{Real Estate Management}

Property management, including merchandising, residential space, managing furnished buildings, single family units, office buildings, commercial properties, and cooperative apartments, setting store rentals, maintenance problems, and operation of a management office. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 285, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 291}

\section*{Leadership}

This course examines the process by which an individual exerts influence over other individuals and inspires, motivates, and directs their activities to help achieve group or organizational goals. Topics include power and influence, participative leadership, leadership theories, and managerial traits, and skills. Writing assignments, as appropriate to the discipline are part of the course.
Prerequisite: Grade of C or better in Business 269, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{BUSINESS 292}

\section*{Employment Law}

This course examines the legal environment relationship, procedures and discrimination. Topics include selection, termination, affirmative action, sexual harassment, and unions and collective bargaining. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Business 269, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[330BSCM] BUSINESS \& COMMERCIAL TECHNOLOGY}

\section*{330BSCM 100}

\section*{Public Passenger Vehicle Training/Taxi}

Course is designed to prepare individuals to take the licensure examination required by the City of Chicago to become unrestricted public chauffeurs. The course rules and regulations governing the operations of a public chauffeur in Chicago, focuses on street law, judicial procedures, and mastery of geography through routing exercises. This course also covers cultural sensitivity and diversity, customer service, accessibility training and taxi Access Program (TAP) and safety of the passenger as well as the driver. Students must also take a four-hour Intra-City bus tour. Writing assignments, as appropriate to the discipline, are part of the course.
300 minutes per week. 6 credit hours.

\section*{330BSCM 503}

\section*{Business Writing}

Fundamentals of business correspond-ence; includes composing business letters, memorandum and reports using a personal computer. Writing assignments, as appropriate the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{330BSCM 508}

\section*{Practicum}

Planned and supervised career field experience relating to a student's occupational program is emphasized. Placement will introduce the student to the real world of work in the field of Information Processing. Writing assignments, as appropriate to the discipline, are part of the course.
5 lab hours per week. 1 credit hour.

\section*{330BSCM 525}

\section*{Introduction to Office Systems}

The major components of a computer system, terminology, operating system command structure, and related utilities will be integrated throughout the course. Basic operations, including directories, cataloging, and comparing files are covered. Advanced concepts such as sub directories, folders, and text editing are discussed. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 3 lab hours per week. 2 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{330BSCM 526}

\section*{Introduction to Personal Computers}

Overview course that ensures students a firm foundation in computer applications. Students will be introduced to operating systems, word processing, database, spreadsheet, desktop publishing, multimedia and telecommunications. This course will also explain the difference between working on a network or a stand-alone environment. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{330BSCM 532}

\section*{Basic Computer Technology}

Course provides students with an overview of the basic computer concepts and terminology, the Internet and the Microsoft Office applications. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture hours per week. 2 credit hours.

\section*{330BSCM 538}

\section*{Business Mathematics I}

Provides skills in developing sufficient knowledge of the basic mathematical fundamentals such as addition, subtraction, multiplication, division, decimals, percents, interest and discounts. Writing assignments, as appropriate to the discipline, are part of the course.
50-150 minutes. 1-3 credit hours.

\section*{330BSCM 539}

\section*{Business Mathematics II}

Develop occupational proficiency in performing business applications such as discounting, percents, interest, decimals, and payrolls. Writing assignments, as appropriate to the discipline, are part of the course. 50-150 minutes. 1-3 credit hours.

\section*{330BSCM 540}

\section*{Business Mathematics III}

Review basic math principles and application of occupational proficiency in performing business applications such as discounting, payrolls, decimals, interest, and percentages; includes basic accounting principles as applied to the office environment. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330BSCM 543}

\section*{Keyboarding for Microcomputers I}

Course will teach students to operate the keyboard by touch and begin the development of speed and accuracy levels and also includes formatting of basic documents. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{330BSCM 544}

\section*{Keyboarding for Microcomputers II}

Course will provide training in keyboarding, skills building, and document formatting. Student will use word processing software as a tool to build keyboarding speed and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{330BSCM 546}

\section*{Career Development I}

Interpersonal skills training to prepare individuals for the world of work with emphasis on community resources, career development, professional grooming, and office etiquette. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330BSCM 550}

\section*{Word Processing Applications}

Development of techniques and skills for word processing software. Features covered include: editing, retrieval, merging and storage of documents, systems layout, design management processes and implementation of programs. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab hours per week. 2 credit hours.

\section*{330BSCM 551}

\section*{Spreadsheet Applications}

Introduce students to spreadsheet concepts and applications. Students will format spreadsheets using effective design principles: entering common spreadsheet formulas, sorting data, using graphic/chart functions and importing spreadsheet files. The course is designed to teach students to think analytically, manipulate information, and use the computer as a productivity tool. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab hours per week. 2 credit hours.

\section*{330BSCM 552}

\section*{Database Applications}

Course provides training in the concepts of database management and the use of relational database software for business applications. Students will create and manipulate data files and format output as documents and reports. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab hours per week. 2 credit hours.

\section*{330BSCM 553}

\section*{Desktop Publishing I}

Course covers the fundamental concepts of desktop publishing techniques, usage of microcomputers to create high-quality documents, principle page layouts, publications, text and graphic documents, brochures, newsletters, business cards, publications, terminology and applications. Students will create a variety of documents and demonstrate proficiency in software functions. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab hours per week. 2 credit hours.

\section*{330BSCM 568}

Language Skills I
Course provides comprehensive coverage of the fundamentals of English as applied to business applications. The students will develop a solid foundation of English grammar essential for successful communication. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}
[CAD TEC] CAD TECHNOLOGY (049)
(Computer-Aided Design)

\section*{CAD TECHNOLOGY 130}

\section*{CAD Technology I}

Application of pictorial techniques used in preparation of industrial illustrations; study of oblique, axonometric, perspective, and exploded views; methods and techniques of shading, commercial media, and reproduction processes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 100, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{CAD TECHNOLOGY 170}

\section*{CAD Technology II}

Introduction to programming techniques using computer- aided (CAD) systems; use of basic command structures, keyboard and menu tablets; text dimensioning and pen and layer selection. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 100, or Engineering 110, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{CAD TECHNOLOGY 171}

\section*{CAD Technology III}

Intermediate programming techniques using computer-aided (CAD) systems; techniques of file handling, archiving and plotting; drawing manipulations of translation and rotation to prepare for CAD system operation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Architecture 170, or CAD Technology 170, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{CAD TECHNOLOGY 172}

\section*{CAD Technology IV}

Advanced planning concepts and designs using computer- aided systems; techniques of file handling, archiving, and plotting; drawing manipulations of translation and rotation to prepare for CAD system operation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CAD Technology 171, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{[CHEM] CHEMISTRY (073)}

\section*{CHEMISTRY 121}

\section*{Basic Chemistry I}

Principles of general inorganic chemistry, including properties of matter, dimensional analysis, fundamentals of stoichiometry, interpretation of the periodic table, nomenclature, and introduction to solution chemistry and commonly used focus units. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and eligibility for Math 118 or higher, or completion of Math 99 with a grade of \(C\) or better.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{CHEMISTRY 201}

\section*{General Chemistry I}

Topics include the periodic table of the elements, atomic structure, basic concepts of quantum theory, bonding, stoichiometry of compounds and reactions, thermo chemistry, the gaseous state, basic concepts of the liquid and solid states, solutions, acids and bases. Writing assignments, as appropriate to discipline, are part of the course.
Prerequisite: Eligibility for Mathematics 140 or higher and Grade of \(C\) or better in Chemistry 121 or one year of high school chemistry, or Consent of Department Chairperson.
4 lecture and 4 lab hours per week. 5 credit hours.

\section*{CHEMISTRY 203}

\section*{General Chemistry II}

Topics include equilibrium, acid-base equilibria, solubility equilibria, kinetics, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry, and descriptive topics in organic chemistry. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 201, or Consent of Department Chairperson.
4 lecture and 4 lab hours per week. 5 credit hours.

\section*{CHEMISTRY 204}

\section*{Quantitative Analysis}

Gravimetric, volumetric, and calorimetric procedures; basic techniques of quantitative measurement applied to the determination of percentage composition, equilibrium constants, and the reliability of data. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 203.
2 lecture and 6 lab hours per week. 5 credit hours.

\section*{CHEMISTRY 205}

\section*{Organic Chemistry I}

Fundamentals of organic chemistry, orbital and structural theory, aliphatic and aromatic hydrocarbons, alkyl halides, and structural isomerism. Introduction to functional groups, nomenclature, stereochemistry, reaction mechanisms, resonance theory, and spectroscopy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 203, or Consent of Department Chairperson.
4 lecture and 4 lab hours per week. 6 credit hours.

\section*{CHEMISTRY 207}

\section*{Organic Chemistry II}

Continuation of the study of organic chemistry: alcohols, and ketones, carboxylic acids, functional derivatives of carboxylic acids, \(\mathrm{O}, \mathrm{N}\) and S containing compounds, heterocyclic compounds, and spectroscopy. Laboratory emphasis on organic synthesis and spectroscopic analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 205, or Consent of Department Chairperson.
4 lecture and 4 lab hours per week. 6 credit hours.

\section*{CHEMISTRY 212}

\section*{Survey of Organic and Biochemistry}

Survey of organic chemistry, including nomenclature and reactions of major functional groups essential to biochemistry. An introduction to the structure and function of biomolecules, and the metabolism of proteins, lipids, and carbohydrates. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 201, or Consent of Department Chairperson.
3 lecture and 3 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{CHEMISTRY 217}

\section*{Introduction to Instrumental Analysis}

Use of modern optical and electrical methods in chemical analysis; filter photometers; visible, ultraviolet and infrared spectrophotometer; gas chromatographs, radioactive counters, PH meters; potentiometers; refractometers; polarimeters; and polarographs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 201, and Chemistry 205, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{CHEMISTRY 219}

\section*{Chemistry for Education I : Matter \& Structure}

This course is designed to provide educators with a fundamental understanding of matters, its structure and its changes from both a qualitative and quantitative perspective. Physical properties, chemical interactions, bond, and the atomic structure of matter will be explored and mapped to state science education standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Student must be a certified middle-grade teacher, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{CHEMISTRY 220}

\section*{Chemistry for Education II :Energy \& Reactions}

This course is designed to provide educators with a fundamental understanding of energy and chemical reactions from a qualitative and quantitative perspective. Solutions, chemical reactions, as well as elemental thermodynamic and kinetics will be explores and mapped to state science education standards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 100 or Placement test or Consent of Department Chairperson. Eligibility for Math 099 and Certified Teacher.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{CHEMISTRY 295}

\section*{Independent Research In Chemistry I}

Original laboratory research supervised by a faculty member, either oncampus or off-campus. A well defined academic goal must be outlined by the instructor and the student. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
1-2 lecture and 5-20 lab hours per week.
\(3-6\) credit hours.

\section*{CHEMISTRY 296}

\section*{Independent Research in Chemistry II}

Original laboratory research supervised by a faculty member, either on campus or off-campus. A well defined academic goal must be outlined by the instructor and the student. This course will usually require library research, laboratory work and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 295, or Consent of Department Chairperson.
1-2 lecture and 5-20 lab hours per week.
\(3-6\) credit hours.

\section*{CHEMISTRY 297}

\section*{Independent Research in Chemistry III}

Original laboratory research supervised by a faculty member, either oncampus or off campus. A well defined academic goal must be outlined by the instructor and the student. This course will usually require library research, laboratory work and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 296, or Consent of Department Chairperson.
1-2 lecture and 5-20 lab hours per week.
3-6 credit hours.

\section*{CHEMISTRY 298}

\section*{Independent Research in Chemistry IV}

Original laboratory research supervised by a faculty member, either oncampus or off-campus. A well defined academic goal must be outlined by the instructor and the student. This course will usually require library research, laboratory work and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 297, or Consent of Department Chairperson.
1-2 lecture and 5-20 lab hours per week.
3-6 credit hours.

\section*{CHEMISTRY 299}

\section*{Independent Research in Chemistry V}

Original laboratory research supervised by a faculty member either oncampus or off-campus. A well defined academic goal must be outlined by the instructor and the student. This course will usually require library research, laboratory work, and the preparation of final and oral reports. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 298, or Consent of Department Chairperson.
1-2 lecture and 5-20 lab hours per week.
3-6 credit hours.

\section*{[CHLD DV] CHILD DEVELOPMENT (090)}

\section*{CHILD DEVELOPMENT 100}

\section*{Critical Reading in Child Development}

Prepares students to read critically in the field of human development. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 101}

\section*{Human Growth and Development I}

This course provides a foundation in theory and principles of human development, from conception to early adolescence. There is an indepth study of physical, social, emotional, cognitive, and language development, including children's play. Five hours observing young children in an early childhood education setting ranging in age from birth to age eight are required. Writing assignments and oral presentations as appropriate to the discipline are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{Course Descriptions}

\section*{CHILD DEVELOPMENT 102}

\section*{Human Growth and Development II}

Continuation of Child Development 101. Emphasizes adolescence through late adulthood. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 107}

\section*{Health Safety and Nutrition}

This introductory course explores practices that promote good nutrition, dental, physical and mental health, as well as safety of infants, toddlers, preschool, and school-aged children in group settings. The course has a dual emphasis on the health, safety, and nutrition of young children as well as the adult student. Health, lifestyle, preventative health, community resources, and emergency response procedures are examined. This course introduces cultural beliefs that influence health, safety and nutrition. It explores ethical and legal responsibilities of adults in protecting the emotional and physical well-being of young children. 5 observation hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 109}

\section*{Language and Literacy Development in Early Childhood}

This course explores the developmental process of language \& literacy development from birth to age eight. In addition, the course explores the relationship between language/literacy and all other domains of development. Planning for a variety of developmentally appropriate activities that support language and literacy development are explored as well as an examination of the role the environment plays and how to design a language and literacy-rich environment for young children. Bilingualism, and multiculturalism as well as the role of culture in language and literacy development and early childhood education are explored. Eight hours observing young children in an early childhood education setting are required for this course. Writing assignments and oral presentations as appropriate to the discipline are part of the course. Prerequisite: Grade of C or better in Child Development 101 and Child Development 120, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 120}

\section*{Intro to Early Childhood Education Group Care}

This introductory course is designed to familiarize students with the historic roots and philosophical foundations of early childhood care and education. The course includes an exploration of different types of early childhood programs, the role of the early childhood professional, and an examination of the student's personal qualities in relationship to expectations of the field. The course will include an examination of the role of culture in child development and anti-biased practices in early childhood education. Finally, the course defines the profession and explores the profession's Code of Ethical Conduct. Five hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 130}

\section*{Special Topics Child Development}

Study of a single topic in child development that would enhance the student's ability to support children and the families of young children. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated four credit hours will be counted toward graduation.
Prerequisite: Grade of C or better in Child Development 101, or Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{CHILD DEVELOPMENT 141}

\section*{Activity Programming}

Recreational and creative activities as factors which change patterns of behavior in children. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{CHILD DEVELOPMENT 142}

\section*{Methods and Materials for Infant and Toddler Care}

Acquaints current and prospective caregivers with the ways infant and toddlers play and learn at specific developmental levels. Through use of observations, students will plan to meet needs of individual children in a group setting. Emphasis will be on creating a context for responsive and respectful care giving in a group setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 143}

\section*{Science and Math for Young Children}

This course explores the relationship of play to the content areas of science and math in early childhood. Planning for a variety of developmentally appropriate experiences in mathematics and scientific inquiry are explored as well as an examination of the role of the early childhood environment in supporting development. The course emphasizes the study of cognitive theory as well as observation and documentation of science and math learning in diverse early childhood settings. The course includes student reflections of their own attitudes about science and math. Eight hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course. Prerequisite: Grade of C or better in Child Development 101 and Child Development 120, or Consent of Department Chair.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 144}

\section*{School-Age Activity Programming}

Designed to introduce the student to a basic understanding of the benefits of play and recreation for school-age children. Develops the basic skills to plan and implement developmentally appropriate activities for schoolage children and adolescents. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 149 \\ Creative Activities for Young Children}

This introductory course explores the importance of creative activities in the early childhood curriculum and the relationship of creativity to physical, cognitive, language, social, and emotional development. Planning for a variety of developmentally appropriate, creative experiences that allow young children to play with art, music, movement, literature, and drama is explored as well as an examination of the role of the early childhood environment on creative expression. This course emphasizes the importance of the process of creative expression and provides diverse, creative experiences for adult students so they may understand the arts as a means of communicating ideas, feelings, and cultural expression. Eight hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 201}

Observation, Assessment, and Documentation to Support Young Children and Families
This course provides an examination of developmentally appropriate techniques for observing, documenting, and assessing the development of young children in order to inform curriculum planning and promote positive guidance strategies. The course emphasizes a strengths-based approach to assessment that includes building partnerships with families and professional colleagues. Self-reflection is a major component of the course as well as the examination of bias in the observation and assessment of young children from diverse backgrounds. Fifteen hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.
Prerequisite: Grade of C or better in Child Development 101. Child Development 107, Child Development 120, and Child Development 149, or Consent of Department Chair. Completion or concurrent enrollment in Child Development 109, Child Development 143, and/or Child Development 262 is recommended.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 205}

\section*{Development of the Exceptional Child}

Study of children whose development does not follow normal patterns; problems of identification, diagnosis, and potential assessment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 225}

\section*{Supervision of the Exceptional Child}

Techniques in handling and communicating with the deaf, blind, developmentally delayed, and physically challenged child. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 205.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 228}

\section*{Principles of Child Care Practice}

Role of the child care worker in group/residential settings; primary objectives and goals; re-examination of child rearing responsibilities in light of treatment goals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 229}

Practicum in Residential Child Care
Twenty hours per week of professional, and supervised training in a Child Care Treatment Program; includes two- hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 102 and Child Development 201 and Child Development 228 and Social Services 212, or Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{CHILD DEVELOPMENT 230}

\section*{Introduction to Early Intervention}

Introduction to the field of early intervention and the role of the Early Intervention Associate. Includes units covering the background and current status of the field, an overview of the characteristics of normal versus at-risk and special needs of infants and toddlers, and theoretical models and strategies of early intervention, including Individualized Family Service (IFS) planning and team building. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 248}

\section*{Principles and Practice of Infant and Toddler Care}

Acquaints prospective teachers and care-givers of infants and toddlers with theory and practice of care and education of very young children in a group setting. Writing assignments, as appropriate to the discipline, are part the course.
Prerequisite: Grade of C or better in Child Development 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{CHILD DEVELOPMENT 257}

\section*{Principles and Practices of Family Child Care}

An overview of operating a family child care home that meets the physical, socio-emotional, and cognitive development needs of children (infant through school-age) in a home child care setting. Includes the place of family child care in the early childhood profession, home arrangement, and activity planning, including age appropriate activities and goals and ways to meet the needs of multiple age groups. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{CHILD DEVELOPMENT 258}

\section*{Principles and Practices of Preschool Education}

This class provides opportunities to plan developmentally appropriate play-based activities that support all developmental domains including physical, cognitive, language, and socioemotional development with an emphasis on designing appropriate early childhood environments that address the needs of all children. The course emphasizes the process of becoming a professional including the implementation of the NAEYC Code of Ethical Conduct and other professional guidelines as well as fostering an early childhood environment that is conducive to respecting diversity. Students will write/revise their philosophy of early care and education. Thirty hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course. Prerequisite: Grade of C or better in Child Development 101, Child Development 107, Child Development 109, Child Development 120, and Child Development 143, or consent of Department Chair. Completion of Child Development 201 and/or Child Development 262 recommended. 200 minutes per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{CHILD DEVELOPMENT 259}

\section*{Practicum in Pre-School Education}

In this capstone course, students spend a minimum of 250 student teaching hours in an early childhood program under the direct mentorship of an on-site supervisor, field supervision by the course instructor, and weekly 2 -hour seminar discussions with classmates. Students are expected to apply what they have learned in all previous CD courses including: engaging in positive interactions with young children, planning developmentally appropriate activities, and using appropriate assessment techniques. Students will uphold professional and ethical guidelines. Students will design and revise a Child Development Portfolio compiled of artifacts from their previous coursework and other professional experiences. An emphasis is placed on the NAEYC Standards for Professional Preparation. Two hundred and fifty student teaching hours with on-site supervision in an early childhood education setting are required for this course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, Child Development 107, Child Development 109, Child Development 120, Child Development 143, Child Development 149, Child Development 201, Child Development 258, and Child Development 262. To register for this course, all students must have Department Chair approval.
2 lecture and 10-20 lab hours per week. 3-6 credit hours.

\section*{CHILD DEVELOPMENT 260}

\section*{Administration and Supervision of Preschool Centers}

For those with experience as teachers or directors of nursery schools or day care centers who wish to improve their skills in administration and supervision. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 262}

\section*{Child, Family and Community Relations}

This course explores the importance of building positive relationships between young children, their families, the community, and the early childhood setting. It examines issues of diversity, multiculturalism, and anti-bias approaches in working with young children, their families, and the community as well as current policies, and practices that influence families. This course promotes self-reflection, cross cultural communication, and sensitivity to cultural, linguistic, and ability diversity. Five hours observing young children in an early childhood education setting are required for the course. Writing assignments and oral presentations as appropriate to the discipline are part of the course.
Prerequisite: Grade of C or better in Child Development 101 and Child Development 120, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CHILD DEVELOPMENT 268}

\section*{Principles and Practice of School Age Programs}

Designed to introduce the student to the principles of developmentally appropriate practice in a school-age group setting. The student will review the developmental stages of school-age children in the social, emotional, physical and cognitive domains and apply these principles to the design and establishment of the physical environment, program scheduling, health and safety practices, and group management. Techniques for parental involvement will be included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, Child Development 107, Child Development 109, Child Development 120, and Child Development 143, or consent of Department Chair. Completion of Child Development 201 and/or Child Development 262 recommended. 200 minutes per week. 4 credit hours.

\section*{CHILD DEVELOPMENT 269 \\ Practicum in School Age Child Care}

In this capstone course, students spend a minimum of 250 studentteaching hours in a school-age program under the direct mentorship of an on-site supervisor, field supervision by the course instructor, and weekly 2-hour seminar discussions with classmates. Students are expected to apply what they have learned in all previous CD courses including: engaging in positive interactions with young children, planning developmentally appropriate activities, and using appropriate assessment techniques. Students will uphold professional and ethical guidelines. Students will design and revise a Child Development Portfolio compiled of artifacts from their previous coursework and other professional experiences. An emphasis is placed on the NAEYC Standards for Professional Preparation. Two hundred and fifty student teaching hours with on-site supervision in an early childhood education setting are required for this course. Writing assignments and oral presentations, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, Child Development 107, Child Development 109, Child Development 120, Child Development 143, Child Development 149, Child Development 201, Child Development 258, and Child Development 262. To register for this course, all students must have Department Chair approval. 2 lecture and 20 lab hours per week. 6 credit hours.

\section*{CHILD DEVELOPMENT 299}

\section*{Special Topics Child Development}

Special topics in Child Development or Early Childhood Education will be discussed. New developments such as the latest brain research and its implication to working with children will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability. Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
50-200 minutes per week. 1-4 credit hours.

\section*{[CHINESE] CHINESE (141)}

\section*{CHINESE 101}

\section*{Introduction to Chinese}

This course introduces the basic elements of Mandarin Chinese in order to develop communicative language skills, basic conversational skills, as well as grammar and vocabulary knowledge in Chinese. Intensive drills on sounds and tones, vocabulary, and sentence patterns in meaningful contexts will be used in order to communicate appropriately and accurately in authentic contexts. Introduction to the diverse culture, history, and social etiquette of China. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 100 with a grade of C or better, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{CHINESE 102}

\section*{Chinese II}

This course is designed for students who have acquired some oral proficiency, but lack formal training and literacy. It teaches more advanced grammar rules while reviewing the basic ones. Students will learn how to use a bilingual dictionary to assist their reading of essays and short stories. They will learn to write notes, letters, and paragraphs. The course will introduce students to the diverse culture, history, and social etiquette of China. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chinese 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{CHINESE 103}

\section*{Chinese III}

This course is designed for students who have acquired some oral proficiency and basic grammar rules of Mandarin Chinese. It will emphasize four skills: speaking, listening, reading, and writing in culturally authentic situations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chinese 102, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{CHINESE 104}

\section*{Chinese IV}

This course provides intensive work in the use of Mandarin Chinese through listening, speaking, reading, and writing and through continued enhancement of the cultural awareness intrinsic to those four skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Chinese 103, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{CHINESE 198}

\section*{Study Abroad: Intensive}

To prepare students to fully participate in and benefit from the Study Abroad program in China, this course will cover two major aspects of the Chinese studies: culture and language. Students will work collaboratively to discuss different topics about China and learn to speak conversational Chinese in an appropriate manner. Writing assignments as appropriate the discipline, are part of the course.
Prerequisite: Grade of C or better in Chinese 101.
100 minutes per week. 2 credit hours.

\section*{CHINESE 199}

\section*{Study Abroad: Immersion}

This course will bridge the content delivered in Chinese 0198 and provide total immersion in Chinese language and culture. This specially designed course consists of two parts: a pre- and post- set of sessions in Chicago and two week immersion language program in Xi'an, China. The language program in China, to be delivered by Xi'an International Studies University, will consist of 6 -hour daily sessions, Monday through Friday. Writing assignments as appropriate the discipline, are part of the course.
Prerequisite: Grade of C or better in Chinese 198.
200 minutes per week. 4 credit hours.

\section*{[INTCOMM] INTEGRATED COMMUNICATION (0139)}

\section*{INTEGRATED COMMUNICATIONS 099}

\section*{Integrated Communication Studies}

This course integrates reading and writing instruction. The course will prepare students to acquire and develop critical literacy skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Consent of Department Chairperson. 300 minutes per week. 6 credit hours.

\section*{INTEGRATED COMMUNICATIONS 100}

Integrated Communication Studies - This course integrates reading and writing instruction. Linking reading and writing processes, students will acquire critical and analytical abilities and apply them to college-level reading and writing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or C orbetter in Integrated Communications Studies 099, or Consent of Department Chairperson.
300 minutes per week. 6 credit hours.

\section*{[CMMEDIA] COMMUNICATION MEDIA (004) \\ (also see Media Communications 011)}

\section*{COMMUNICATION MEDIA 110}

\section*{History of Photography}

The historical development of photography as an art form from 1839 to the present, including critical analysis of types of photographs and aesthetic movements in photography. Examines photographs for their aesthetic and humanistic values, emphasizing photographs as expressions of ideas and beliefs of photographers within their cultural and social contexts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMMUNICATION MEDIA 161}

\section*{Beginning Photography}

An introduction to black and white photography as an art medium, including the basics of camera and darkroom techniques and relevant aesthetic, historic, and critical issues. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
6 lab/studio hours per week. 3 credit hours.

\section*{COMMUNICATION MEDIA 162}

\section*{Photography of Persuasion}

Advanced photography darkroom skills; past and present use of photography in persuasion as in advertising and political campaigns; different approaches in magazine and newspaper advertising employing photographs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Communication Media 161, or Art 115, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMMUNICATION MEDIA 163}

\section*{Film Rhetoric}

Introductory film making skills, both camera and editing; film viewing designed to cultivate students' understanding of how films affect them; includes terminology, effects of film on people, how these effects are achieved, and concepts of criticism and advertising. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{COMMUNICATION MEDIA 167 \\ \section*{Digital Photography}}

A course for photographers and photography students, exploring applications of digital photography in the field of photography. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{[RELIGN] COMPARATIVE RELIGION (133)}

\section*{COMPARATIVE RELIGION 101}

\section*{Introduction to Religion}

Introduction to the nature, origin, beliefs, practices, and development of religion in society. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 102}

\section*{The Bible Hebrew Old Testament}

The study of the Old Testament with an emphasis on historical, cultural and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 103}

\section*{The Bible New Testament}

The study of the New Testament, with an emphasis on historical, cultural, and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 104}

\section*{Islamic Scriptures: The Qur'an}

The study of the Qur'an with an emphasis on its historical, cultural, and intellectual settings; literary characteristics; and the scholarship related to its various translations and interpretations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 106}

\section*{Comparative Religion I/Eastern Religion}

Comparison and investigation of major Eastern religions. Includes origins, rituals, religious knowledge and destiny. This course concentrates on the religions of the Eastern world. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 107}

\section*{Comparative Religion II/ Western Religion}

Comparison and investigation of major Western religions. Includes origins, rituals, religious knowledge and destiny. This course concentrates on the religions of the Western world. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPARATIVE RELIGION 108}

\section*{Religion and Psychology}

The study of the relationship between religion and psychology. Includes the similarities between religious and psychological phenomena; ways religion and psychology shape and influence one another; and how human needs are met through the blending of religious and psychological experiences. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER AIDED DESIGN (049) (see CAD Technology)}

\section*{[CIS] COMPUTER INFORMATION SYSTEMS (032)}

\section*{COMPUTER INFORMATION SYSTEMS 101}

\section*{Introduction to Computer Information Systems}

Theory and application of computers in information management; career opportunities, problem solving techniques, input/output media, microcomputer applications, and Internet applications. Writing assignments, as appropriate to the discipline, are part of the course. (Laboratory hours to be arranged.)
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 102}

\section*{Introduction to Programming Logic}

Techniques and problem-solving aids necessary for efficient solution of computer programming problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 103 Introduction to BASIC Language}

The most simplified of all computer languages. How to use the BASIC language in solving problems in mathematics, science, business and other fields. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100 and Math 099 or higher, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 111}

\section*{Computer Operations}

Operation and routine maintenance of central processing unit; peripheral devices; initial program load; system utilities; and system scheduling. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 101, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{COMPUTER INFORMATION SYSTEMS 112}

\section*{Advanced Computer Operation}

Operating system concepts; program resources and their allocations, job scheduling, exception handling, set-up. Relationship between operating system, hardware and user program, time sharing, and teleprocessing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 111.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 116}

\section*{Introduction to Operating Systems}

An overview including a theoretical and practical framework for the study of controlling software in the microcomputer environment using prevailing cooperating systems. Concepts of interrupt handling, scheduling and query techniques, and access and storage methods. Writing assignments, as appropriate to the discipline, are part the course. Allowed Repeatable Course: Not more than three credit hours will count towards the CIS/IT degree requirements. Additional earned credits up to six will be counted towards elective credit and requires the Consent of the Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 120}

\section*{Introduction to Microcomputers}

Fundamental concepts of computer information systems as applied to microcomputers in business and personal use; includes handson experience with a variety of microcomputer software. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than three credit hours will count towards the CIS/IT degree requirements. Additional earned credit hours up to six will be counted towards elective credit and requires the Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 122}

\section*{Introduction to Word Processing on Microcomputers}

In-depth concepts of word processing as they apply to microcomputers in business and personal use. Laboratory assignments provide handson experience with microcomputer word processing software. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than three credit hours will count towards the CIS/IT requirements. Additional earned credit hours up to six will be counted towards elective credit and requires the Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 123}

\section*{Introduction to Spreadsheets on Microcomputers}

Fundamental concepts of computer programs as exemplified in the electronic spreadsheet. Emphasis on business applications and personal financial management and tax preparation. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than three credit hours will count towards the CIS/ IT degree requirements. Additional earned credit hours up to six will be counted towards elective credit and requires the Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 130}

Introduction to Assembler Programming
Writing programs demonstrating use of assembler language. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 103, and CIS 135, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 135 \\ Introduction To COBOL Programming}

Writing programs in COBOL for typical business problems. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 142}

\section*{Introduction to C or C++ Language}

Fundamentals of structured problem-solving in C language: emphasis on syntax, data types, operators, control structures, functions program structure, pointers, arrays, input, and output; students will complete programs of moderate size and complexity. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 103, or CIS 130, or CIS 135, and Math 099 or higher, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 144}

\section*{Introduction to Java Programming Language}

A block-structured high-level programming language commonly used in internet applications, including procedural and data abstraction programming styles; the concepts of design, testing, and documentation in programming, programming platforms, and software developments; selection, repetition, and sequence control structures; the basic programming elements of arrays, records, and files. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 142.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 145}

\section*{Introduction to Database on Microcomputers}

In-depth concepts of database as they apply to micro computers in business and personal use to build information management systems. The network, hierarchical, and relational models are discussed. DBMS on microcomputers are used for lab assignments to implement the rational models. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than three hours will count towards the CIS/IT degree requirements. Additional earned hours up to six will be counted towards elective credit and requires the Consent Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 158}

\section*{Beginning Internet}

The basic concepts and usage of the Internet. Emphasis on the access of information from and development of HTML documents for the World Wide Web. Consideration will also be given to other Internet protocols (Gopher, FTP, Email, and Usenet) and to the principles and terminology relevant to networking in general. Writing assignments, as appropriate the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 101, or CIS 120, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{COMPUTER INFORMATION SYSTEMS 171}

\section*{Computer Mathematics}

Survey of numbers systems, conversion of one number system into another; fundamental operations of binary, octal, and hexadecimal arithmetic. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 099, or Math 140.
50-200 minutes per week. 1-4 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 181}

\section*{Web Development I/Basic Web Technologies}

Emphasis on web site architecture, layout structure, template development, documentation and form development, including the development of a basic template for a data driven web site. Style sheets will be used to organize and present page content. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 116, or CIS 120, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 182}

\section*{Web Development II/Client Side Scripting}

Continuation of CIS 181. Focus on client side scripting to verify data entry, manipulation and control of web page elements, and storage of information on the client machines using cookies, including methods for initiating user authentication. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 181, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 191}

\section*{Introduction to E-Commerce}

Survey of methods used to implement commercial transactions on the Internet. Approaches to be studied include low-cost secure order taking to real-time credit care processing and order fulfillment. Students implement an online e-commerce system. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 158, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 203}

\section*{Advanced Basic Programming}

Event-driven programming using the Visual Basic programming language. Includes algorithm development, structured design and file processing, and the use of various controls including control arrays, exception handling, and the use of multiple forms. Introduces database manipulation using Microsoft Access and database controls. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 103, or CIS 142, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 235}

\section*{Advanced COBOL Programming}

Building on prior COBOL experience, structured programming design, implementation, testing, and documentation using COBOL, including arrays, records, string processing and files, and direct access file techniques, control break logic, master file update, sorting, and searching techniques, and interactive programming. Program linkage and parametric processing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 135, and CIS 142, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 242}

\section*{Advanced C or C++ Language}

Building on prior programming experience, design and implementation of large-scale programs; abstract data types; and data structures: sets, pointers, lists, stacks, queues, trees, graphs. Program verification and complexity, recursions, and dynamic concepts: memory, scope, block structures. Text processing and introduction to searching and sorting algorithms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 142, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 244}

\section*{Advanced Java Programming Language}

Use of Internet programming language for design and implementation of large-scale problems; management of abstract data types; data structures (files, sets, pointers, lists, stacks, queues, trees, graphs); program verification and complexity; recursion; dynamic concepts (memory scope, block structures); text processing; introduction to searching and sorting algorithms, including programming for computer graphics and animation and implementation for Internet usage. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 144.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 250}

\section*{Introduction to Systems}

Analysis and design of information systems; includes analysis of organization and procedure, forms and work- flow, equipment selection, and implementation of systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 244.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 251}

\section*{Introduction to Database Management Systems}

Examination of data manipulation needs and comparison of traditional processes for meeting needs with data base approach; use of computer simulations to practice and a apply database management system (DBMS) techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{COMPUTER INFORMATION SYSTEMS 255}

\section*{Introduction to Operating Systems}

An overview of general principles and specific applications of operating system on various computers. A theoretical and practical framework for the study of controlling software, including concepts of interrupt handling, multi-programming, multi-processing, scheduling and query techniques, and access and storage methods Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 257}

\section*{Introduction to Business Telecommunications}

Study of the basic principles that apply to the general design of business telecommunication systems; covers appreciation for the scope of these systems and a logical approach to solving communications problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 258}

\section*{Advanced Internet}

Extends introductory concepts of CIS 158, using a variety of Internet and general networking concepts, including interactive forms and CGI programming for the World Wide Web, multimedia development, Intranets, server installation and management, and database connectivity, and administer a simple website. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 158, or CIS 257, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 260}

\section*{Computer Information Systems Field Project}

Provides students with practical application of data processing skills by participation in a planned and coordinated field project. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 265}

\section*{Computer Information Systems Internship}

Students gain data processing experience by working at an appropriate and supervised work-training station. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 280 \\ Computer Graphics}

Tips, techniques, and advice for creating professional business presentations using text, bullets, tables, pie and bar charts, templates and clip art. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 120, and VIS COM 122, or Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 281}

\section*{Web Development III/ Server Side Programming}

Continuation of the CIS 182. Part III presents dynamic web programming using server side programming techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 182, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 282}

\section*{Web Development IV/Web Database Integration}

Part IV integrates all of the skills, using basic markup, a scripting language and server-side programming and focuses on the integration of databases into a web site. Retrieval, storage, modification, and presentation of data from a database. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 281, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COMPUTER INFORMATION SYSTEMS 299}

\section*{Special Topic Computer Information Systems}

Special topics in CIS will be discussed along with appropriate lab and/ or field trip activities. New developments will be emphasized, especially materials useful in \(\mathrm{K}-12\) education and industry. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
50-200 minutes per week. 1-4 credit hours.

\section*{[COMPSFI] COMPUTER SECURITY \\ AND FORENSIC INVESTIGATION (162)}

\section*{COMPUTER SECURITY AND FORENSIC INVESTIGATION 101}

\section*{General Technology Essentials}

This course is a basic requirement for the Computer Security and Forensic Investigation certificate program/ plan 297. Explores the basic areas of knowledge necessary to understand information security architecture and lay a firm foundation for further study and coursework. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 102}

\section*{Introduction to Information Security}

This course is one of the requirements for Computer Security and Forensic Investigation certificate program/ plan 297. Explores the importance of protecting information for the individual as well as the corporate and government sectors. Provides an overview of the principles and practices of information security. Introduces security systems and monitoring procedures, and some of the critical elements in both. Provides an overview of the current trends in information security, the challenges faced when attempting to build a secure security system, and the possible countermeasures to intrusions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 103 \\ \\ Introduction to Network Security} \\ \\ Introduction to Network Security}

Provides comprehensive study of network and computer security, network security concepts and techniques with emphasis on hands on experience, including basic security principles, establishing security baselines, and the most recent attack and defense techniques and technologies and . In addition, this course discusses establishing security policies and procedures, and managing security efforts. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 109}

\section*{Network Systems Security}

Designed for the novice networking student and covers all types of networks, encouraging new users to feel confident in moving onto a network course of study while obtaining the skills necessary to perform hands-on network installations, network system security, and basic troubleshooting for home, small business, and large enterprise networks. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and CIS 101, or Grade of C or better in CIS 120, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 200 \\ Network Emergency Management}

A comprehensive study of contingency planning for network technology systems to recover network services following an emergency, system disruption, natural disaster or terrorist attack. Principles apply equally well to homeland security emergency management. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101 and CIS 101, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 202 \\ Introduction to Cybercrime}

This course is one of the requirements for Computer
Security and Forensic Investigation Certificate program/plan
297. This course is designed to introduce various types and levels of cybercrime, the far-reaching consequences of such crime, and some recovery measures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 101.
150 minutes per week. 3 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 203}

\section*{Financial Cybercrime}

This course is one of the requirements for Computer Security and Forensic Investigation certificate program/plan
297. Explores the various types of economic cybercrime, the far-reaching consequences of such crime, and some recovery of countermeasures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 102, and COMPSFI 202. 150 minutes per week. 3 credit hours.

\section*{COMPUTER SECURITY AND}

\section*{FORENSIC INVESTIGATION 204}

\section*{Introduction to Computer Forensics and Law}

This course is one of the requirements for Computer Security and Forensic Investigation certificate program/plan 297. Designed to provide an introduction to the world of computer forensics and the attendant legal issues concerning privacy and electronic evidence. Explores computer forensics as the science of collecting, preserving, and analyzing data from computers so they can be admissible at a company discipline hearing or in a court of law. Surveys problems of maintaining a secure technological environment, protecting the identity of individuals, as well as protecting confidential information. In addition, it will introduce techniques used in the collection and analysis of evidence. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 102, and COMPSFI 202. 150 minutes per week. 3 credit hours.

\section*{COMPUTER SECURITY AND FORENSIC INVESTIGATION 205}

\section*{Computer Forensics Technology}

This course is one of the requirements for Computer
Security and Forensic Investigation certificate program/plan
297. A continuation of COMPSFI 204. An in-depth, hands- on analysis and practice of computer forensics investigation techniques, technology, and procedures in a setting that simulates a real network environment. Demonstrates how to manage investigations from start to finish, how to use computer forensic technology to conduct such investigations, and how to present collected information to attorneys and courts. Follows six areas in computer forensic investigation: strategy, documentation techniques, use of technology, industry procedures, courtroom techniques, and enforcement developments and trends. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Grade of C or better in COMPSFI 203, and COMPSFI 204. 6 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 206 \\ Internet Vulnerabilities/Criminal Activities/Investigative Procedures}

This course is one of the requirements for Computer Security and Forensic Investigation certificate program/ plan 297. An overview of appropriate, lawful investigative procedures for the collection, documentation, preparation and presentation of evidence from Internet Cybercrime investigations. The lab course focuses on the areas of search and seizure, the use of some evidence analysis presentation software, and other appropriate software tools. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 158, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 209}

\section*{Network Defense}

Network Defense has been designed to map the primary emphasis on intrusion detection and forensics, but also covers such essential practices as developing a security policy and then implementing that policy by performing Network Address Translation, setting up packet filtering, and installing proxy servers, firewalls, and virtual private networks. Provides the essential skills knowledge and experience necessary to deal with computer and network attacks, detect hackers before damage is inflicted, and reduce the effects of viruses and worms across a network. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and CIS 101, or CIS 120, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 213}

\section*{Information Security Technology}

Provides a hands-on review and analysis in a laboratory environment of the following six major areas of information security technology: firewalls, intrusion detection, virus detection, encryption, authentication/ authorization, and trending/tracking/logging/ analysis. Provides an understanding of each technology on a conceptual level as well as understanding of specific technology brands. Demonstrates how to build and manage a complete information security architecture within a corporate computing environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 102, and COMPSFI 202. 6 lab hours per week. 3 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 214}

\section*{Information Security Systems Analysis}

This course is one of the requirements for Computer Security and Forensic Investigation certificate program/plan 297. Continuation of COMPSFI 103. Identification of classes of security systems and monitoring procedures. Introduces security and monitoring procedures and critical elements of effective security systems. Provides an overview of the challenges faced when attempting to build a secure security systems, and explores possible counter-measures to intrusions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100 and Grade of C or better in CIS 120, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COMPUTER SECURITY AND \\ FORENSIC INVESTIGATION 215 \\ Information Security Domain}

An overview of the critical information security domains. The Common Body of Knowledge (CBK) in information security is extensive and requires a thorough understanding of the security discipline or domains. This course will cover what each domain is, what area it encompasses, and how it is integral to the information security process. Provides an excellent preparation for those who wish to pursue certification as an information security professional. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 213.
150 minutes per week. 3 credit hours.

\section*{COMPUTER SECURITY AND FORENSIC INVESTIGATION 216}

\section*{Information Security Program Management}

This capstone course is one of the requirements for Computer Security and Forensic Investigation certificate program/ plan 297. Explores the critical areas of security policies and procedures that govern how an institution views the importance, often underestimated, of securing the network environment and the relationship between those policies and procedures and the network security layers that need to be protected. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in COMPSFI 201, and COMPSFI 214. 150 minutes per week. 3 credit hours.

\section*{COMPUTER SECURITY AND FORENSIC INVESTIGATION 221 \\ Network Forensics}

Presents methods to properly conduct a network forensics investigation, explores the preventions for network from being used to commit crimes and record crimes. Students gain practical knowledge in conducting digital investigations and preserving evidence that stands up in court or corporate inquiries. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100 and Grade of C or better in CIS 120, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{[432CMGT] CONSTRUCTION MANAGEMENT}

\section*{432CMGT 601}

\section*{Introduction to Construction}

The course is designed to give the student a foundation in the basic concepts of construction. The course focuses on the fundamental skills needed in the industry for the core construction class; industry related terminology, construction processes and procedures, scale reading, applying construction calculation, measuring, tools and usage, and industry job descriptions. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{432CMGT 602}

\section*{Methods of Building Construction}

The course is designed to develop an understanding of the methods of construction of residential and commercial type building and includes a survey of different types of construction and their advantages and limitations. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{432CMGT 603}

\section*{Building Materials and Testing}

Examination of the characteristics of materials such as wood, masonry, concrete, iron, and steel relative to their basic use in the construction industry. The physical properties of each will be studied relative to actual in-service behavior. This course is an introduction to the field and laboratory methods of testing soils, concrete, and steel. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 604}

\section*{Blueprint and Specifications}

Designed to provide proper knowledge of blueprints reading as it relates the architectural or building construction industry. The course covers the theory of orthographic projections, reading floor plans and elevations drawings, symbols and notations, scaling and dimensioning practices, reading blueprints of structural information, electrical and mechanical trade drawings. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 605}

\section*{Construction Cost Estimating}

This course is designed to provide the students with a basic introduction to the methods of construction, estimating and developing the associated costs. Students will gain a working knowledge of materials takeoffs, the estimating process, building and estimating spreadsheets, unit cost, assembles for different trades, overhead and profit. Manual and computer approaches to solving estimating problems will be used. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 432CMGT 604, and CIS 120.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 606}

\section*{Construction Contracting Specs}

Introduction the functions and operations of a construction office, including bidding, construction contracts and specifications, bonds and insurance, labor law and labor relations. Legal aspects and interpretation of contracts and specifications. This course is designed to give the student a general working knowledge of the various types of contracts, specification, and delivery methods. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in 432CMGT 604.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 607}

\section*{Construction Scheduling/Mgmt}

An introduction to the methods of construction scheduling and project management. Students will become familiarized with using different scheduling approaches, how to handle worksite paperwork, and to plant the need for manpower, materials, and equipment coordination with the project budget. The course will use manual and computer approaches to solving scheduling programs. Discussion and critical path methods (CPM) and analysis are included in the course. . Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 432CMGT 604, and CIS 120. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 608}

\section*{Project Management}

This course is designed to provide the student with a basic understanding of the process of a construction project and provide the tools that are necessary to estimate or manage a construction project. . Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 432CMGT 604, and 432CMGT 607 and CIS 120.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{432CMGT 609}

\section*{Construction Safety II}

This course covers thirty (30) hours of training, required by the Occupational Health and Safety Act (OSHA) that apply toward the 30hour Construction Industry course completion card. The course covers topics pertaining to regulations covered by Standard 28 CFR 1926. Upon successful completion of the course, participants will receive an OSHA construction safety and health 30 -hour course completion card from the Department of Labor. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{432CMGT 610}

\section*{Construction Internship}

This course is designed to give the student the practical application of current construction methods. There will be a variety of projects from the residential and commercial sectors. The sites selected will vary due to availability and weather.
Prerequisite: Consent of Department Chairperson. Writing assignments, as appropriate to the discipline, are part of the course.
15 lab hours per week. 3 credit hours.

\section*{[COOP EX] COOPERATIVE WORK EXPERIENCE (008)}

\section*{COOPERATIVE WORK EXPERIENCE 101}

\section*{Cooperative Work Exploration}

Career planning, job entry skills, guidance to assist students in exploring and evaluating their interests, aptitudes and abilities for consideration of career goals; development of skills necessary for job search success, and job entry preparation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 100, or English 127, and Reading 125, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Cooperative Work Experience}

The Cooperative Education courses listed below are designed to provide employment skills as a concurrent and integral part of a student's educational program in a number of career areas. Students are placed in an approved employment situation mutually agreed upon by the student, college staff, and employer, with the opportunity of applying knowledge and being exposed to work methods unavailable in the classroom.
College staff members develop with each student a written educational plan, including performance-based measurable objectives. Guidance and supervision are regularly provided by college staff members who visit students at work and confer with the employer, measure progress, and work out any concerns. Follow-up seminars with the staff may be scheduled for up to two hours per week.
Cooperative Work Experience (CWE) 105 and 205 Business Technologies

Cooperative Work Experience (CWE) 106 and 206 -Commercial-Data Processing CWE

\section*{COURSE DESCRIPTIONS}

Cooperative Work Experience (CWE) 107 and 207 Health

Cooperative Work Experience (CWE) 108 and 208 Engineering and Industrial Technologies

Cooperative Work Experience (CWE) 109 and 209 Natural Science Technologies

Cooperative Work Experience (CWE) 110 and 210 Public and Human Services
Students are assigned a job directly related to their academic program/ plan, which will enhance educational goals without infringing upon course and program/plan obligations. Academic credit during the regular semester is awarded on a ratio of 1 semester hour of credit to each 5 hours of approved employment per week for part time employment up to 20 hours per week, with a maximum of 4 semester hours credit for the work component. Academic credit for full time employment is awarded on a ratio of 1 semester hour of credit for each 10 hours of approved employment with a maximum of 4 semester hours of credit for the work component. If offered in conjunction with the work component, 1 semester credit hour is awarded for each seminar hour per week up to a maximum of 2 semester credit hours.
In total, variable credit may be acquired depending on the number of hours on the job and the extent of follow- up seminars, up to a maximum of 3 hours for the summer term or 6 hours during the fall or spring semester. During the summer term, which is one-half the length of the fall or spring semester, semester hours of credit are awarded for credit earned in approved employment. Seminars, if offered, require two hourly meetings per week for one semester hour of credit to a maximum of 1 semester hour of credit. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson. Enrollment in an approved program/plan. Completion of a minimum of 12 semester hours or equivalent courses (those required for the major field of study) in the student's major prior to or taken concurrently with such program/plan. No more than 12 semester hours of credit in work experience will be accepted for graduation.

\section*{[COSMET] COSMETOLOGY (0349)}

\section*{COSMETOLOGY 101}

\section*{Introduction to Cosmetology/Cosmetic Art}

Topics covered in this course include orientation to the cosmetology field, its history, and the current state of the profession. This course also provides a foundation for understanding the histology of hair, principles of personal hygiene, requirements and procedures for sterilization and sanitation, shampoo and scalp treatment, roller control, manicures and pedicures. Additionally, students will gain specific knowledge of the techniques, principles, purposes, benefits and the contra-indications of applying hand, neck, and facial massage. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 12 lab hours per week. 5 Credit hours

\section*{COSMETOLOGY 102}

\section*{Hair Shaping Technology}

Students learn to identify, safely use and properly care for the various types of tools used for cutting and shaping hair. Students develop skill and proficiency in shaping hair with scissors and razors, as well as in various methods of cutting hair as required by specific hair styling and permanent waving. Considerable emphasis is placed on efficiency and quality. Writing assignments, as appropriate to the discipline, are part of the course.
15 lab hours per week. 5 Credit hours

\section*{COSMETOLOGY 103 \\ Basic Styling Technology \\ Through this course, students receive comprehensive instruction regarding the tools, materials, equipment and methods of basic waving and styling. Skills are developed in the proper application of sculpture curls, roller direction, comb-out techniques, and basic styling. Emphasis is placed on adapting hairstyles to suit the individual and recognizing the texture, elasticity and porosity of various types of hair. Writing assignments, as appropriate to the discipline, are part of the course. \\ 15 lab hours per week. 5 Credit hours}

\section*{COSMETOLOGY 104}

\section*{Hair Tinting Technology}

Studying the principles and techniques of applying hair tints and bleaches, students learn color-blending methods and they gain knowledge about the composition, merits and limitations of chemicals used in the cosmetology field. Students also learn about potential reactions of various hair and scalp textures to specific chemicals. Writing assignments, as appropriate to the discipline, are part of the course.
9 lab hours per week. 3 Credit hours

\section*{COSMETOLOGY 105}

\section*{Salon Technology I}

This course provides opportunities for the practical application of specific customer services for which the student has received previous training. Work is performed under the direct supervision of a licensed and experienced instructor. Emphasis is placed on the development of proficiency. Writing assignments, as appropriate to the discipline, are part of the course.
15 lab hours per week. 5 Credit hours

\section*{COSMETOLOGY 106}

\section*{Salon Technology II}

This course provides continued opportunities for the practical application of specific customer services for which the student has received previous training. Work is performed under the direct supervision of a licensed and experienced instructor. Emphasis is placed on the development of proficiency. Writing assignments, as appropriate to the discipline, are part of the course.
15 lab hours per week. 5 Credit hours

\section*{COSMETOLOGY 201}

\section*{Advanced Styling Technology}

Students received advance training to increase proficiency in all areas of customer servicing as it relates to cosmetology. Students will refine and further develop specific skills and technique previously learned to enhance hair shaping, coloring, tinting, waving and creative styling. Writing assignments, as appropriate to the discipline, are part of the course.
12 lab hours per week. 4 Credit hours

\section*{COSMETOLOGY 202}

\section*{Summative Seminar}

This course provides the opportunity for practical application of all previously acquired cosmetology knowledge and skills. Although trainees perform all work under direct supervision of a licensed and experienced cosmetology instructor, they are much less dependent upon instructors in carrying out assignments. Considerable emphasis is placed on efficiency and quality of work performed while servicing clients. Finalizing of the portfolio and salon floor plan is required for this course. Preparation and review for the Illinois State exam will be provided. Writing assignments as appropriate to the discipline are part of the course.
12 lab hours per week. 4 Credit hours

\section*{Course Descriptions}
[CRM JUS] CRIMINAL JUSTICE (080)

\section*{CRIMINAL JUSTICE 102}

\section*{Administration of Criminal Justice}

Operation of the agencies of criminal justice: police, prosecution, courts, correctional institutions, probation and parole. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.
CRIMINAL JUSTICE 104

\section*{Street Law}

The course contains information and activities designed to provide students with the ability to analyze, evaluate and understand legal issues related to business transactions, landlord and tenant relations, marriage and divorce, and constitutional issues like procedural and substantive due process. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours

\section*{CRIMINAL JUSTICE 114}

\section*{Administration of Juvenile Justice}

Studies in the etiology of juvenile delinquency, analysis of the agencies of control of juvenile behavior, and the roles of courts and correctional institutions in the administration of juvenile justice. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 151}

\section*{Practice of Probation and Parole}

Development, philosophy, organization and administration of probation and parole; survey of principles, investigation, supervision, treatment and utilization of community resources to rehabilitate and reintegrate the offender into society. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 155}

\section*{Introduction to Corrections}

This course covers the history and development of corrections at the local, state, and federal levels with emphasis on the goals, structure, and operations of correctional institutions. Included are alternatives to incarceration and the future of corrections within the American criminal justice system. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Criminal Justice 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 170}

\section*{Scope and Purpose of Private Policing}

Study of private policing as an extension of law enforcement in business, industry, or mercantile establishments; applications within civil law enforcement; role of the security officer; analysis and development of U.S. public and private policing. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 172}

\section*{Management and Supervision for Private Policing}

Study of police supervisory and management principles; concepts of organization, communication, planning and human relationships. Analysis of problems and responsibilities in private security for middlemanagement; role of the security director from behavioral standpoint. Writing assignments, as appropriate the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 173}

\section*{Issues and Problems of Private Policing}

Analysis of current issues and occupational aspects of private policing; implementation of federal, state, and local government recommendations applied to private policing. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 174}

\section*{Law For Private Police}

Survey of criminal law and applications for the private police industry; substantial criminal law, rules of evidence, criminal court procedures, court presentation; analysis of current civil court actions relating to private security. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 202}

\section*{Issues In Criminal Justice}

Critical issues related to crime and urban society; analysis and evaluation of documents in the field of Criminal Justice. Consideration of newly proposed reforms and the method of implementing these reforms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 210}

\section*{Industrial Security for Private Police}

Industrial security related to the operation of private industrial security force; functions of industrial security; corporate objectives protection plans, and the key components of industrial security analyzed as they relate to employee control, industrial espionage, fire prevention, and bomb incident management. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 211}

\section*{Introduction to Investigation}

Intensive study and analysis in investigative procedures; strategy, and tactics of obtaining and analyzing evidence through testimonial evidence, physical evidence, and records; reconstructing the crime; preservation of evidence and case preparation. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 215}

\section*{Terrorism}

Detailed study of terrorism, counter terrorism, terrorist personalities, and terrorist groups, including types, tactics, and trends on a worldwide scale as well as domestically. Examines the issues of prevention, civil liberties, nation building, and homeland security. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{CRIMINAL JUSTICE 221}

\section*{Police Organization and Management}

Police organization as a means by which police goals are achieved. Variations in organizational patterns resulting from differing and changing objectives of police service. Analysis and evaluation of urban law enforcement problems and procedures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 222}

\section*{Professional Responsibility}

Examination of professional ethics and legal responsibilities of the criminal justice practitioner; principles and techniques of stress management for maintenance of performance and health. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 234}

\section*{Criminal Law and Procedure}

Analysis of the nature of substantive criminal law, with emphasis on its historical and philosophical development in the United States. Examination of constitutional rights of the defendant, as these relate to arrest, rules of evidence, and courtroom procedure at pre-trial and trial level. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 250}

\section*{Introduction To Criminology}

This course covers the basics of criminology, criminological theories, principles and concepts, and the history and development of criminology. Included is the study of society's reaction to crime and criminals as well as those organizations and agencies designed to combat crime. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in
Criminal Justice 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CRIMINAL JUSTICE 256}

\section*{Constitutional Law}

Study of the Fourth, Fifth, Sixth, Eighth and Fourteenth Amendments to the United States Constitution, as these govern police and court procedures and the rights of citizens. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[330CUL] CULINARY}

\section*{330CUL 577}

\section*{Reading for Information}

This course is designed to provide skills necessary to analyze reading materials effectively. Writing assignments, as appropriate to the discipline, are part of the course.
50 to 150 minutes per week. 1-3 credit hours.

\section*{330CUL 701}

\section*{Introduction to Food Service I}

Introduction to the food service industry (history, organization and future challenges); career opportunities; standards of professionalism; instruction in principles and procedures of basic equipment and its use; basic food and kitchen safety; beginning fundamentals of cooking. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Math 098; concurrent enrollment in 330CUL 703, and 330CUL 705 and 330CUL 708.

150 minutes per week. 3 credit hours.

\section*{330CUL 703}

\section*{Food Sanitation and Safety I}

Topics will include prevention of food-borne illness, HACCP procedures, facility sanitation, legal guidelines, kitchen safety, and safe food preparation, storing, and reheating guidelines. The National Restaurant Association ServSafe examination will be a part of this course. Students who pass the exam will receive the ServSafe certification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading
125, and Math 098; concurrent enrollment in 330CUL 701, 330CUL 705, and 330CUL 708.
50 to 100 minutes per week. 1- 2 credit hours.

\section*{330CUL 705}

\section*{Chef's Training I-Section A}

Designed to give the student the opportunity to investigate and evaluate culinary arts as a possible career goal. It covers basic mise en place including knife skills, proper station set-up, classical cooking terminology, standard cooking methods, stock preparation, sauce preparation, and heat transfer methods. Develops the basic skills necessary for employment as food service professionals, emphasizing professionalism and team work as a basic element for success. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, and Reading 125, and Mathematics 098; concurrent enrollment in 330CUL 701, and 330CUL 703 and 330CUL 708.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330 CUL 706}

\section*{Chef's Training II-Section A}

Introduces Garde Manager - cold kitchen techniques including production of soups, salads, sandwiches, sausages, terrines, pates, galantines, cheese, hors d'oeuvres, canapés, appetizers, condiments, pickles and breakfast items. Includes sanitation as it applied to cold food preparation, the equipment in the Garde Manager kitchen and garnishes, both individual plate presentation and buffet presentation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 701, and 330CUL 703, and 330CUL 705, and 330CUL 708, or Consent of Department Chairperson; concurrent enrollment in 330CUL 709, and 330CUL 714.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330CUL 707}

\section*{Food Service Technology}

Introduces kitchen calculations, including recipe costing and conversion, determining revenue and food cost, menu planning and pricing, cost control in a foodservice environment, and an overview of the use of computers in a professional kitchen. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, Reading 125, and Mathematics 098; concurrent enrollment in 330CUL 721 and 330CUL 723.
200 minutes per week. 4 credit hours.

\section*{Course Descriptions}

\section*{330CUL 708}

\section*{Chef's Training I-Section B}

Covers basic mise en place including knife skills, proper station setup, classical cooking terminology, standard cooking methods, stock preparation, sauce preparation and heat transfer methods. Develops the basic skills necessary for employment as food service professionals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, Reading 125, and Math 098; concurrent enrollment in 330CUL 701, and 330CUL 703, and 330CUL 705.

1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330CUL 709}

\section*{Chef's Training II-Section B}

Introduces Garde Manager-cold kitchen techniques including production of soups, salads, sandwiches, sausages, terrines, pates, galantines, cheese, hors d'oeuvres, canapés, appetizers, condiments, pickles and breakfast items and the production of these items, as well as sanitation as it applies to cold food preparation, the equipment in the Garde Manager kitchen and garnishes, both individual plate presentation and buffet presentations Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 701, and 330CUL 703, and 330CUL 705, and 330CUL 708, or Consent of Department Chairperson; concurrent enrollment in 330CUL 706, and 330CUL 714.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{330CUL 712}

\section*{Baking Theory and Problems}

Instruction in formulas, new formulas and ingredients in the baking/ pastry field. Evaluation of convenience mixes. Math for bakers. Writing assignments, as appropriate to the discipline, are part of the course. 250 minutes per week. 5 credit hours.

\section*{330CUL 714}

\section*{Nutrition for Chefs}

This course provides the basic principles of nutrition and their relation to food preparation. Nutrition's role in culinary techniques, ingredient selection, flavor development and creation of healthful menu options will be applied in lecture and experimental learning. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 701, and 330CUL 703, and 330CUL 705, and 330CUL 708, or Consent of Department Chairperson; concurrent enrollment in 330CUL 706, and 330CUL 709.
200 minutes per week. 4 credit hours.

\section*{330CUL 721}

\section*{Entrée Preparation}

Study of principles, methods, and techniques involved in the preparation of international cuisines with an emphasis on specialized cooking methods and flavor profiles; practical experience in banquet and buffet production with an emphasis on presentation techniques and design; proper and safe use of tools, materials, and quantity foodservice equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 701, and 330CUL 703, and 330CUL 705, and 330CUL 708, or consent of Department Chairperson; concurrent enrollment in 330CUL 707, and 330CUL 723.
2 lecture and 15 lab hours per week. 7 credit hours.

\section*{330CUL 722}

\section*{Entrée Sanitation and Safety}

Upon completion, the student will be able to perform advanced techniques of safety and sanitation as they relate to the main menu items. Writing assignments, as appropriate to the discipline, are part of the course.
3 lab hours per week. 1 credit hour.

\section*{330CUL 723}

\section*{Food Service Management}

Instruction in foodservice management and executive responsibility in all facets of the foodservice industry. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, Reading 125, and Mathematics 098; concurrent enrollment in 330CUL 707, and 330CUL 721.
4 lecture and 3 lab hours per week. 5 credit hours.

\section*{330CUL 728}

\section*{Advanced Cooking}

Study of principles, methods, and techniques involved in quantity preparation of appetizers, sandwiches, salads, soups, stocks, sauces, meats, seafood, poultry, eggs, milk, cheese, bakery products, desserts, and beverages; practical experience in proper and safe use of tools, materials, and quantity foodservice equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 701, and 330CUL 703, and 330CUL 705, and 330CUL 708, or consent of Department Chairperson. 1 lecture and 18 lab hours per week. 7 credit hours.

\section*{330CUL 754}

\section*{Candy and Confectionery}

In this course, the students will learn about the history of chocolate, chocolate bi-products, tempering and handling of chocolate. They will learn to produce a wide range of chocolate candies. This class is taught using updated methods of traditional recipes with efficient production setup. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{330CUL 758}

\section*{Plated Desserts}

This course focuses on simplified and cost-effective production methods, while stressing the importance of maintaining high quality by using the freshest ingredients. Students will be exposed to refreshingly new presentations and elegant designs that will be carried out when they prepare several placed desserts including hot and cold, frozen desserts, fruit soups, parfaits, and a la minute desserts. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{330CUL 761}

\section*{Chocolate and Sugar}

Students will learn about the history, tempering and the fundamentals of chocolate and sugar. They will learn the latest techniques with use of chocolate colors, spray gun, use of different types of molds, making cut-out decorations, silk screens, pastillage, saturated sugar, pulled and blown sugar, spun and piped, bubble, straw, pured sugar and more. All of these techniques will be applied to the several show pieces each student will create and take home. Writing assignments, as appropriate to the discipline, are part of the course.
250 minutes per week. 5 credit hours

\section*{COURSE DESCRIPTIONS}

\section*{330CUL 762}

\section*{French Cakes and Pastries}

In this course, the students will learn to produce a wide variety of classical and modern French cakes suitable for restaurants, retail shops for large scale productions, using the latest assembling techniques and cost-effective production methods. These cakes will be highlighted with decorations such as silk screens, printed sponge, logos, chocolate and sugar decorations to name a few. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{330CUL 779}

\section*{Safety \& Sanitation}

This course conveys the utmost importance of food professionals providing safe food to their customers. Students learn everything about food safety, sanitation, equipment, and food delivery. This is a comprehensive immersion into all aspects of handling food safely. The National Restaurant Association ServSafe examination will be a part of this course. Students must pass this exam in order to pass the 16-week program. Those who do not pass will have the opportunity to re-take the exam. Student who pass will be eligible for city and state certification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment in 330CUL 780, and 330CUL 781, and 330CUL 782, and 330CUL 783.
50 minutes per week. 1 credit hour.

\section*{330CUL 780}

\section*{Baking, Pastry \& Technology}

This course takes students through the technology and science of the ingredients of pastry. Students learn the differences between various dairy products and eggs, the different types of flours and sugars, and how the interactions of ingredients affect the outcome. Students learn basic skills and modeling, petits fours and party favors, as well as the historical development of celebration cakes. Students immerse themselves in the history of French pastry and cake making, the development of palate, the hierarchy of a kitchen, and an exploration of the wide variety of settings where graduates can use their craft. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 779; concurrent enrollment in 330CUL 781, and 330CUL 782, and 330CUL 783.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{330CUL 781}

\section*{Cake Baking \& Construction}

This course covers all aspects of wedding, celebration, and specialty cake baking, constructing, and assembly. Recipe creations with taste and texture profile methods are covered in depth. Students learn a variety of doughs and fillings; the art of cake architecture; European classic recipes, cutting- edge creations, current trends, and sculpted cake methods; all this giving students a solid foundation necessary to create their own. Efficient production methods are taught and students will use these techniques to produce their own designs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 779, and 330CUL 780; concurrent enrollment in 330CUL 782, and 330CUL 783.
2 lecture and 9 lab hours per week. 5 credit hours.

\section*{330CUL 782}

\section*{Cake Decorating Techniques}

In this course students learn a wide variety of cake decorating techniques including elaborate gumpaste work, detailed piping techniques, French buttercream frosting, making rolled fondant from scratch and rolled fondant cake covering, chocolate decorations specifically tailored cakes, pastillage and pressed sugar accents, pulled and blown sugar flowers and ribbons, mold making methods, airbrushing skills, figurine modeling and 3-D sculpted cakes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 779, and 330CUL 780; concurrent enrollment in 330CUL 781, and 330CUL 783.
2 lecture and 9 lab hours per week. 5 credit hours.

\section*{330CUL 783}

\section*{Cake Business Planning}

This course provides in-depth focusing on critical information needed to operate a successful wedding cake business such as pricing, customer consultation, cake portions, design, packaging, and delivery logics. Career counseling and personal attention to each student's career goals are provided. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330CUL 779, and 330CUL 780; concurrent enrollment in 330CUL 781, and 330CUL 782.
50 minutes per week. 1 credit hour.

\section*{[DENTHYG] DENTAL HYGIENE (100)}

\section*{DENTAL HYGIENE 110}

\section*{Oral Microbiology and Immunology}

Introduction to the general principles of microbiology, including the morphology, physiology, and classification of bacteria and related organisms. Basic concepts of immunology, especially in relationship to oral diseases are covered. Specific attention is given to oral microbial infections. Emphasizes concepts of applied microbiology as it pertains to dental hygiene practice. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and grade of C or better in Biology 226, and Biology 227, and Chemistry 121. 100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 112}

\section*{Concepts of Preventive Therapy I}

Orientation to the profession of dental hygiene and the role of the dental hygienist in the educational and therapeutic oral health services provided in the development of an individualized plaque control program. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan
222.

100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 121}

\section*{Principles of Dental Hygiene I}

Fundamental theories and skills necessary to perform oral prophylaxis treatment. Principles of disease transmission, infection control, instrumentation, and the examining and charting of oral conditions. Concepts and procedures are presented through lectures and applied in the clinical laboratory sessions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 110, and Dental Hygiene 112, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{Course Descriptions}

\section*{DENTAL HYGIENE 122}

\section*{Principles of Dental Hygiene II}

Systematic presentation of additional theories and skills necessary to perform an oral prophylaxes and supplementary techniques. Emphasis on additional principles of instrumentation, instrument sharpening techniques, polishing technique, use of fluorides, taking alginate impressions, comprehensive periodontal evaluation, dental and periodontal charting, blood pressure measurement, medical emergencies in the dental office, classification of dental care and use of phase microscope, and dental hygiene planning. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission the Dental Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 121 and Dental Hygiene 123. 100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 123}

\section*{Principles of Dental Hygiene I Laboratory}

Companion course designed for the application of concepts presented in Dental Hygiene 121. Practice provided in the pre-clinical laboratory setting. Instrumentation skills are performed on typodonts and on student partners to a specified standard of competency. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/ plan 222, and Grade of C or better in Dental Hygiene 110 and Dental Hygiene 112. 6 lab hours per week. 2 credit hours.

\section*{DENTAL HYGIENE 124}

\section*{Principles of Dental Hygiene II Laboratory}

Companion course designed for the application of concepts presented in Dental Hygiene 122 within the laboratory/ clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Dental Hygiene 121, and Grade of C or better in Dental Hygiene 123. 9 lab hours per week. 3 credit hours.

\section*{DENTAL HYGIENE 125}

\section*{Nutrition and Biochemistry}

An introduction to the fundamental principles of general biochemistry, metabolism, oral biochemistry, and nutrition., including the molecular components of cells, their chemical processes, the biological basis of dental disease, and the clinical application of nutritional theory on the counseling of dental patients. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Chemistry 121, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 126}

\section*{Dental Radiology}

The application of the fundamental principles of radiology in the study of teeth and surrounding structures. Provides pre-clinical laboratory beginning clinical experience in exposing, processing, mounting, and basic interpretation of dental radiographs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 131 and Dental Hygiene 133. 2 lecture and 3 lab hours per week. 3 credit hours.

\section*{DENTAL HYGIENE 128 \\ General and Oral Pathology \\ A survey of general and oral pathology with emphasis on diseases and their manifestations in the oral cavity. Recognition and detection of such deviations from normal are also studied. Writing assignments, as appropriate to the discipline, are part of the course. \\ Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 131 and Dental Hygiene 133. \\ 100 minutes per week. 2 credit hours.}

\section*{DENTAL HYGIENE 130}

\section*{Dental Materials}

Introduction to the basic concepts of material science and physical properties while gaining practical experience in the manipulation of restorative materials used in dental hygiene practice. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DENTAL HYGIENE 131}

\section*{Oral Structures and Function}

Introduction to the microscopic, embryologic, and morphologic characteristics of the cells, tissues, and structures associated with the oral cavity. Emphasis on the development, structure and function of periodontal tissues, external and internal morphology of the teeth, and basic concepts of occlusion. Writing assignments, as appropriate to the discipline, are part the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Biology 226, and Biology 227, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{DENTAL HYGIENE 133}

\section*{Head and Neck Anatomy}

Introduces the gross anatomical structure and function of the human head and neck including the face, oral cavity, and deep structure of the face, including clinical implications and correlations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Biology 226, and Biology 227, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 135}

\section*{Concepts of Preventive Therapy II}

Continuation of Preventive Therapy I with special emphasis on the psychology of motivation, special patient care, and specific population groups. Procedures will be introduced for developing and presenting dental health educational materials primarily to children in the school setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 112, and Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{COURSE DESCRIPTIONS}

\section*{DENTAL HYGIENE 200}

\section*{Summer Clinic}

A continuation of dental hygiene theory and clinical concepts applicable to dental hygiene practice. Emphasis will be placed upon specific topics pertinent to acquiring clinical expertise. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Dental Hygiene 122 and Dental Hygiene 124.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{DENTAL HYGIENE 202}

\section*{Critique of Dental Literature}

Introduction to the fundamental concepts and skills needed to understand, interpret, and critique professional literature. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{DENTAL HYGIENE 233}

\section*{Expanded Functions}

Principles and techniques utilized in comprehensive dental care. Includes the mixing and placement of amalgam, composite, other restorative materials. Special attention is paid to pain management with use of local anesthesia and conscious sedation agents commonly utilized in the dental treatment setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Dental Hygiene 131 and Dental Hygiene 133. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{DENTAL HYGIENE 235}

\section*{Community Dental Health I}

An introduction to the current principles and issues in community health and their relationship to the delivery of dental care to the public sector. The role of the dental hygienist in the community disease prevention and health promotion activities will be emphasized. Writing assignments, as appropriate the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 241}

\section*{Dental Pharmacology}

Principles of pharmacology and understanding of the characteristics of major drug groups and their utilization in medicine and dentistry. Emphasis on drugs used for medical treatment which require treatment modification by the dentist or dental hygienist and those drugs used in dental practice. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Grade of C or better in Biology 227, and Dental Hygiene 121, and Dental Hygiene 123, and Dental Hygiene 128.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 243}

\section*{Periodontics}

Includes the etiology, classification, symptomatology, diagnosis, treatment, and prognosis of periodontal disease. Emphasis on the phases of periodontics pertinent to a dental hygienist. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Dental Hygiene 121.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 250}

\section*{Oral Diagnosis}

Introduction to the art of differential diagnosis as it relates to lesions occurring in and about the oral cavity, including pathology, history, radiographic and clinical appearance, prognosis and treatment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{DENTAL HYGIENE 251}

\section*{Clinical Dental Hygiene I}

Enrichment of skills in performing health services in the clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Dental Hygiene 200. 1 lecture and 12 lab hours per week. 5 credit hours.

\section*{DENTAL HYGIENE 252}

\section*{Clinical Dental Hygiene II}

Enrichment of skills in performing oral health services in the clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Dental Hygiene 251.
1 lecture and 12 lab hours per week. 5 credit hours.

\section*{DENTAL HYGIENE 254}

\section*{Dental Specialties}

Introduction to various dental specialties and current trends in dental treatment. Guest lecturers, who are specialists in the field, will provide pertinent information and in some cases, supervise practical experiences during clinical rotation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{DENTAL HYGIENE 256}

\section*{Community Dental Health II}

A continuation of Dental Hygiene 235. Developing, implementing and evaluating a community dental health program; utilization of health care services, epidemiology of dental disease, health care financing, and health care delivery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Dental Hygiene 235.
2 lab hours per week. 1 credit hour.

\section*{DENTAL HYGIENE 258}

\section*{Ethics and Jurisprudence}

The personal and professional aspects of dental hygiene practice, including: interpersonal and inter-professional communication, licensure and credentialing, elements of practice management, employment opportunities and strategies, ethics, legal responsibilities, and the professional organization. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{Course Descriptions}

\section*{DENTAL HYGIENE 260}

\section*{Senior Seminar}

A review of all material found on the national, regional, and State Dental Hygiene Board Examinations and preparation for the Dental Hygiene Board examinations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Dental Hygiene program/plan 222, and Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{[DIET TC] DIETETIC TECHNICIAN (012)}

\section*{DIETETIC TECHNICIAN 104}

\section*{Fundamentals of Nutrition}

Nutrition and its role in health care and maintenance. Study of the major nutrients in foods and how the body uses them. Nutrient composition of foods, the food exchange list system, balanced diets, the basic four food groups, ideal body weights, energy and protein requirements. Recommended daily allowances nutrients, principles of meal planning for normal nutrition, dietary guidelines, nutrient calculations and analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[DMD] DIGITAL MULTIMEDIA (138)}

\section*{DIGITAL MULTIMEDIA 105}

\section*{Animation}

This is a studio course in which the primary orientation is the development of the student's portfolio. Principles, practices and philosophy of animation, with the primary emphasis on the creation of a short animation, including the creation of sketches, overlays, storyboards and a short animation. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 115}

\section*{Digital Soundtrack}

This is a studio course whose primary orientation is the development of the student's portfolio. Investigational development of soundtracks for video, film and multimedia, using digitized sounds, traditional foley effects, general midi music, and dubbed effects, with the primary emphasis on the creation of a video and multimedia soundtrack, and professional sound and editing techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 121}

\section*{3D Graphics I}

This is a studio course whose primary orientation is the development of the student's portfolio. Introduction to 3D graphics, principles of perspective, and basic principles of 3D modeling. The theory of 3D on the computer will be explored. Writing assignments, as appropriate to the discipline, are the part of the course.
Prerequisite: Grade of C or better in English 101, and Digital Multimedia 168, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 131 \\ Multimedia I}

This is a studio course whose primary orientation is the development of the student's portfolio. Introduction to multimedia, principles of interactivity and basic principles of 2-dimensional interactive. Simple scripting , flow charts and storyboards. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and Digital Multimedia 168.

6 lab/studio hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 168 \\ Computer Art I}

Introduction to the concepts of computer art using representative programs and concepts from the profession, including both raster paint/ photo retouching programs and professional quality vector programs, and the history of computer art. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, and Grade of C or better in CIS 120, or Consent of Department Chairperson
6 lab/studio hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 179}

\section*{Video I}

This is a studio course in which the primary orientation is the development of the student's portfolio. Investigates video production, with primary emphasis on the creation of a video and in-camera editing, storyboards, scripts, shooting lists, and a short film. Writing assignments, appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, and Grade of C or better in CIS 120, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 221}

\section*{3D Graphics II}

This is a studio course whose primary orientation is the development of the student's portfolio. 3D graphics and 3D modeling with an emphasis on movement, using systems and inverse kinematics and the use of constraints and bones. Advanced modeling will be used such as skins and mesh deformation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Digital Multimedia 121, and Digital Multimedia 168, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 231}

\section*{Multimedia II}

This is a studio course whose primary orientation is the development of the student's portfolio. Extensive use of scripting, programming with an emphasis on using professional techniques and standards. Sound, video, animation and interactivity will be combined in an interactive work. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Digital Multimedia 131, or Digital Multimedia 279, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{DIGITAL MULTIMEDIA 233}

\section*{Multimedia III}

This is a studio course whose primary orientation is the development of the student's portfolio. Extensive use of professional production management techniques. Development of a group multimedia project using professional techniques and standards. Sound, video, animation and interactivity will be combined to create an interactive work. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Digital Multimedia 231, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 268}

\section*{Advanced Computer Art}

This studio course develops understanding of and skills in computer art at an advanced level, builds upon the basic skills developed in DMD 168 and explores more advanced features in both bitmap and vector painting and drawing programs. Utilization of filters, layers, channels, gradient mesh, advanced type techniques, color correction, and surface and texture creation, the preparation of images for the web, and use of vector and bitmap programs in tandem. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Digital Multimedia 168, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 279}

\section*{Video II}

This is a studio course whose primary orientation is the development of the student's portfolio. Advanced video production, with the primary emphasis on the creation of a video, storyboards, scripts, and shooting lists for a short video, and professional lighting, sound and editing techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Digital Multimedia 115, or Digital Multimedia 179, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{DIGITAL MULTIMEDIA 299}

\section*{Portfolio Development}

This is a seminar course to prepare students to successfully present their ideas and art in the marketplace. Portfolio development and presentation, along with the mechanics of writing a proposal, preparing a budget and presenting the proposal will be examined in depth. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
2 lecture and 2 lab hours per week. 3 credit hours.
[ECON] ECONOMICS (082)

\section*{ECONOMICS 101}

\section*{Elements of Economics}

Allocations of scarce resources among alternative uses in both the market place and within the individual consuming units; basic money and banking mechanisms, income determination in the larger economy, and business fluctuations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ECONOMICS 133}

\section*{Consumer Economics}

Principles of intelligent buying, investments, shelter, insurance and basic commodities ;development of consumer cooperative movement, advertising, fraud, monopoly, and competition, and role of government in promoting consumer welfare. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ECONOMICS 201}

\section*{Principles of Economics I}

Macro or income analysis, including money, income determination, public finance, and economic development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ECONOMICS 202}

\section*{Principles of Economics II}

Covers micro or price analysis, including the markets, production function, income distribution, and international trade. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ECONOMICS 203}

\section*{Current Economic Problems}

Representative contemporary economic problems and possible solutions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Economics 201, or Social Science 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ECONOMICS 204}

\section*{Money and Banking}

Economic history and operation of U.S. monetary and banking systems, business cycles, international exchange, Federal Reserve System, and use of national fiscal policies as instruments of economic control. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Economics 201, and Economics 202, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[EDUC] EDUCATION (083)}

\section*{EDUCATION 101}

\section*{Introduction To Education}

Introduction to teaching as a profession in the American education systems, including historical, philosophical, social, legal, and ethical issues in a diverse society, organizational structure, and school governance. Field experience is required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{EDUCATION 102}

\section*{Using Technology in the Class}

Prepares pre-service and in-service teachers to integrate technology, including computer and multimedia software, into pre-K through 12th grade classes. Survey concepts of technology use, provides handson experience with hardware and software, and addresses human, social, and ethical issues related to the use of technology in education. Meets national and state technology standards. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 103}

\section*{Students with Disabilities in School}

A survey course that presents the historical, philosophical, and legal foundations of special education, as well as an overview of the characteristics of individuals with disabilities, the Individual with Disabilities Act (IDEA) and the services that are provided under this act, and the diversity of exceptional populations with implications for service delivery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in EDUC 101, Psychology 207.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 203}

\section*{Educational Psychology}

Assessment of aptitudes, capacities, interests, and achievements, and the educational implications of physical, emotional and social development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 205}

\section*{Introduction To Teacher Assistant}

This course is one of the requirements of the Teacher Assistant certificate programs/plans 273 and/or 274. Provides an introduction to the rules and duties, the responsibilities and expectations of the teacher's assistant in Chicago Public Schools (CPS), including an orientation to the profession of teaching; the role of the teacher and the teacher's assistant; current trends and problems in education, particularly in the CPS. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 208}

\section*{School Leadership and Support Professionals}

This course is one of the requirements of the Teaching, Leadership and Support Professionals AAS degree program/plan 055 and the Advanced Certificate program/plan 057. Examines the administrative process at educational institutions, emphasizing the role of the principal and staff relations. Functions in an elementary/ secondary schools and community colleges, including school finance, planning, personnel, organizational structure, governance, and problem solving in elementary/ secondary and community colleges will be explored. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{EDUCATION 209}

\section*{Observation/Seminar Elementary Education}

Provides authentic experiences and knowledge which impact teaching in the elementary school classroom. Students will evaluate and design unit and lesson plans based on Illinois Learning Standards (ILS); review curriculum and instructional materials; shadow an entry-level elementary school leader and education support personnel; maintain an observation log; maintain a reflective journal with daily entries; and complete written reports on topics relevant to teaching and leadership support in elementary schools. This experience will be evaluated under the guidance of the classroom teacher and monitored by the college instructor. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Education 208.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{EDUCATION 210}

\section*{Observation/Seminar Secondary Education}

Provides authentic experiences and knowledge which impact teaching in the elementary school classroom. Students will evaluate and design unit and lesson plans based on Illinois Learning Standards (ILS); review curriculum and instructional materials; shadow an entry-level secondary school leader and educate support personnel; maintain an observation log; maintain a reflective journal with daily entries; and complete written reports on topics relevant to teaching and leadership support in secondary schools. This experience will be evaluated under the guidance of the classroom teacher and monitored by the college instructor. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Education 208.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{EDUCATION 211}

\section*{Observation/Seminar Community Colleges}

Students will participate in a required supervised practicum at the college level and will shadow a support professional and an entry-level manager; develop an observation log; maintain a reflective journal with daily entries; develop a handbook on college positions; complete written reports; and develop a special project for leadership services. The course will include guest speakers, and oral presentations. Field experience will occur at college-approved sites. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Education 208.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{EDUCATION 256}

\section*{The American Public School}

Function of the school as a social institution; organization, administration, and finance of public education and the major educational issues and trends. Designed for general education students and for prospective teachers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 260}

\section*{Principles of Practice in Elementary Education}

Organizational procedures, curriculum, principles classroom management, and the role of the teacher in stimulating learning. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{EDUCATION 269}

\section*{Practicum in Elementary Education -16 Wks}

Students spend 20 hours per week, under supervision, as a teacher aide in a primary grade classroom, 8 or 16 weeks; course includes 2 -hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Child Development 102, and Child Development 107, and Education 256, and Consent of Department Chairperson.
1-2 lecture and 10-20 lab hours per week. 3-6 credit hours.

\section*{EDUCATION 277}

\section*{Philosophy}

Comparative study of philosophical views on the relationship of education to political institutions, social processes, material conditions and individual ideas. Designed primarily for future teachers; open to all students. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{EDUCATION 299}

\section*{Special Topics in Education}

Special topics in education and new developments in research and practice including the use of technology in the classroom. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
50-200 minutes per week. 1-4 credit hours

\section*{[ELECTRN] ELECTRONICS (033)}

\section*{ELECTRONICS 116}

\section*{Basic Electronics AC/DC}

Fundamentals in advanced electronics; basic laws of alternating and direct current circuit theory and operation of electronics devices and circuitry, including operation of modern electronic test equipment in practical laboratory application. This course covers essentially the same material as covered in Electronics 101 and Electronics 102 but in an accelerated, one semester approach. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Math 107, or Math 108.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{ELECTRONICS 206}

\section*{Digital Circuits and Systems}

The analysis and design of digital circuits and digital systems, including digital logic, 7 -segment displays, clocks, mono-stable multi-vibrators, flip flops, registers, analog to digital and digital to analog converters, counters, timers, sequential and state-variable logic, RAM and ROM. This course covers the same material as Electronics 118 and 119 but in an accelerated one-semester approach suitable for a
200 -level course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Electronics 116, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{[EMT] EMERGENCY MEDICAL TECHNICIAN (120)}

\section*{EMERGENCY MEDICAL TECHNICIAN 100 \\ Emergency Medical Technician First Responder}

Training Development of basic skills in patient assessment and emergency medical care procedures required for minimizing patient suffering and the prevention of further injury. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 101}

\section*{Emergency Medical Technician-Basic}

Provides training to recognize the nature or extent of a patient's condition, administer appropriate emergency medical care to stabilize the patient's condition and transport safely to the proper medical facility. Follows United States Department of Transportation (DOT) guidelines for EMT-B Training. CPR training/certification and ten (10) hours working in hospital clinical setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
400 minutes per week. 8 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 221}

\section*{Essentials of Paramedic Medicine I}

Introduction to the roles of the paramedic. Focuses on the introduction, assessment, management and stabilization of various patient conditions. Follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successfully complete the Paramedic Program Application and Entrance Process; concurrent enrollment in EMT 222; and Consent of Department Chairperson.
450 minutes per week. 9 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 222}

\section*{Paramedic Medicine Practicum I}

Focus on the integration and application of the principles learned in EMT 221. Includes: Direct patient care; Patient simulation, Clinical rotations, and ambulance ride time. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment in EMT 221; and Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 5 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 223}

\section*{Essentials of Paramedic Medicine II}

A continuation of EMT 221. The content focuses on the assessment, management and stabilization of various patient conditions. Follows the United States Department of Transportation Guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in EMT 221, and EMT 222; concurrent enrollment in EMT 224; and Consent of Department Chairperson.
450 minutes per week. 9 credit hours.

\section*{Course Descriptions}

\section*{EMERGENCY MEDICAL TECHNICIAN 224}

\section*{Paramedic Medicine Practicum II}

Integrates the principles learned in EMT 221, 222 (and concurrent course 223) and applies this knowledge into practical application. Includes: Direct patient care; Patient simulation, Clinical rotations and Ambulance ride time. This course follows the United States Department of Transportation guidelines for Paramedic Training. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in EMT 221, and EMT 222; concurrent enrollment in EMT 223; and Consent of Department Chairperson. 2 lecture and 6 lab hours per week. 5 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 227}

\section*{Paramedic Medicine Field Internship}

Provides the opportunity to integrate, synthesize and apply the knowledge gained in EMT 221, 222, 223 and 224 toward in-field situations. The student will be under the direct supervision of Paramedic Preceptors and will work with assigned Resource Hospitals as well as the Course Coordinator. This course will involve ambulance ride time. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in EMT 221, and EMT 222, and EMT 223 and EMT 224, and Consent of Department Chairperson.
3 lecture and 6 lab hours per week. 6 credit hours.

\section*{EMERGENCY MEDICAL TECHNICIAN 250 \\ \section*{EMS Instructor}}

Provides the necessary to successfully present any of the Department of Transportation National Highway Traffic Safety Administration EMS course. Provides a solid foundation in learning theory, yet moves directly into hands-on application. With the emphasis on practical skill development, instructor trainees will complete with the confidence that they can successfully teach any course in the National Standard Curricula for which they are technically qualified. Successful completion of this course enables the participant to acquire state recognition as an EMS Lend Instructor. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[ENGR] ENGINEERING (034)}

\section*{ENGINEERING 100}

\section*{Elements of Engineering}

Drawing survey course for students in technical and engineering science major programs. Study of more advanced software "AutoCAD Mechanical Program"; also draw geometric figures, multi-view drawings, pictorial drawing, charts and graphs with emphasis on graphic elements of machine parts drawings. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ENGINEERING 110}

\section*{Introductory Drafting}

For students in non-technical and non-engineering science major programs. Learn to use "AutoCAD general program" to draw geometric figures, multi-view drafting, pictorial drawing, charts and graphs. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{ENGINEERING 111}

\section*{Introduction to the Engineering Profession}

History of engineering profession, the engineer's role in a technological society, his/her work, and the relationship of engineering to other professions; includes study of general and related areas, ethics and responsibility of engineers and guidance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 131, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{ENGINEERING 115}

\section*{Engineering Communications - Blueprint Reading}

Principles and practices involved in interpretations of engineering graphics communications; emphasis on machine and structural graphic communications. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENGINEERING 131}

\section*{Engineering Graphics and Introduction to Design}

Graphics, both manual and computer-aided drafting and design. Introduction to design techniques in graphics and multi-view drawing, auxiliary views, selecting, tolerance dimensioning, and technical sketching. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Engineering 110, and Engineering 111, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ENGINEERING 132}

\section*{Descriptive Geometry}

Theory of projections. Solution by graphical methods of problems concerning the relation of points, lines, planes, and surfaces. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 131, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ENGINEERING 165}

\section*{Current Engineering Topics}

Study of current topics including pollution control, transportation systems, water recycling, computer applications, automation, and engineering analysis of these problems. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{ENGINEERING 190}

\section*{Computer Applications In Engineering}

FORTRAN or C with emphasis in engineering and scientific programming languages such as FORTRAN and APT with emphasis on engineering problems encountered in design and manufacturing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Mathematics Placement Test, and credit in Math 207, and Engineering 131.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ENGINEERING 202}

\section*{Advanced Drafting and Basic Machine Design}

Application of fundamentals of stress analysis to design of complete machine units involving machine elements such as shafts, springs, gears and screws, mechanical properties of materials and their significance in design; classification of fits, specification of materials in use, and the manufacturing processes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 131, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{ENGINEERING 206}

\section*{Elements of Mechanics}

Statics Rigid bodies,fluid statics,friction,moments of inertia,centroids, and virtual work. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Physics 235, and Math 208, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGINEERING 208}

\section*{Strength of Materials For Architecture}

Concepts of stress and strain relationships; analysis of elementary stress distributions and deformations; study of axial loading, shear and bending moment diagram, and bending theory application. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 206, and Math 141. 2-3 lecture and 2-3 lab hours per week. 3-4 credit hours.

\section*{ENGINEERING 215}

\section*{Electrical Circuit Analysis}

Basic electric circuits, Nodal and Mesh analysis. Voltage and current laws, circuit analysis techniques and superposition. Operational Amplifiers. RL, RC, and RLC circuits. Frequency response, Resonance, AC power analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisites: Grade of C or better in Physics 236, and Math 209, and concurrent enrollment in Math 210.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{ENGINEERING 250}

\section*{Engineering Projects}

Projects of experimental and analytical nature to stimulate creativity; recommended scheduling and integrating subject material with selected engineering courses. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Engineering 202, or Consent of Department Chairperson.
50-100 minutes per week. 1-2 credit hours.

\section*{[332ENGR] ENGINEERING \& INDUSTRIAL}

\section*{332ENGR 300}

\section*{Introduction to Computer Aided Design}

This course introduces students to the use of the microcomputer for computer aided design and drafting, using measuring instruments, special perception workpiece scales. Writing assignments, as appropriate to the discipline, are part of the course.
2 lectures and 3 lab hours per week. 3 credit hours.

\section*{332ENGR 301}

\section*{Computer Numeric Control Operations}

Students are provided the opportunity to learn the operations and set up of CNC controlled vertical mills and CNC controlled lathes. Writing assignments, as appropriate to the discipline, are part of the course. 2 lectures and 3 lab hours per week. 3 credit hours.

\section*{332ENGR 302}

\section*{Computer Numeric Control Programming I}

This course provides knowledge and skills needed for entry level employment in CNC programming, as well as advanced programming dealing with the lathe and mill. Programming of complex parts with the aid of a computer is also part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
2 lectures and 3 lab hours per week. 3 credit hours.

\section*{332ENGR 303}

\section*{Computer Numeric Control Programming II}

This course provides advanced part programming dealing with the lathe and mill. Programming of complex parts with the aid of a computer. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 332ENGR 302.
2 lectures and 3 lab hours per week. 3 credit hours.

\section*{332ENGR 304}

\section*{CAD/CAM Numerical Control}

This course is designed to acquaint students with NC part programming as it applied to a CAD/CAM system. Writing assignments, as appropriate to the discipline, are part of the course.
2 lectures and 3 lab hours per week. 3 credit hours.

\section*{332ENGR 305}

\section*{Introduction to Computer Applications in Manufacturing}

Fundamentals concepts of computer information systems as applied to microcomputers in the manufacturing field. Students will be introduced to specialized software formats in word processing, spreadsheets, databases, and graphics. Includes hands-on experience using a variety of software employed in the manufacturing field. These include: computer-aided design, computer numerical control, quality assurance, and computer readouts. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332ENGR 539}

\section*{Metallurgy}

This course provides the student with the basic knowledge in the compositions, structure, and selection of steel and other metals used in modern machining processes. Emphasis is placed on the common properties of metals such as: density, ductility, tensile strength and hardness, as well as to show how some of the metals respond to heat treatment processes. Writing assignments, as appropriate to the discipline, are part of the course.
2 lectures and 3 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{332ENGR 761}

\section*{Machine Shop Math}

This course provides the student with the necessary mathematical foundation for problem solving, review of the basic principles of arithmetic, decimal, fractions and metrics. It also provides training in the use of algebra, geometry and trigonometry as applied to the solution of practical machine shop problems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{332ENGR 764}

\section*{Machine Shop Technician}

Students will study the nomenclature of hand tools, engine lathe, grinders, drill press, bandsaws and the use and care of precision measuring instruments. This course provides students with manual, semi-automatic, automatic, numerical and computerized numerical control training in the safe operation of engine and turret lathes, vertical and horizontal milling machine with the proper use of cutting, fluids, basic metallurgy, gears and gear cutting, feed and speeds. The use of the dividing head and rotary table are also emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332ENGR 767}

\section*{Blueprint Reading}

A course to develop the trainee's ability to interpret drawings related to actual machine shop projects. Wood and metal patterns and (CAM) graphics are used to facilitate interpretation. This course covers the basic principles of GD\&T. Students learn how GD\&T symbols are used to ensure the interchange ability of parts being manufactured, as well as how GD\&T is added to enhance the quality of parts that must be assembled. Students will learn the various tolerances of form, profile, orientation, runout, and location. The practical application of GD\&T will be used throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332ENGR 770}

\section*{Machine Tool Operations}

Introduction to basic machine tool operations including bandsaws, engine lathes, drill presses, milling machines, grinding of drill and tool bits, bench work and related layout work and inspection. Writing assignments, as appropriate to the discipline, are part of the course.
9 lab hours per week. 3 credit hours.

\section*{332ENGR 777}

\section*{Statistical Process Control}

This introductory course provides an overview of quality as it applied to producing quality products and services. Students learn the terminology and techniques necessary to control the processes and systems, including the control of procured materials, equipment, and services. The course starts with the history of quality control, standards, inspection, calibration, preventative maintenance, systems and OSHA standards. Production parts will be used to calculate the measured dimensions and determine quality compared to the standard. These skills will be applied to the lab portion of the CNC Program. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{332ENGR 779 \\ Internship}

The internship will provide students with hands-on experience operating a lathe, mill, or other machining equipment at an actual worksite. The intern will most likely be an assistant to a machinist or perform basic machine work. Writing assignments, as appropriate to the discipline, are part of the course.
5 lab hours per week. 1 credit hour.

\section*{[432ENGR] ENGINEERING \& INDUSTRIAL}

\section*{432ENGR 502}

\section*{Electrical Wiring}

This course will introduce the student to electrical wiring, repair and construction techniques in a laboratory setting. Students will also acquire proficiency in the identification and use of various electrical components associated with wiring activities. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 503}

\section*{Applied Mathematics}

This course introduces the student to the use of fractions mixed numbers, decimals, order of operations, ratio, proportion and percent problems as they relate to industrial maintenance activities. Measurement and graphical representation will be explored and the skill of estimating and solving word problems will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{432ENGR 504}

\section*{Introduction to Pneumatic Technology}

This course in pneumatic technology will teach students how air is harnessed as a source of power to do work. The pneumatic trainer will be used to illustrate how pneumatic circuits are used in real-life and industrial applications. Students will also learn how to use a variety of pneumatic instruments, components and systems through a series of enjoyable and interesting experiments. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{432ENGR 505}

\section*{Solid State Fundamentals}

This course will focus upon the use of discrete solid state devices in electronics. Topics on instruction will include: semi conduction, diodes, optoelectronic devices, DC and small signal analysis of bipolar transistors and FETS, power amplifiers, tuned amplifiers, frequency response and other associated electronic devices. The theory and application of solid state electronics will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 3 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{432ENGR 506}

\section*{Industrial Motors}

This course will introduce the student to the principles and applications of electric motors used in industry. Topics to be studied include: motor and generator fundamentals, single and three-phase AC motors, DC and universal motors, stepper motors, servo motors, motor load characteristics, motor specifications and ratings, efficiency characteristics, motor specifications and ratings, efficiency characteristics, motor testing and protective devices and testing and troubleshooting procedures for motors. The theory and application of motors used by industry will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 507}

\section*{Industrial Controls}

This course will introduce the student to the AC power control system used in the industry. Topics to be studied include: ladder diagramming, motor starters, relays, timers, solid state motor controls, photo electronic and proximity control devices and an introduction to programmable controllers. The theory and application of industrial controls will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 508}

\section*{Digital Electronics Fundamentals}

This course will introduce the student to electronic digital fundamentals through the study of combinational and sequential logic circuits. Topics of study will include Boolean algebra, number codes, latches, flipflops, counters and shift registers. The theory and application of digital electronics will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 509}

\section*{Industrial Programmable Control}

This course will introduce the student to the basic operations of programmable controllers, central circuit programming and industrial programmable controller applications used in automated manufacturing. The theory and application of programmable controllers will be studied in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 510}

\section*{Industrial Hydraulics}

This course will introduce the student to the basic concepts of hydraulics and its applications in an industrial setting. A hydraulics laboratory trainer will be utilized to help students learn hydraulics through the use if a variety of test instruments, gauges, components and control systems. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{432ENGR 512}

\section*{Internship}

Placement on the job monitored by supervisor will introduce the student to the real world of work. Writing assignments, as appropriate to the discipline, are part of the course.
10 lab hours per week. 1 credit hour.

\section*{432ENGR 515}

\section*{Principles of DC/AC}

This course will introduce the student to DC and AC circuiting fundamentals including current and voltage resistive elements, Ohm's law, series, parallel, and series-parallel DC and AC circuits analysis, conductors and insulators, basic electric measurements instruments, capacitors, magnetic circuits and electromagnetism, inductance, sinusoidal alternating current and voltage, and various types of transformers. Various aspects of DC and AC theory and problem solving activities will be conducted in a laboratory setting. Writing assignments, as appropriate to the discipline, are part of the course.
4 lecture hours per week. 4 credit hours.

\section*{432ENGR 516}

\section*{Quality Insurance}

This introductory course provides an overview of quality assurance as it applies to producing products and services based primarily upon processes and systems, and including the control of procured materials, equipment and services. It will include an overview of the history of quality assurance, standards, inspection, calibration, preventative maintenance, systems and OSHA standards. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture hours per week. 2 credit hours.

\section*{432ENGR 517}

\section*{National Electric Code}

This course in the National Electronic Code (NEC) helps students understand how the NEC is constructed, how to read the code, from beginning students to experienced electricians. A series of enjoyable lectures that clarify confusing and seemingly conflicting rules from the 1996 NEC. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture hours per week. 2 credit hours.

\section*{432ENGR 518}

\section*{Introduction to Power Systems}

This course will introduce and develop students' critical thinking process, enabling them to reach a sound understanding of a broad range of topics related to power systems, while motivating their interest in the electrical power industry. Both theory and modeling are developed from simple beginnings so that students can be readily extended to new and complex situations. The course renews basic phasor concepts, single phase, as well as three phase circuits, power transformers, transmission lines parameters, power system control, including turbine-generator controls and multi machine stability. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture hours per week. 2 credit hours.

\section*{[ENGLISH] ENGLISH (035)}

\section*{ENGLISH 098}

\section*{Composition}

Elements of reading, writing and speaking basic English. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 98, or Grade of C or better in Reading 099, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{ENGLISH 100}

\section*{Basic Writing Skills}

Emphasis on individual expression in paragraph form, sentence clarity through knowledge of sentence structure, and correct word forms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 100, or Grade of C or better in English 98, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 101}

\section*{Composition}

Development of critical and analytical skills in writing and reading of expository prose. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 102}

\section*{Composition}

Continuation of English 101. Introduces methods of research and writing of investigative papers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 105}

\section*{Business Writing}

Fundamentals of basic forms of business correspondence. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English
101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 107}

\section*{Report Writing}

Letters and reports, methods of collecting and organizing data, and methods of presenting facts and ideas effectively. Writing assignments, as appropriate to the discipline, are part of the course.
50-150 minutes per week. 1-3 credit hours.

\section*{ENGLISH 121}

\section*{Communications}

Ability to communicate: listen, view, talk, read, write; study of communications theory, investigation of other media: radio, television, film, records, tape, magazine, and newspaper advertisements. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{ENGLISH 127}

\section*{Textual Analysis}

Relating thinking to reading by analysis of written materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 150}

\section*{College Newspaper}

News reporting and writing, feature writing, makeup and editorial work; discussion of problems of policy and newspaper. Lab work correlated with publication of college newspapers. Students will carry out all the tasks involved in the writing, publication, and distribution of the college newspapers. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Eligibility for course repetition for additional credit hours is determined by the instructor. No more than an accumulated 3 credit hours will be counted towards graduation.
Prerequisite: None
50 minutes per week. 1 credit hour.

\section*{ENGLISH 151}

\section*{News Reporting and Writing}

Survey of journalism, including news reporting and feature writing, makeup and editorial work, business and advertising problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 152}

\section*{Introduction to Mass Communication}

Scope of modern journalism and dominant theories of communication; influences of the media in today's society. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 153}

\section*{Journalism}

Survey of print journalism, including news, editorial and feature writing, newspaper organization, copy editing, printing technology and circulation. Application of skills involved in publishing the college newspaper. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 151.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{ENGLISH 197}

\section*{Communications Skills}

This course provides additional support to English 101 students emphasizing critical reading, academic writing, and standard English grammar. Writing assignments, as appropriate the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 201}

\section*{Advanced Composition}

Intensified work in expository and argumentative writing for students who need to improve writing skills for professional careers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ENGLISH 203}

The Structure of English
A study of linguistics applied to American English. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 241}

\section*{Creative Writing}

Descriptive and narrative writing, concentrating on the writing of poetry, drama, and fiction. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 242}

Intercultural Communication
Examination of communication barriers through the study of the varieties of English, including dialects, structural and phonetic differences among ethnic groups, both present and historical, beginning with the Old English period and moving to the present. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 243}

Creative Writing-Fiction
Students will understand the structure and elements of fiction and the writing process, produce fully-developed works of fiction, and demonstrate an understanding of the critical terminology of the creative writer. Student will experiment with different approaches to plot, point-of-view, dialogue, voice, sequence and structure. A minimum of 25-30 finished pages of original work is recommended. Journals, a midterm, and a final exam may also be required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101. 150 minutes per week. 3 credit hours.

\section*{ENGLISH 245}

\section*{Creative Writing Poetry}

Students will understand the structure and elements of poetry and the writing process, produce fully-developed works of poetry, and demonstrate an understanding of the critical terminology of the creative writer. Students will experiment with different approaches to form, voice, narration, imagery, translation, creative response, and revision. A minimum of 200-250 finished lines of original work is recommended. Journals and exams may also be required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 276}

\section*{Feature Writing for Newspapers and Magazines}

Feature writing for newspapers and magazines. Study and applied skill emphasize idea development for the extended feature article, personality profile, and focus story. Assignments may also include advanced practice in writing critical reviews on books, music, theater, restaurants, and writing humor. Includes a focus on selling feature articles and on the business of freelance writing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
150 minutes per week. 3 credit hours.

\section*{ENGLISH 299}

\section*{Special Topics in English}

Selected topics in English for students interested in further developing their understanding of specific authors, movements, genres, styles of writing, and forms of language; emphasis on linguistic structure, social contact, and interpretation. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.
50-150 minutes per week. 1-3 credit hours

\section*{ENGLISH AS A SECOND LANGUAGE (SEE ESL)}

\section*{[ENTRE] ENTREPRENEURSHIP (143)}

\section*{ENTREPRENEURSHIP 201}

\section*{Introduction to Entrepreneurship}

Introduction to the concept of sustainable entrepreneurship, a manageable process applicable across careers, work settings, and time. Focus on building entrepreneurial attitudes and behaviors that will lead to creative solutions within the business community and other organizational environments, including the history of entrepreneurship, the role of entrepreneurs and entrepreneurs in the 21st century global economy, and opportunity identification, elements of creative problemsolving, and development of an enterprise concept/model. Examination of feasibility studies, and the social/moral/ethical implications of entrepreneurship. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 118, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENTREPRENEURSHIP 202}

\section*{Opportunity Recognition and Development}

Participants will learn techniques and processes leading to opportunity (value) recognition to include the evaluation of target market, current economic, social, and political climate that provide value opportunities for entrepreneurial ventures. Entrepreneurial opportunities will be evaluated relative to personal strengths and weaknesses, financial, professional, social, and personal goals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, and eligibility for Math 118, and grade of C or better in ENTRE 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENTREPRENEURSHIP 203}

\section*{Entrepreneurial Accounting and Finance}

An advanced entrepreneurial course structured on accounting and financial methodologies in order to evaluate or predict the financial performance of their enterprise. Building upon their business concepts or existing enterprise, participants will be introduced to core financial and managerial accounting concepts. Financial analysis techniques will enable them to prepare short and long-term financial operations plans, including cash requirements for enterprise startup and ongoing operations. Participants will be trained to use computerized accounting software as part of a managerial tool kit to support operation assessment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, and eligibility for Math 118, and Grade of C or better in ENTRE 201, and ENTRE 202, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{Course Descriptions}

\section*{ENTREPRENEURSHIP 204}

\section*{Entrepreneurial Marketing \& Sales}

Introduction to marketing and personal selling strategies designed to support entrepreneurial development and growth. Participants will develop a theoretical and practical understanding of key marketing and sales strategies, including competitive product/services pricing, product/ service promotion and distribution, customer and supplier qualification and the closing of sales transactions. Writing assignments, as appropriate to the discipline, are part of this course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 118 and Grade of C or better ENTRE 201, and ENTRE 202, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENTREPRENEURSHIP 205}

\section*{Law for the Entrepreneur}

A required course, providing an overview of the formation and operation of business enterprises, types of business organization, contract law, leases, intellectual property and employment law, including sole proprietorships, general and limited partnerships, limited liability companies and corporations, the benefits and disadvantages of each type of entity as well as the formation, dissolution and record keeping for each of these entities, other fundamental areas of law affecting business entities. Writing assignments, as appropriate to the discipline, are part of this course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 118, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENTREPRENEURSHIP 206}

\section*{Entrepreneurial New Venture Startup}

Participants will explore and identify problems that arise in the start-up phase of an entrepreneurial venture by developing a business plan/ concept for a new venture and pitching it to a panel of judges. Alternatively, participants have the option to explore and identify the obstacles to success that occur while managing and operating a business venture in a computer- simulated environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in ENTRE 201, ENTRE 202, ENTRE 203, ENTRE 204, and ENTRE 205, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[ENVR ST] ENVIRONMENTAL STUDIES (026)}

\section*{ENVIRONMENTAL STUDIES 101}

\section*{Man and Environment I}

Interdisciplinary study of humans, the environment, and their interrelationships, including resources, processes, wastes, growth, change, values, individual responsibility, and involvement; emphasis on ecology of Chicago metropolitan environment; individual in relation to urban systems, and urban systems in relation to world environment. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL STUDIES 102}

\section*{Man and Environment II}

Resource and land management, interaction of social, economic, and technological systems with the environment and relationship of individuals and groups to the environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Environmental Studies 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[ENVR TC] ENVIRONMENTAL TECHNOLOGY (027)}

\section*{ENVIRONMENTAL TECHNOLOGY 100 Introduction to Emergency Management}

Introduction to the principles and concepts of emergency management, including an overview of the various disciplines involved in preparing for emergencies resulting from many different causes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 101}

\section*{Basic Skills in Emergency Management}

Provides a background in various aspects of emergency management that would apply in any emergency. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 102}

\section*{Leadership/Influence/Communication}

Among the most important attributes of successful emergency managers is the ability to fill a strong authority position that will aid them in accomplishment of tasks that would need to be done to deal with an emergency. This course is designed to provide a basic understanding of the skills needed by emergency managers that will allow them to lead and motivate emergency responders. Writing assignments, as appropriate to the discipline, are part of the course.

\section*{ENVIRONMENTAL TECHNOLOGY 103}

\section*{Introduction to Emergency Planning}

The importance of planning for emergencies before they occur has long been recognized as the key to minimizing their impact on society. This course is designed to provide a basic overview of the concepts of preplanning needed to deal with a wide range of emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 104}

\section*{Energy Systems Fundamentals}

Covers the basics of building envelopes, HVAC, lighting, insulation, glazing, plumbing and electrical systems, construction materials, and the surrounding environment. Incorporates blueprint/design fundamentals. Focus on construction engineering concepts. Introduces LEED and Energy Star programs, relevant environmental, health and safety principles, impacts, and regulatory implications. Provides a broad overview of energy use and efficiency in structures and why it matters. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ENVIRONMENTAL TECHNOLOGY 105}

\section*{Introduction to Atmospheric Sciences}

Introduction to principles and concepts of the atmospheric sciences with an emphasis on climate, weather, and related environmental interactions resulting from human activities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 106}

\section*{Introduction to Terrorism}

Terrorism events present some special aspects to the world of emergency management. This course will examine the differences and similarities among emergencies resulting from terrorism vs. natural disasters or accidents. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 107 \\ Environmental Geology}

Examines human interactions with geologic processes and hazards, including earthquakes, volcanoes, landslides, subsidence, hydrology, and flooding; occurrence and availability of geologic resources, such as energy, water, and minerals; principals of land-use planning, pollution, and waste disposal, environmental impact, health, and law. Writing assignments, as appropriate to the discipline, are part of the course.

\section*{ENVIRONMENTAL TECHNOLOGY 108 \\ \section*{Mitigation Management}}

The impact of many types of emergencies can be reduced by taking certain actions prior to their occurrence that will lessen the damage when the emergency occurs. Introduction to the concept of mitigation, and the activities that will accomplish it in a wide range of potential emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of Environmental Technology 100 with a C Grade or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 111}

\section*{Basic Incident Command}

The Incident Command System provides a management framework for dealing with emergency situations. Provides the basic knowledge of what incident command is and how it functions, as well as the importance of having a strong central authority to oversee all aspects of responding to emergency situations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 112}

\section*{Disaster Response and Recovery}

Explores the basic nature of disasters, what they are, what steps must be taken to respond to them, and what is involved in recovering from them. This is a lab class that will culminate in the conduction of a day-long, campus-wide disaster scenario response drill. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Environmental Technology 100, and Environmental Technology 101, or Consent of Department Chairperson. 3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 113}

\section*{Emergency Resource Management}

In planning for and responding to emergencies, varied resources will be required. This course identifies what these various resources are and how to use them most efficiently in a response action. The course includes study of governmental, non-governmental, and volunteer resources and their potential roles. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 114 \\ Renewable Energy Systems}

An introductory, work-skills course on principles, concepts, applications, and installation of renewable and alternative energy technologies. Distinguishes between technologies appropriate to industrial / commercial settings versus those intended for residential structures. Covers renewable energy sources (solar, wind, geothermal, etc.) as well as alternative technologies utilized for building operations (microturbines, fuel cells, combined heat and power). Designed to prepare tradesman for the installation of various technologies. Up to five off-campus field trips to alternative energy installations will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 115}

\section*{Introduction to Weapons of Mass Destruction}

Provides an overview of chemical, biological, radiological, and nuclear (CBRN) weapons, and the threat of their use in terrorism events. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 121}

\section*{Introduction to Hazardous Materials Management}

This course is an overview of the environmental impacts resulting from hazardous materials such as asbestos, and their mismanagement. Emphasis is placed on understanding the sources responsible for soil, water, land, and pollution and the environmental laws governing our natural resources, including asbestos. Emphasis is placed on storage and treatment practices, monitoring, sampling and handling techniques, damaging effects on humans, ecology and the environment, as well as governmental regulations concerning soil, water, and air. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 122 \\ Disaster Site Worker}

Focuses on the skills needed by workers who respond in the recovery phase of major disasters, including the requirements for obtaining the OSHA Construction Worker 10-hour card, which is required for Disaster Site Worker certification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Environmental Technology 100, and Environmental Technology 181, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{ENVIRONMENTAL TECHNOLOGY 123 \\ Chemical Emergency Response}

This course is designed to meet the requirements of OSHA for workers who will respond to a hazardous chemical release. The course consists of the five levels of training required under 29CFR1910.120(q). Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 131}

\section*{Environmental Health and Safety}

Introduction to health and safety principles and skills needed to conduct field operations dealing with hazardous substances. Meets initial training requirements of the Occupational Safety and Health Administration for workers engaged in hazardous waste operations. Includes fundamentals of hazard recognition, toxicology, selection, use, and safety procedures for conducting waste site use, and limitations of personal protective equipment. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 141}

\section*{Site Investigation and Sampling}

Introduction to the techniques for monitoring and sampling of soil, water, and air. Emphasis is on site investigation procedures for contamination by hazardous materials; the use of specialized sampling equipment its maintenance and repair, and record keeping for chain-of-custody and other documentation. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 144}

\section*{Building Systems Maintenance}

Course is comprised of seven energy efficiency topics in building operations and maintenance. Building Operators Certification is a professional development program in the energy and resource efficient operation of buildings to qualify operations and maintenance staff for certification. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 151}

\section*{Introduction to Environmental Laws and Policies}

Introduction to the United States legal system and to the doctrines and statues which regulate the production, treatment, transportation, and disposal of hazardous materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Environmental Technology 121.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 163}

\section*{Asbestos Training for Workers and Supervisors}

Trains workers, supervisors, and contractors on an asbestos abatement job in hazard assessment, regulations, procedures, operation and maintenance planning, personal protection, and worksite safety according to AHERA and state regulations. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 165}

\section*{Asbestos Training for Inspectors}

Provides all inspectors of asbestos problems in public buildings with the equivalent of three days of Environmental Protection Agency approved training in asbestos control, sampling and inspection, including health effects, personal protection, regulations and liabilities, according to AHERA and state regulations. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 175}

\section*{Hazardous Material Handing and Transportation}

Explores the regulations involving the transportation of hazardous materials and waste. It includes manifesting, generator and transporter standards, Department of Transportation hazard classes, placards, labels, markings, spill response, and driver responsibilities. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 181}

\section*{Emergency Response Levels I, II, III}

Trains personnel responding to hazardous materials emergencies on the requirements outlined in the appropriate OSHA regulations and NFPA standards for Levels I, II, III. The emphasis is on hazard and risk assessment, safety, basic chemistry, personal protective equipment, spill containment and confinement, decontamination, and incident record keeping and reporting. This course will satisfy the requirements for Emergency Response Levels I, II, and III training. Writing assignments, as appropriate to the discipline, are part of course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 190 Introduction to Animal Sciences}

Provides a firm biological and natural sciences background to students for understanding the principles important to the raising and management of livestock and companion animals. Students will have the opportunity to learn from animal industry leaders. The course is team taught to incorporate Animal Sciences instructors who are specialists in their subject matter areas. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 101, and Math 118 or higher.

\section*{ENVIRONMENTAL TECHNOLOGY 191}

\section*{Introduction to Crop Sciences}

This course is designed to introduce students to basic principles of plant growth, including human and environmental influences and the theoretical and practical application of agronomic principles to crop production. This course is designed to serve as an introduction to agronomy revolving around crop production in the Midwest. The subject matter presented will provide an overview of major aspects of plant and soil management, pest control, and soil and water conservation issues and practices and how they affect growth and development. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: The student should be capable of college entry level reading, writing, and mathematics.
200 minutes per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ENVIRONMENTAL TECHNOLOGY 192}

\section*{Introduction to Soil Science}

This course is designed to provide a comprehensive treatment of the basic principles of soils as they exist and interact in the environment. The course emphasizes soil as a natural body in nature, its formation, classification, chemical and physical properties. This course is designed to be equally useful to the non-agricultural production students, including those studying plant science, ecology and environmental sciences, and to students in curricula such as agronomy, crop science, soil science, horticulture and forestry. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of high school Chemistry is required. 200 minutes per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 193}

\section*{Introduction to Horticulture}

This course is designed to offer the student a general Introduction to the principles of plant growth and development as they apply to the wide range of horticultural crops and the industries related to production, marketing, and utilization of horticultural crops. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 203}

\section*{Advanced Emergency Planning}

Covers the planning required for specific emergency response actions, including emergency evacuation, housing, and logistics. Course information is presented in the context of exercises design as preplanning for response. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 204}

\section*{Residential Energy Systems}

Covers energy systems and energy efficiency technologies utilized in single- and multi-family residential building forms, including systems design and installation in both new construction and retrofit projects. Introduces field auditing techniques, environmental impacts (indoor air quality, asbestos, lead, voc's, radon, waste disposal issues, etc.), worker health and considerations, Energy Star certification, building commissioning procedures, and local regulatory requirements. An offcampus field trip to a residential green building/construction site will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 205}

\section*{Terrorism Planning}

Preparing for and responding to terrorism events requires a more focused perspective. This course will provide an overview of the special considerations that must be included in the planning stages of response to terrorism event. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 211}

\section*{Recycling and Waste Minimizing}

Presents information on reuse and recycling of non- hazardous materials that dominate the municipal waste system. Waste reduction techniques for industrial processes that generate hazardous waste constitute the second half of the course. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 212}

Advanced Incident Command
Focus on the particular management issues associated with large-scale emergencies that require response from multiple entities, including the federal government. Includes the National Incident Management System (NIMS) that is activated for incidents of national significance. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 214}

\section*{Institutional Energy Systems}

Covers the types of energy systems and energy efficiency technologies in use in commercial, industrial, and high-rise buildings. Includes design, installation, testing, evaluation, and operation of technologies for these structures, and details the integration of system control components. Also encompasses a synopsis of environmental, health and safety for construction and post-construction activities, Energy Star, LEED certification, other pertinent programs and regulatory aspects. An offcampus field trip to an institutional green building/construction site will be scheduled as part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 215}

\section*{Advanced Weapons Mass Destructions}

Applies the basic concepts from EM Introduction to Weapons of Mass Destruction to specific potential situations where these weapons may be used. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 221}

\section*{Emergency Management Operations I}

An advanced course that covers the workings of the Emergency Operations Center (EOC) during the response to major incidents. Students will fill operational roles in a simulated EOC as various drill scenarios are run. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 222}

\section*{Emergency Management Operations II}

A field course on the application of the concepts covered in the program through direct observation of emergency response activities performed by various government agencies. Writing assignments, as appropriate to the discipline, are part of the course. Students will be placed as interns in government agencies in this course. Students registering for this course must meet all prerequisite requirements and submit to a criminal background check.
Prerequisite: Consent of Department Chairperson.
20 lab hours per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{ENVIRONMENTAL TECHNOLOGY 225}

\section*{Psychology of Terrorism}

Examines the motivations of terrorist groups, the goals of terrorism, and the impact of terrorism events on societies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Environmental Technology 100, and Environmental Technology 101, and Environmental Technology 105, and Environmental Technology 205, or Consent of Department Chairperson. (Concurrent enrollment in Emergency Technology 205 is allowable).
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 226}

\section*{Disaster Psychology}

Examines the psychological impact of disasters on both victims and responders. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 100 with a C or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 231}

\section*{Treatment/Storage/Disposal of Hazardous Materials}

Introduces treatment, storage, and disposal of hazardous wastes, or hazardous constituents. The emphasis is on various technologies, including treatment, land disposal, surface impoundments, solidification, incineration, and disposal management. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 241 \\ Environmental Sampling}

An in-depth study of the procedures and concepts used by EPA to investigate sites. Emphasis is on hazardous waste at both controlled and uncontrolled sites. Include the investigation of ground water, surface water, air, and soil contamination, including health and risk assessments. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Environmental Technology 121, and Environmental Technology 131.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 242}

\section*{Environmental Analysis}

Introduction to the foundations of environmental chemistry. Artificially created and natural systems will be examined. Students will be encouraged to qualify and quantify the relationships between chemistry and the environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Chemistry 121 and Biology 106. 150 minutes per week. 3 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 243}

\section*{Environmental Analysis}

This course will introduce the student to the foundations of environmental chemistry, man-made and natural systems will be examined. Students are encouraged to qualify and quantify the relationships between chemistry and environment. United States Environmental Protection Agency analytical requirements will be surveyed using inductively coupled argon plasma, gas chromatography, mass spectrometry, ion chromatography and UV-Vis spectrometry, among other state-of-theart analytical technologies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 106, and Chemistry 121.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 244}

\section*{Energy Equipment Troubleshooting}

A second tier course comprised of four classes in maintenance, operation, and diagnostics of electrical and HVAC systems, two of four possible electives in system specialty topics. Buildings Certification is a professional development program in the energy and resource efficient operation of buildings to qualify operations and maintenance staff for certification. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{ENVIRONMENTAL TECHNOLOGY 271}

\section*{Legal Issues in Hazardous Waste Management}

Focus on legal problems and financial liabilities that may be associated with producing, handling, storage, and disposal of hazardous materials. Designed to explore legal aspects and ramifications in production, storage, and disposal of hazardous wastes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Environmental Technology 151.
150 minutes per week. 3 credit hours.

\section*{[ESLINTG] ESL (INTEGRATED) (136)}

\section*{ESL (INTEGRATED) 098}

\section*{Intermediate Integrated ESL}

An integrated reading/writing course at the intermediate ESL Level designed to increase student's receptive and productive command of written English. The focus is on grammatical structures, as well as reading and composition at the intermediate level. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: ESL Placement Test and interview, or Consent of Department Chairperson.
300 minutes per week. 6 credit hours.

\section*{ESL (INTEGRATED) 099}

\section*{High Intermediate ESL}

An integrated reading/writing course at the high-intermediate ESL Level designed to increase student's receptive and productive command of written English. The focus is on sentence structure, reading of authentic texts, and essay writing. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: ESL Placement Test and interview, or successful completion of ESL (Integrated) 098, or ESL English 098, and ELS Reading 098, or Consent of Department Chairperson.
300 minutes per week. 6 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ESL (INTEGRATED) 100}

\section*{Advanced Integrated ESL}

An integrated reading/writing course at the Advanced ESL Level designed to increase student's receptive and productive command of written English. There is a review of sentence structure and sentences connection; extensive reading of authentic texts, including academic ones; and frequent essay-writing. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: ESL Placement Test and interview, or successful completion of ESL (Integrated) 099, or ESL English 099, and ESL Reading 099, or Consent of Department Chairperson.
300 minutes per week. 6 credit hours.

\section*{[ESLREAD] ESL READING (137)}

\section*{ESL READING 098}

\section*{Special Reading Skills}

Special reading skills for non-native speakers of English; focus is on comprehension and analysis of reading materials and study of American idioms. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Qualifying score on ESL Placement Test and oral interview, ESL Writing 098, and ESL Speech 098, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ESL READING 099}

\section*{High Intermediate Reading Skills}

Efficient reading of textbooks and other materials, including work in mechanics of reading, vocabulary development, comprehension, and rate of reading. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test, or grade of C or better in ESL Reading 098, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ESL READING 100}

\section*{Advanced Reading Skills}

Focus on comprehension and analysis of college-level reading materials and the study of American idioms. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test, or grade of C or better in ESL Reading 099, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[ESLSPCH] ESL SPEECH (195)}

\section*{ESL SPEECH 098}

\section*{Intermediate Speech}

Emphasis on achieving competency required for successful pursuit of higher education: pronunciation drills, pattern drills, participation in group discussion and presentation of brief speeches. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable
Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test and oral interview, ESL Writing 098, and ESL Reading 098, or Consent of Department Chairperson. 150 minutes. 3 credit hours.

\section*{ESL SPEECH 099}

\section*{High Intermediate Speech}

Emphasis on conversation, group discussion, and listening skills to improve communication to enhance academic pursuits. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test and oral interview. or completion of ESL Speech 098 with a grade of C or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ESL SPEECH 100}

\section*{Advanced Speech}

Emphasis is placed on oral presentations, as well as comprehensibility and use of conversational techniques. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test and oral interview, or completion of ESL Speech 099 with a grade of C or better, or Consent of Department Chairperson
150 minutes per week. 3 credit hours.

\section*{[ESLWRIT] ESL WRITING (135)}

\section*{ESL WRITING 098}

\section*{Special Grammar and Composition}

Writing skills and linguistic and idiomatic patterns are emphasized. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test and oral interview; Reading-ESL 098, and Speech-ESL 098, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{ESL WRITING 099}

\section*{High Intermediate Grammar and Composition}

Intensive review and refinement of grammar and composition. Writing assignments, as appropriate to the discipline, are part of the course.
Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test, or grade of C or better in Writing-ESL 098, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{ESL WRITING 100}

\section*{Advanced Grammar and Composition}

Writing and analysis of paragraphs and essays and of logical development. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Placement Test, or grade of C or better in Writing-ESL 099, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[FIN ART] FINE ARTS (042)}

\section*{FINE ARTS 103}

\section*{Theater Arts}

A cross-disciplinary approach to the performing arts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{FINE ARTS 104}

\section*{The World of The Cinema}

Study of various types of films; covers historical development, production methods, technique of films, and critical evaluation. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{FINE ARTS 105}

\section*{History of Painting, Sculpture and Architecture}

Survey of art from pre-historic to contemporary. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{FINE ARTS 106}

\section*{African Art}

Study of the ancient, traditional, and contemporary art of the peoples of the African continent, from the prehistoric paintings of Tassili-N-Ajer to the varied forms of contemporary African artists; influence of religion, philosophy, and social institutions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{FINE ARTS 107}

\section*{History of Architecture, Painting and Sculpture I}

Survey of art from pre-history through the 17th Century. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{FINE ARTS 108}

\section*{History of Architecture, Painting and Sculpture II}

Survey of art from the 18th Century to the present. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\begin{abstract}
FINE ARTS 109
History of Cinema
An international survey of the history of cinema, from the silent era to contemporary filmmaking, emphasizing a study of various film genres from around the world and innovations in film production that have had significant influence on film as an art form. Full-length films and film clips will be screened in class. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.
\end{abstract}

\section*{FINE ARTS 110}

\section*{Opera and the Humanities}

Opera as a medium in which the philosophic, aesthetic, and psychological perspectives of composers and their eras are communicated; selected operas which parallel those offered in the community and present similar communication experiences will be studied; written material, radio broadcasts of operas, opera commentaries, and opera performances will be utilized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[FIRE TC] FIRE SCIENCE TECHNOLOGY (116)}

\section*{FIRE SCIENCE TECHNOLOGY 101}

\section*{Introduction To Fire Science}

History of fire science; principles of fire prevention, protecting, and extinguishing; discussion of individual career opportunities. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 102}

\section*{Fire Fighting Tactics}

Basic procedures for suppression of fire; application to principles of building construction; coordination of human resources and equipment. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 103}

\section*{Fire Suppression Systems}

Fire suppression and protection systems, including characteristics and usage of sprinkler systems, wet pipe systems, stand pipe systems, heat detectors, smoke detectors; covers components of sprinkler systems, valves, OSY and P.I.V. valves, spacing of sprinkler heads according to occupancy classification, temperature rating, color coding of sprinkler heads, and Fire Department support, connections, and emergency involvement. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 104}

\section*{Fire Suppression Apparatus}

Basic principles of fire apparatus construction, operation, and maintenance; consideration of pumps, pumper procedures and tests, aerial, ladders and platforms, and elementary hydraulic calculations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{FIRE SCIENCE TECHNOLOGY 197}

\section*{Fire Service Orientation}

Organization and operation of the fire department; handling hoses, raising ladders, use of ropes, masks, and other fire service appliances; automatic fire alarm and sprinkler systems, telegraph fire alarm and code of signals. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 198}

\section*{Emergency Medical Orientation}

Instruction in emergency medical care of injured persons; operation of resuscitation and other emergency medical equipment; use of emergency extrication equipment; certification in standard emergency medical practices. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 200}

\section*{Fire Administration}

Analysis of basic objectives, personnel management, motor apparatus, equipment, buildings, communications, alarm systems; comparison of local, state, and federal fire control agencies. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 201}

\section*{Fire Service Hydraulics}

Review of basic mathematics for study of properties of fluids, force, pressure, and flow velocities; operation and characteristics of fire pumps; generation of fire streams and water distribution systems. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 202}

\section*{Building Construction for Fire Service}

Study of exterior and interior material and structural construction of buildings in relation to fire resistance, safety, and fire fighting. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 203}

\section*{Fire Protection Systems}

Study of required standards for water supply, protection systems, automatic sprinklers and special extinguishing systems; analysis of automatic signaling and detection systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 204}

\section*{Fire Fighting Tactics II}

Study of human labor and apparatus management; types of fires requiring a unique suppression approach. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 205}

\section*{Chemistry of Flammable Materials}

Properties and fire suppression of chemically active and hazardous materials; flammable liquids, combustible solids, oxidizers, corrosive materials. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 206}

\section*{Fire Codes}

Study of national, building, and other codes relating to fire prevention and protection; relationship between building inspection agencies and fire prevention organizations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 210}

\section*{Fire Prevention Fund I}

Principles of a fire prevention program; planning and implementation of fire inspection; recognition of fire hazards and causes; building construction types and materials, and private protective systems. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 211}

\section*{Fire Prevention Fund II}

Protection of public and private industrial properties against fire, explosion, lightning, and wind damage. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 212}

\section*{Fire Insurance Rating}

Study of multiple line insurance policy types, rate determination, claim adjustments, and types of rate schedules. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 213}

\section*{Fire Causes and Arson Investigation}

Techniques and procedures for investigation of fires; determining origin and causes of fires; fundamentals of arson investigation; gathering evidence for technical reports; criminal procedures related to local and state statutes. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{FIRE SCIENCE TECHNOLOGY 220}

\section*{Fire Service Training I Instructor}

Methods and techniques of teaching for fire service instructors; principles of teaching adults, how adults learn, teaching procedures and methods, training aids and services, testing and evaluation; includes practice teaching and evaluation by qualified observers; course will meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for the Basic Level Instructor Certification. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{FIRE SCIENCE TECHNOLOGY 221}

\section*{Fire Service Training II Instructor}

Methods and techniques for planning, development, and conducting a Fire Service Training program/plan 336; covers objectives of a program, evaluating training, techniques of conference leadership. Meet requirements of the Illinois Fire Protection Personnel Standards and Education Commission for the Standard Level Instructor Certificate. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Fire Science 220, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[FOODSRV] FOOD SERVICE ADMINISTRATION (038)}

\section*{FOOD SERVICE ADMINISTRATION 222}

\section*{Food Service Sanitation}

Sanitation in preparation and service of food; sanitation chemicals, equipment and materials; ordinances and inspection procedures to ensure sanitary dispensing of food. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{[FRENCH] FRENCH (051)}

\section*{FRENCH 101}

\section*{First Course French}

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Exam or Consent of Department Chairperson. 200 minutes per week. 4 credit hours.

\section*{FRENCH 102}

\section*{Second Course French}

Continuation of French 101. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{FRENCH 103}

\section*{Third Course French}

Review and development of basic language skills, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 102, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{FRENCH 104}

\section*{Fourth Course French}

Review of language structure and interpretation of readings, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 103, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{FRENCH 206}

\section*{Intensive Oral Practice}

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 104, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{FRENCH 210}

\section*{Modern Civilization and Culture}

Recent social, cultural, and historical trends, conducted in French and English. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 100 with a grade of C or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{FRENCH 213}

\section*{Introduction to Modern Literature}

Selections from contemporary writings, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{FRENCH 214}

\section*{Readings In Literature}

Works from selected historical periods, conducted in French. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or French 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[GEOG] GEOGRAPHY (084)}

\section*{GEOGRAPHY 101}

\section*{World Geography}

Economic, political, and cultural geography of the modern world, includes the people, raw materials, industrial resources, and trade connections of various parts of the earth. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{GEOGRAPHY 102}

\section*{Economic Geography}

Contemporary view of the economic interdependence of the nations of the world with emphasis on role of the United States, the dynamic changing future of geography, and its influence on world conditions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{GEOGRAPHY 115}

\section*{Geography of Metro Chicago}

Examination of physical characteristics of six-county metropolitan areas, including topography, climate, and waterways; functional land use patterns, including economic modes, population focuss, transportation patterns and historic development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{GEOGRAPHY 201}

\section*{Physical Geography}

Physical environment of humans, their atmosphere, landforms, waters, and other natural resources; emphasis on interrelationships of these areas and interaction of humans with their surroundings. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson
150 minutes per week. 3 credit hours.

\section*{[GEOLOGY] GEOLOGY (075)}

\section*{GEOLOGY 201}

\section*{Physical Geology}

Basic earth processes: weathering, erosion, deposition, and mountain building, metamorphism, volcanism, and plate tectonics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{GEOLOGY 205}

\section*{Geology for Educators}

This course is designed to provide educators with a fundamental understanding of the Earth's systems, its changes, history, and resources, from both a qualitative and quantitative perspective. Plate tectonics, surface processes, and the Earth's composition and history will be explored and mapped to Illinois State Learning Goals for geology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for Math 140, Grade of C or better in English 102, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[HEALTH] HEALTH (001)}

\section*{HEALTH 102}

\section*{Medical Law \& Ethics}

This course considers the standards of ethical conduct toward patients, colleagues and other members of the medical team. Legal responsibility, professional liability, licensing, contracts, and other applications of law in medicine will be included. This course discusses what medical career students should know to give competent, compassionate care to patients that are within acceptable legal and ethical boundaries. It can also serve as a guide to help the student resolve the many legal and ethical questions that students may find to expect. Pertinent legal cases, anecdotes, and sidebars related to health- related careers are presented in this course as well as how legislation affects health care. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and acceptance into the Medical Assistant program/plan 359.
150 minutes per week. 3 credit hours.

\section*{HEALTH 103}

\section*{Medical Assisting Clinical Procedures I}

This course is designed to introduce students to basic clinical procedures in the medical office assisting field. Students will learn to perform basic skills and assist with procedures common to the medical office. Instruction will include classroom and laboratory as learning experiences. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and acceptance into the Medical Assistant program./plan 359.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HEALTH 104}

\section*{Medical Assisting Clinical Procedures II}

This course is designed to build upon the knowledge and skills developed in Clinical I. Students will learn to perform clinical skills and assist with procedures common to the medical office. Instruction will include classroom and laboratory learning experiences. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Health 103.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HEALTH 105}

\section*{Medical Careers Professional Development}

This course explores the professional issues that affect the medical assistant. Current trends in education, certification and employment will be discussed and their impact on the practicing medical assistant will be emphasized. Communication skills that will enhance the performance of the medical assistant will also be reviewed. Employment seeking techniques such as resume preparation and interviewing skills will be included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Health 103.
100 minutes per week. 2 credit hours.

\section*{HEALTH 106}

\section*{Administrative Procedures}

This course will explore administrative and front office responsibilities in the physician's practice or clinic setting. Emphasis is placed on clerical functions, bookkeeping procedures, preparing special accounting entries, transcription, and processing insurance claims. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Health 103.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HEALTH 107}

\section*{Pharmacology}

This course introduce the student to the basic skills that are performed by the medical assistant in the medical office. The course will emphasize the principles of pharmacology as they relate to medication administration in the medical office and clinic settings. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and acceptance into the Medical Assistant program/plan 359.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{HEALTH 108}

\section*{Fundamentals of Ambulatory Billing \& Coding}

This course covers performance of coding procedures; application of third party and managed care policies, procedures, and guidelines, including obtaining referrals and pre-certifications; and billing for services, including insurance claim forms and use of a physician's fee schedule. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{HEALTH 109}

\section*{Medical Assisting Externship Practicum}

This course requires a minimum of 160 hours of supervised, nonsalaried experience in a variety of health care settings. Students will be assigned to clinical sites. This course requires 16 practicum hours per week. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of didactic portion of the Medical Assistant program/plan 359.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{HEALTH 250}

\section*{Health Education}

Trends and issues of personal and community health; stress on ways to maintain good physical and mental health; ecology, drugs, alcoholism, human sexuality, nutrition, disease, and related topics. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HEALTH 251}

\section*{First Aid}

Standard American Red Cross course in first aid; principles and practices of first aid for all age levels; safety and accident prevention stressed; First Aid Standard and Advanced certificates awarded to students completing the course successfully. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{[HLTH SCI] HEALTH SCIENCE (124)}

\section*{HEALTH SCIENCE 101}

\section*{Trends and Issues in Health Care Delivery}

Introduction to health care delivery systems; various health professions will be presented with emphasis on their primary role and how they interact or complement each other in delivery of health care services. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HEALTH SCIENCE 102}

\section*{Professional Medical and Health Care Practices}

Includes the study of acronyms and professional jargon used in the medical and health care environment; examination of data used in the delivery of health care and the characteristics of the health care workforce. Chronic illness and rehabilitative care will be examined as well as primary and specialty care in light of managed care. The process of accrediting and licensing of health science programs will be explored. A case study format involving inter-disciplinary health science programs will be reviewed, emphasizing systematic clinical applications. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{[334HLTH] HEALTH TECHNOLOGY}

\section*{334HLTH 701}

\section*{Introduction to Community Health Work}

This course provides an overview of the health care system and community health work. Students will gain an understanding of the role of community health workers, the scope of their function and the types of services they may provide, and how they interact with other health personnel and resources. It includes principles of effective verbal and non-verbal communication to assist students in encouraging positive interaction. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 702}

\section*{Accessing Community Resources}

This course will provide students with a brief overview of public health, its services and core functions in the protection and promotion of health and prevention of diseases and injury. It will include selected international, national and local health organizations that influence public health. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 703 \\ Community Health Problems}

This course will focus on developing community leadership and capabilities to identify and address community health needs. This course is designed to help students develop self, client and community capacities to protect and improve health. Emphasis is on building individual and community participation in health through information sharing, informal counseling, social support, health skills instruction, community-wide assessments and promoting changes in negative behaviors. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 704}

\section*{Communicable Diseases}

This course will provide students with an overview of communicable disease. It will provide the student with information on prevention, referral sources and treatment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 705}

\section*{Nutrition, Exercise \& Disease}

This course will provide students with the information necessary to promote healthy eating styles and proper food preparation for all age groups. This course gives the students information about identifying the relationship of diet to disease. Attention is given to the treatment of disease by diet modification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334 HLTH 706}

\section*{Human Development Overview}

This course provides students with information on pre-conceptual, intra-conceptual, prenatal care, fetal development and newborn care. Students will gain an understanding of the various stages of human development and recognize their role in promoting acceptable standards of health care. This course includes information of the important role parents have in the development of children. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 334HLTH 701.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{334HLTH 707}

\section*{Portfolio Development}

This course provides the student an opportunity to carefully select, purposeful organize their professionally related academic accomplishments. It provides documentation of the student's having met the entry-level competency skill standards for community health workers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 708}

\section*{Adult and Senior Health}

This course will focus on adult health throughout the early, middle and later stages of adult development and health issues. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 709}

\section*{Substance Abuse Issues}

This course gives the student an overview of what substance abuse is and how to recognize it. Students will become familiar with misuse and abuse of substances ranging from over the counter medications to highly controlled narcotics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 710}

\section*{Mental Health Issues}

This course will provide an overview of mental health issues and concerns of community and families. This course also covers the more prevalent diseases such as depression, domestic violence, developmental delays, alcoholism, etc. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 711}

\section*{Case Management Fundamentals}

This course is designed to provide the student with the basic case management skills. The focus of this course is on the main components of case management, outreach, screening, intake, referrals, follow-up. Students will learn about home visits, universal precautions and handling emergencies on the job and in the community. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120 and 334HLTH 701.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{334HLTH 712 \\ Field Experience - First Aid \& CPR}

This course is an introduction to working in the health care field. This course will include field experience and basic skills for working effectively in communities providing patient advocacy, professional communication skills, and approaches in working effectively with co-workers and agencies, and awareness of basic research and interviewing skills. It will provide basic skills in performing CPR and First Aid. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, CIS 120, Biology 115, Child Development 101, 334HLTH 701,702,703,704,705,706.707,708.7 09 and 710.
1 lecture and 10 lab hours per week. 6 credit hours.

\section*{[HISTORY] HISTORY (085)}

\section*{HISTORY 111}

\section*{History of American People to 1865}

Exploration of the new world and its colonization; study of colonial life with emphasis on cultural heritage and the American Revolution; emergence of the American nation traced through major trends and events in economic, political, cultural, social and intellectual affairs; includes past and present American culture patterns. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 112}

\section*{History of American People from 1865}

American history from the close of the Civil War to the present; political and economic developments, and social, intellectual, and cultural changes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 113}

\section*{United States Labor History}

Labor movements development in the United States; problems of workers such as wages, hours, working conditions analyzed within their historical context; labor legislation, collective bargaining, social insurance, government intervention, and prospects for organized labor examined in their historical setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 114}

\section*{The Afro-American in American History}

Role of the African-American in American culture and the historical traditions which give rise to current dilemmas confronting the American community: traces history of people of African heritage from the background of African culture and slave trade as they became a part of American life. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{HISTORY 115}

\section*{Afro-American History Since 1865}

Reconstruction period after the Civil War; Black politics in the new South; rise of Jim Crow sentiment; alliance of northern industry and southern Bourbonism; early northward migrations and urban culture; growth of civil rights organizations; W. E. B. DuBois and Booker T. Washington; Blacks in WWI and WWII; post-war developments. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 116}

\section*{Women in History}

Historical roots of the position of women in society; women in antiquity, biblical attitudes towards women, women in the medieval period, women in the Industrial Revolution, the feminist movement, and women in contemporary society; role of women in non-Western (African and Chinese) societies; emphasis on the relationship between the social position of women and historically existing social, economic, and ideological forces. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 117}

\section*{History Of Chicago Metropolitan Area}

Evolution of Chicago metropolitan area from frontier outpost to modern metropolis; economic, social, political and cultural changes, analysis of institutions, and discussion of current problems requiring solution in context of their historical background. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 118}

\section*{Women in American History}

Introduction to history of women in America, women's changing status in society; effect of major events and forces on women's lives; women's role in reform; discussion of recent problems in light of past developments. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 141}

\section*{History of World Civilization to 1500}

Definition and flowering of the classical civilizations of Eurasia, Africa, and the Americas. Emphasizes environment, cultural diffusion, and technology as shaping forces in world history; empires and trade links; the major religious systems to 1500 C.E. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 142}

\section*{History of World Civilization from 1500}

Effects of the military, scientific, industrial, and democratic revolutions on the balance of civilization after 1500 C.E, including: the gunpower empires; the "Columbian exchange"; colonialism and the price revolution; capitalism and liberalism in global perspective; nationalism and dictatorship; the century of total war; and the shifting of world balance in the new millennium. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{HISTORY 170}

\section*{Native American History}

Focus on the Native American experience in the United States of America. Selected topics in history to develop an understanding of specific periods, movements and leaders; emphasis on the social, political, economic, intellectual and philosophical events and implications. Focus on the Native American experience in the United States of America. Writing assignments, as appropriate to the discipline, are part the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 210}

\section*{War and Peace in the Nuclear Age}

An overview of the origins and evolution of nuclear weapons as well as the political, strategic, technological and ideological problems, and issues that have stemmed from their development. Thirteen part television series. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{HISTORY 211}

\section*{Problems In History}

Methods of historical research; specific subject matter varies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 212}

\section*{History and Culture of China}

Study of Chinese history from Asian dynasties to the present. Political, economic, and cultural structure of traditional Chinese civilizations, foreign relations, invasions, and consequences, including the rise of the Communist party and the emergence of modern Communist China. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{HISTORY 215}

\section*{History of Latin America}

Political and constitutional history of principal Latin American nations; European, American and Indian backgrounds, movements for independence, and social and economic movements pertinent to their present relationships with the United States. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 216}

\section*{History of Latin America in the United States}

History, development, and contributions of persons of Latin American origin or ancestry in the United States with emphasis on those of Mexican, Puerto Rican, and Cuban background; includes pre-colonial origins in America, Europe and Africa; development of distinct cultures in the Western Hemisphere; migration patterns to the United States; development of communities in the United States, and directions in the Chicago area. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 225}

\section*{Modern Middle East History}

The history of the Modern Middle East since World War I, including the challenges posed by imperialism and the rise of nationalism in the area. The region studied encompasses the Arab World, Israel, Turkey and Iran. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 230}

\section*{Ancient History}

History of ancient Mediterranean civilizations from their origins to the fall of the Roman Empire; background of Egyptian, Assyrian, and Babylonian civilizations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 232}

\section*{Modern European History 1500-1830}

Medieval backgrounds, the Reformation and religious struggles, the development of nation-state, commercial revolution, colonization, and European expansion. Includes the rise of Prussia and Russia and the French Revolution. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 233}

\section*{Modern European History since1830}

Recent European history, includes 19th Century background, emphasis on the period following the Versailles Treaty of
1919. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 243}

\section*{The Far East in the Modern World}

Historical development of China, India, and Japan. Evolution of Oriental culture, economy, society, and government; the relation of America and the Far East, and the impact of Western ideas and institutions on the region. Survey of Philippines, Indo-China, Indonesia and Korea. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 247}

\section*{African History to Colonial Period}

Historical background of Africa south of the Sahara; pre- colonial and cultural development, including tribal histories, impact of colonialism and development of African nationalism. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 248}

\section*{African History - Modern Period}

Growth of colonial government; the economic role of colonies; early opposition movements against European imperialism; the psychology of the colonizer and colonized; civil wars and independence. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 250}

\section*{Topics in American History}

Selected topics in history for students interested in further developing and understanding specific periods, movements and leaders; emphasis on the social, political, economic, intellectual and philosophical events and implications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HISTORY 252}

\section*{History of Science}

Basic scientific principles, historic origins, and the evolution in scientific thought in the sciences from ancient civilization to present, with a comparative component between western and non-western sciences. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{[HORTIC] HORTICULTURE (096)}

\section*{HORTICULTURE 101}

\section*{Introduction to Ornamental Horticulture}

Plant structures, terminology and use of identification keys; study of culture and use of annuals, biennials, herbaceous perennials. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HORTICULTURE 102}

\section*{Turfgrass Management}

Lawn grasses and ground covers and insects, diseases and pests common to them; lawn planning, constructions, renovation, weed control and fertilizing. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HORTICULTURE 103}

\section*{Landscape Pest Management}

Diagnosis of plant diseases and disorders, physiological and pathological, and application of control measures for insects, diseases and pests of ornamental plants; survey of diagnostic and identification keys. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{HORTICULTURE 104}

\section*{Plant Propagation}

Techniques used in reproducing plants, both from seed and vegetative parts; propagating units, factors affecting rooting, growth substances, rooting media and seed treatment; principles of heredity, structure of genetic material and mechanics of transmission, and importance of genetics in hybridization. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{HORTICULTURE 105}

\section*{Identification of Herbaceous Landscape Plants}

Focus on identification of herbaceous used in the landscape. Study the ornamental value, use of, and culture of annuals, biennials, and perennials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Horticulture program/plan 241.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{HORTICULTURE 106}

\section*{Identification of Woody Landscape Plants I}

Focus on the identification, ornamental value, and culture of wood landscape plants. Emphasis on deciduous trees and coniferous evergreen trees and shrubs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission in to the Horticulture program / plan 241.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HORTICULTURE 107}

\section*{Soils and Fertilizers}

Study of soils, the formation of soils, physical and biological properties of soil, and the relationship of water in soils. Includes soil fertility, fertilizers and fertilizers applications, damage to soil, and soilless media. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Horticulture program/plan 241.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HORTICULTURE 201}

\section*{Supervised Horticulture Experience}

Focuses on placing students with a horticulture company during seasonal semesters, including practical experiences as performed in the horticulture industry. Regular supervisory visits by the instructor. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Admission to the Horticulture program/plan 241. 250 minutes per week. 5 credit hours.

\section*{HORTICULTURE 202}

\section*{Landscape Design I}

Aesthetic and economic importance of grounds improvement, residential and commercial; site analysis, requirements of landscape plans, scale drawings and landscape symbols; nursery classification, selection of plant materials, and landscape construction. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{HORTICULTURE 203}

\section*{Landscape Design II}

Continuation of Horticulture 202, with emphasis on commercial landscaping; blueprint reading planning and construction of decorative gardens, athletic fields, and public parks. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{HORTICULTURE 204}

\section*{Landscape Installation}

Focuses on landscape construction, including site preparation; drainage, irrigation, and lighting systems; installing edging, walls, fences, paving decks, water features, and plantings. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Horticulture program/plan 241.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{HORTICULTURE 205}

\section*{Arboriculture}

Continuation of plants identification, covering use and culture of deciduous and evergreen trees and shrubs. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HORTICULTURE 206}

\section*{Identification of Woody Land Plants II}

This course focuses on a continuation of woody landscape plant identification with emphasis on deciduous shrubs, broadleaf evergreens, vines and ground covers. Ornamental value and plant culture are also covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Horticulture program/plan 241.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{[HOSPTLY] HOSPITALITY (003)}

\section*{HOSPITALITY 102}

\section*{Hotel-Motel Sales Promotion}

Organization and function of sales department. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Hospitality 104. 150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{HOSPITALITY 103}

\section*{Food and Beverage Supervision}

Overview of the food and beverage field as part of hospitality industry and the departments that make up food and beverage operation in a hotel. Preparation and service of food and alcoholic beverages are included. The course is taught at a Chicago hotel. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Hospitality 104.
150 minutes per week. 3 credit hours.

\section*{HOSPITALITY 104}

\section*{Introduction to the Hospitality Industries}

History and organization of the Hospitality Industry, Hotel- Motel, Food Service, Travel-Tourism, with emphasis on career opportunities and jobs, economic projections and industry trends, and on the meaning of hospitality in each industry. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HOSPITALITY 108}

\section*{Introduction to Meeting and}

\section*{Convention Management and Planning}

The study of the Meeting and Convention Industry; the role and responsibilities of planners employed by associations, businesses, and other segments of the industry, including the study of key concepts of Meeting and Convention Planning such as: specific goal setting; research and selection of locations; facilities; transportation; support services; development of marketing, promotion, and publicity programs to achieve goals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Hospitality 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HOSPITALITY 202}

\section*{Front Office and Room Division Management}

Overview of the front office operation within the context of the hotel industry, including the understanding of the special problems of room division management. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Hospitality 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HOSPITALITY 205}

\section*{Hospitality Industry Purchasing}

Study of organization and administration of quantity purchasing policies and procedures; specifications, inventory buying, receiving, and issuing of items used in hospitality operations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HOSPITALITY 209}

\section*{Applied Meeting and Convention Management}

Employs material covered in previous Meeting and Convention Management courses and provides in-depth study of insurance, liabilities, legal aspects, managing exhibits, on- site management of catered events, and emergency and contingency plans. Using a case study format, each student will design and execute a convention/ meeting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{[HDFS] HUMAN DEVELOPMENT AND FAMILY SERVICES (168)}

\section*{HDFS 201}

\section*{Human Development and Sexuality}

A study of the social and psychological aspects of human sexuality. Topics include sexual development, cultural influences, gender identity, sexual dysfunctions, love and relationships. Emphasis will be placed on the mental and emotional aspects of human sexuality as well as current issues. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201.
150 minutes per week. 3 credit hours.

\section*{HDFS 202}

\section*{Intimate Relationships}

An overview of theories and research related to intimate/ romantic relationships as well as family members, friends, and professional. Students will be encouraged to think critically about the various components of healthy relationships including comparative research within self expectations and effects of such as perpetuated by the media and other sources. Topics include communication, conflict, love, stress, strains, and overall impact on relationships. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, and Child Development 102.
150 minutes per week. 3 credit hours.

\section*{HDFS 203}

\section*{Family Development Cross Cultural Perspective}

Course includes information on families and culture through an examination of research on child development, child rearing across cultures, and issues of equity, power and privilege. Readings and discussion on how culture and context influence all aspects of development whereby students gain in-depth understanding of families and lifestyles, communication and conflict, domestic violence, dysfunctions within families and inter-generational families. Course also provides a knowledge base for family assessment, understanding one's own family, tools to prepare one to work with families in a variety of settings and across the lifespan. Topics such as child rearing, language differences, racial identity, cultural traditions, and socio-economics status will be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101.
150 minutes per week. 3 credit hours.

\section*{HDFS 204}

\section*{Family Life Education}

Introduction to and history of the professional and practice of family life education, including needs assessment, evaluation of programs, understanding group process, and contexts of family life education. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{HDFS 205}

\section*{Internship for Human Development}

Participation in occupational area of study, work experience under supervision of both college and employer. Internship objectives developed by student and faculty adviser, with approval of employer, to provide appropriate work-based learning experience at the site 15 hours per week. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completed and accepted application, Grade of \(C\) or better in Child Development 101, and Child Development 102; all courses in HD program including any special certificates.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{[HUM] HUMANITIES (041)}

\section*{HUMANITIES 100}

\section*{Critical Readings in Humanities}

Introductory course to humanistic studies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 105}

\section*{The New World of Mass Media}

Analysis and evaluation of the strengths, limitations, impact, and social media biases of both print and electronic mass media. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{HUMANITIES 107}

\section*{Popular Culture - Mirror of American Life}

Interdisciplinary investigation of relationships between American life and popular culture; includes defining popular culture and high culture; role of formulating popular culture in films, role of advertising in popular culture, stereotypes of the sexes and ethnic groups, role of sports in American life, and popular music and its audience and television. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 123}

\section*{Introduction to Arts and Ideas}

Interdisciplinary introduction to the arts and ideas through the study of masterpieces past and present. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 143}

\section*{Introduction to Latin American/Latino Studies}

An interdisciplinary study of Latin American cultures, including Latino cultures in the U.S., from literary, artistic and philosophical perspectives. It explores various links between cultures in the U.S. and other Latin American countries through the study of historical and artistic periods, major movements, and integrated theories. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 145}

\section*{Intro to Diversity/Ethnic Studies}

An introduction to the broad field of diversity/ethnicity through the interdisciplinary study of art, music, literature, history, and philosophy, emphasizing the content, style, and historical context of the various diversity/ethnicity related artifacts, particularly those created by and featuring depictions of diverse/ethnic groups. Features African Americans, Latino/ Latin American, Native Americans, and European American artists, artistic expressions, and portrayals of these groups in the arts, by themselves and "outsiders" and the impact of these portrayals with the groups and society at large. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 201}

\section*{General Course I}

Introduction to the interdisciplinary study of arts and ideas, with emphasis on principles of analysis and interpretation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 202}

\section*{General Course II}

Continuing the interdisciplinary study of arts and ideas, with emphasis on principles of analysis and interpretation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 203}

\section*{Arts of Contemporary America}

Analysis and evaluation of major art forms of today - film, television, poster art, journalism, poetry, fiction, painting, and music. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 205}

\section*{World Literature I}

Masterpieces of world literatures including principal works from selected literary periods and traditions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 206}

\section*{World Literature II Existentialism}

Introduction to Existentialist philosophers, dramatists, and novelists. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{HUMANITIES 207}

\section*{The Great Books}

Focus on the formulation and ideas of Western civilization. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 208}

\section*{Women in Creative and Performing Arts}

Examination of the changing views of woman's nature, her relationship to man and to society as found in the creative and performing arts and philosophical works of a specific culture or cultures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 210}

\section*{Comparative Mythology}

A comparative introduction to mythology throughout the world. The emphasis is on the nature of mythology through the study of mythological themes in folklore, myth, and legendary narratives and the visual representation of those themes. The course includes non-Western and multi- cultural components. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 212}

\section*{Non-Western Humanities}

An interdisciplinary survey of significant intellectual and artistic achievements of non-Western cultures through selected works of literature, philosophy, visual art, music, and other performing arts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 213}

\section*{Hispano-American Arts and Literature I}

An interdisciplinary survey of significant intellectual and artistic achievements of Hispano-American cultures through selected works of literature, philosophy, visual arts, music, and other performing arts. Reading and analysis of representative masterpieces from a variety of nationalities and epochs focusing on Western literature. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 214}

\section*{Hispano-American Arts and Literature II}

Continuation of Humanities 213; an interdisciplinary survey of significant intellectual and artistic achievements of Hispano- American cultures through selected works of literature, philosophy, visual arts, music, and other performing arts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{HUMANITIES 215}

\section*{The Art and Philosophy of the African Continent}

African culture of the past and present, including art, music, literature, history, language, political science, and economics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{[432IBEW] IBEW}

\section*{432IBEW 702}

\section*{Electrical Circuitry}

Includes a study in circuitry commonly used in the residential housing industry in the Chicago metropolitan area, installation practices and hands-on wiring skills, such as splicing and termination. Writing assignments, as appropriate to the discipline, are part of the course. 3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 703}

\section*{Conduit Bending I}

Focus on the various methods of bending and conduit employed in the electrical construction industry and on hand- type benders and methods of conduit installation utilized in the commercial, industrial and residential housing industry. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 4.5 lab hours per week. 3.5 credit hours.

\section*{432IBEW 704}

\section*{Construction Technology}

A study of common hardware wiring materials used in the electrical construction industry, including a first aid, personal safety, job site safety, the use of rope, knot basic rigging, drill gauges, drilling and tapping holes in metal, drill sharpening, using knockout sets, hole saws, concrete anchors and fastening devices, and the use of hand tools, drill motors, hammer drills, and grinding wheels. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 705}

\section*{Print Reading I}

Focus on residential prints and their use with the National Electrical Code. Writing assignments, as appropriate to the discipline, are part of the course.
175 minutes per week. 3.5 credit hours.

\section*{432IBEW 706}

\section*{Conduit Bending II}

Advanced conduit bending techniques utilizing mechanical leverage benders and hydraulic benders commonly used in the electrical construction industry, including hand-operated and automatic cutting and threading devices. Writing assignments, as appropriate to the discipline, are part of the course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{Course Descriptions}

\section*{432IBEW 707}

\section*{Fire Alarm Systems}

Basic concepts and theory of installation and maintenance of fire alarms systems and fire suppression systems currently in use in the electrical construction industry, including testing, troubleshooting and safety techniques through hands-on training and field simulated problems and the Chicago and National Electrical Codes as they pertain to the installation and maintenance of fire alarm systems. Writing assignments, as appropriate to the discipline, are part of the course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{432IBEW 708}

\section*{Motor Control Systems}

Basic concepts and theory of installation, operation, and maintenance of motor control devices commonly used in the electrical construction industry, including skills in testing, troubleshooting, and safety techniques through hands-on training and the use of field simulated problems. Includes theory and the practical application of transformers as used in the electrical industry. Writing assignments, as appropriate to the discipline, are part of the course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{432IBEW 709}

\section*{Print Reading II}

Commercial and industrial construction prints and their use with both the Chicago Electrical Code and the National Electrical Code. Writing assignment, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{432IBEW 710}

\section*{Programmable Control}

Basic concepts and theory of installation, operation, and maintenance of programmable control systems commonly used in the electrical industry, including programming techniques and hands-on training in the lab on Allen-Bradley systems PL5/20, PLC5/11, and SLC 5/03 CPU programmable controllers. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 711}

\section*{Communications}

The BICSI Installer level telecommunications cabling installation training is designed for individuals with 2 to 5 years of low voltage cabling experience, including ANSI/ TIA/EIA wiring Standards and the National Electrical Code. LAN cabling system characteristics and network topologies, media and media characteristics, transmission fundamentals, connectorization, grounding and bonding, pulling and terminating copper and fiber, testing and troubleshooting copper and fiber, splicing fiber, firestopping site surveys and safety practices. A period of structured on- the-job training to be completed at the student's workplace. Writing assignments, as appropriate to the discipline, are part of the course. 2.5 lecture and 4.5 lab hours per week. 4 credit hours.

\section*{432IBEW 712}

HVAC Systems
The theory of thermal dynamics and the processes used in the heating, ventilation and air-conditioning systems. Hands-on training covers skills in piping, brazing, soldering, and the E.P.A. standards for charging, and evacuating air- conditioning and refrigeration systems. This course meets the Refrigeration Service Engineers Society Technician Certification Standard. The midterm examination shall be the R.S.E.S. Technician Certification test. It will be mandatory to pass the R.S.E.S. Technician Certification test before becoming a journeyman. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 713}

\section*{Instrumentation}

The basic concepts and theory of installation, operation, and maintenance of instrumentation control process commonly used in the electrical construction industry, including the theory of flow, pressure, temperature, and level. Calibration techniques are taught through hands-on training, bench testing, and lab work with a variety of instruments, the Fluke 702 Calibrator and the Rosemount Communicator. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 714}

\section*{Technical Math I}

Calculations and applications of the formulas used daily in the first year apprentice course of study and in the electrical construction industry. Writing assignment, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{432IBEW 715}

\section*{Technical Math II}

Calculations and problem solving techniques used in the application of Ohm's Law in accordance with the National Electrical Code. Writing assignment, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{432IBEW 716}

\section*{Electronics}

Basic electronics and its application to the communications industry, including basic electric theory, direct current, alternating current, writing Ohm's Law, the use and calibration of electrical test equipment, electrical safety, soldering skill, series, parallel and combination circuits, and electronic components. Writing assignments, as appropriate to discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 717}

\section*{Structured Wiring}

Focus on the wiring materials commonly used in the communications industry, including personal safety, jobsite safety, and shop safety as it applies to the communications industry. Applicable EIA/TIA standards, BICSI requirements, media characteristics, transmission characteristics, fire protection, documentation, grounding, bonding, electrical protection, and other relevant industry practices. Upon satisfactory completion of the course the student will be eligible for the BICSI Level I Installer Examination. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{432IBEW 718}

\section*{Integrated Systems I}

Introduction to the basic concepts and theory of digital and analog based audio communications systems, including skills in installation, balancing, testing, and troubleshooting of audio communications equipment. Included are constant voltage audio systems, paging systems, background music systems, and sound reinforcement systems. Writing assignments, as appropriate to the discipline, are part of the course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{432IBEW 719}

\section*{Integrated Systems II}

Basic concepts and theory of transmission and distribution of digital and analog based video signals, including transmission line theory and signal propagation along with installation, testing, and troubleshooting of video communications equipment. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 720}

\section*{Communication Systems Verification}

Testing, benchmarking troubleshooting of fiber optic and copper based communications systems, including the proper use of field test equipment, electrical safety, transmission characteristics, fault location and analysis of field test results. Writing assignments, as appropriate to the discipline, are part of this of course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{432IBEW 721}

\section*{Fiber Optics}

Basic concepts and theory of digital transmission of communications over fiber optic communications cabling, including skills in installation, testing and troubleshooting of fiber optic connectors and cabling systems. This course meets the Fiber Optic Association Certification for fiber optic installation. Writing assignments, as appropriate to the discipline, are part of this course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{432IBEW 722}

\section*{Computer Networking}

An overview of the basics of networking from the component hardware to the topology and theoretical foundation of networks, including various types of networks, including and network topologies. Writing assignments, as appropriate to the discipline, are part of this course.
3.5 lecture and 3 lab hours per week. 4.5 credit hours.

\section*{432IBEW 723}

\section*{Industrial Control Systems}

Focus on modern systems incorporating feedback loops, analog and pneumatic signals, and the smart family of transmitters. The dominant process variables - temperature, pressure, level, and flow - will be employed in the development of these skills. Covers electrical layout with an emphasis on initial conduit installation, reading blueprints of various building trades, calculating loads based on the electrical code, designing distribution systems, and sizing and protecting electrical conductors. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 2 lab hours per week. 4.5 credit hours.

\section*{432IBEW 724}

\section*{Electrical Power Systems}

The theory of distribution and usage of electricity in common industrial settings, including the basics of power distribution with an emphasis on transformers and the four basic power systems: delta, corner grounded delta, high leg delta, and wyes, and largest user of this distributed power: rotating equipment - motors. Covers single phase and three phase motors. The single phase motors include shaded pole, AC series, permanent split capacitor and motors with starting relays. The three phase motors include wyes, delta and wye/delta motors. Covers the newest technique for motor control, variable speed drives and the theory of pulse width modulation, and the safe operation of frequency drive motors. Includes line lengths, over voltage, overheating, harmonics, and drive components. Writing assignments, as appropriate to the discipline, are part of the course.
3.5 lecture and 2 lab hours per week. 4.5 credit hours.

\section*{432IBEW 725}

\section*{Low Voltage Systems}

Basic concepts and theory of the installation and maintenance of low voltage systems currently in use in the electrical construction industry including installation, testing, troubleshooting, and safety techniques through hands- on training and field simulated problems. Covers topics in security, life safety, access, environmental controls, communications, data transfer, and data storage. The associated electrical codes are included as they pertain to installation and maintenance of low voltage systems. Writing assignments, as appropriate to the discipline, are part of the course.
2.5 lecture and 3 lab hours per week. 3.5 credit hours.

\section*{INTEGRATED \{see ESL (Integrated) (136)\}}

\section*{[INTDSP] INTER-DISCIPLINARY STUDIES (104)}

\section*{INTER-DISCIPLINARY STUDIES 101}

\section*{College Success Seminar}

Introduction to academic skills that foster success in college and after college, critical thinking, reading, and writing as well as study skills, time management and stress management, use of technology for communication and research. These skills will be learned through the topic of the course which will be based in the idea of "Self and Community," but will vary depending on the instructor and department teaching the course. Topics will be approached from a variety of perspectives that represent interdisciplinary academic inquiry, and students will consider how to take personal responsibility for academic and career choices through exploration of relationship between self and community. Students will be required to do either twelve hours of service learning related to the content of the course, or to meet other criteria for an equivalent number of hours spent in outside activities as determined by the instructor. Writing assignments, as appropriate to the discipline, are part of the course.
50-150 minutes per week. 1-3 credit hours.

\section*{[ITALIAN] ITALIAN (052)}

ITALIAN 101

\section*{First Course}

Pronunciation and basic structures, speech patterns, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{ITALIAN 102}

\section*{Second Course}

Continuation of Italian 101. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ITALIAN 103}

\section*{Third Course}

Review and development of basic language skills, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 102, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ITALIAN 104}

\section*{Fourth Course}

Review of language structure and interpretation of readings, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 103, or Consent Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ITALIAN 206}

\section*{Intensive Oral Practice}

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 104, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{ITALIAN 213}

\section*{Introduction to Modern Literature}

Selections from contemporary writings, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{ITALIAN 214}

\section*{Readings in Literature}

Works from selected historical periods, conducted in Italian. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Italian 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[JAPANES] JAPANESE (054)}

\section*{JAPANESE 101}

\section*{First Course}

Pronunciation and basic structures, speech patterns, reading and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{JAPANESE 102}

\section*{Second Course}

Continuation of Japanese 101. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Japanese 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{JAPANESE 103}

\section*{Third Course}

Review and development of basic language skills, conducted in Japanese. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Japanese 102, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{JAPANESE 104}

\section*{Fourth Course}

Review of language structure and interpretation of readings, conducted in Japanese. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Japanese 103, or Consent Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{[LATIN] LATIN (0142)}

\section*{LATIN 101}

\section*{First Course Latin}

Includes mastery of vocabulary and grammar, accidence, syntax, and etymology focusing on developing skills and strategies for acquiring new vocabulary and the understanding of sentences structure that increases readiness to acquire other languages, related and non-related, and provides techniques that can be applied in many other fields. Analysis of Latin roots of English words, parse and translate passages from Latin Literature, recognize derivatives found in the Romance Languages, cultural content. (This course transfers to the four-year state universities as elective credit.) Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement test, or English 100 with a C or better, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{LATIN 102}

\section*{Second Course Latin}

The study of more complex grammatical and syntactical constructions, including increase in Latin vocabulary and understanding of etymology. Analyze of Latin roots and English words, parse and translate more difficult passages from actual works of Latin Literature, and recognize derivatives found in the Romance Languages. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Latin 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{[LIS] LIBRARY AND INFORMATION SCIENCE (039)}

\section*{LIBRARY AND INFORMATION SCIENCE 101}

\section*{Information Literacy}

This course is to help students gain the information literacy skills that enable them to find, retrieve, gather, analyze, and use information so they can prosper as a student, citizen and life-long learner. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours

\section*{[LIB TECH] LIBRARY TECHNOLOGY (050)}

\section*{LIBRARY TECHNOLOGY 101}

\section*{Introduction to Library Procedures}

Vocabulary, tools, systems, organization and equipment of modern libraries. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{LIBRARY TECHNOLOGY 102}

\section*{Multi-Media Technologies}

Clerical and supervisory duties in scheduling, circulation, maintaining, and operation of audio-visual and reproducing equipment. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{LIBRARY TECHNOLOGY 125}

\section*{Learning Resource/Library Practicum}

Practice course in which students are placed in learning resource center/ library situations. 20 hours per week plus two hour seminar. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Library Technology 101.
1-2 lecture and 3-20 lab hours per week.
1-6 credit hours.

\section*{LIBRARY TECHNOLOGY 201}

\section*{Library Public Service}

Clerical and supervisory duties required in reference and circulation areas. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{LIBRARY TECHNOLOGY 203}

\section*{Materials Preparation Procedures}

Clerical and supervisory duties required in catalog departments; familiarization with commercially produced card catalog sets, classification tables and indices, subject headings, filing, cross referencing, typing forms and records. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Library Technology 101. 150 minutes per week. 3 credit hours.

\section*{[LING] LINGUISTICS (132)}

\section*{LINGUISTICS 101}

\section*{Language and Culture}

Examines the relationship between language and culture. Includes the language socialization of children, gender differences in language, standard varieties and dialects of language, the effects of language on thought, and the nature of language in personal relationships. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LINGUISTICS 102}

\section*{Introduction to Linguistics}

Ageneral introduction to the theory of language, with a focus on language systems, phonology, morphology, syntax, semantics, and regional and social varieties of English. Examples of general linguistic principles will be drawn from English as well as other languages known to those who teach the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LINGUISTICS 103}

\section*{Instructional Media Second Language Teachers}

Introduction to a variety of instructional media in classrooms and learning centers. Includes creative and effective use, adaptive application of materials, selection and evaluation, use and maintenance, and special techniques and devices for class instruction. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 101, or CIS 120, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LINGUISTICS 104}

\section*{Cross-Cultural/Multi-Cultural Education}

Study of complex problems facing educational institutions in multi-cultural or pluralistic communities. Includes the role of education as an agent for change and the study of effective teaching strategies and resources for cross-cultural and multi- cultural teaching. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LINGUISTICS 201}

\section*{Issues in First and Second Language Acquisition}

Topics in first and second language acquisition, applying principles to specific problems through case studies, simulation, special projects, or problem-solving procedures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Linguistics 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[LIT] LITERATURE (036)}

\section*{LITERATURE 110}

\section*{Introduction to Literature}

Representative poetry and prose. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 111}

\section*{Poetry}

Reading of representative poems from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{LITERATURE 112}

\section*{Drama}

Reading of representative plays from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 113}

\section*{Fiction}

Reading of representative novels and short stories from various periods for analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 114}

\section*{Ideas In Prose}

Introduction to significant prose writing in major areas of thought. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 115}

\section*{Great Books Seminar/Topics Literature}

Focus on the Great Books Foundation's Great Books texts an examines in-depth the global themes in the literature for enrichment, stimulation, pleasure and greater self- knowledge. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of three credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 116}

\section*{American Literature from Colonial Days to Civil War}

Early American social and political documents, novels, short stories and poems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 117}

American Literature from

\section*{the Civil War to the Twentieth Century}

American prose and poetry from 1865 to 1914 . Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 118}

English Literature from its Beginnings to the Age of Johnson Important writers and representative literary forms from their beginnings to the Age of Johnson. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{LITERATURE 119}

\section*{English Literature from}

\section*{the Romantic Revival to the Twentieth Century}

Important writers and representative literary forms. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{LITERATURE 120}

\section*{Contemporary British and American Literature}

Major British and American writers of fiction, poetry, and drama of the 20th century. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 121}

\section*{Contemporary African American Literature}

Survey of major African-American writers from the period of Harlem Renaissance to present day. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 122}

\section*{Perspectives In Black Literature}

Sequence and scope of writing development by Blacks in America; analysis and interpreting of major works of prose, poetry, and drama. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 123}

Literature of the United States from the Civil War to the Present Development of the literature of the United States from the Civil War to the present through the analysis of representative texts. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 124}

\section*{Experimental Literature}

New directions in writing; experiments in poetry, prose, drama, and exploratory writing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{LITERATURE 125}

\section*{Psychology in Black Literature}

Analysis of books by African-American writers from a psychological point of view. Begins with the autobiography of Frederick Douglass and concludes with Black experiences by contemporary writers Cleaver and Jones. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 126}

\section*{Contemporary American Literature}

Major American writers of fiction, poetry, drama, and essays of the 20th century. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 127}

\section*{Contemporary British Literature}

Major British, Irish, and Scottish writers of fiction, poetry, drama, and essays of the 20th century. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 128}

\section*{Latin American Literature}

This course spans the centuries and the Western Hemisphere, including the pre-Columbian Mayan Indian authors of Popol Vuh and the worldrenowned contemporary practitioners of magic realism, and the authors from Mexico, the Caribbean, Central America, and South America, including the historical and cultural context of the works. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson
150 minutes per week. 3 credit hours.

\section*{LITERATURE 129}

\section*{United States Latino(a) Literature}

Explores the trends and movements of various periods of U.S. Latino(a) Literature in relation to U.S. Latino(a) social and cultural history. As part of the literature of the United States, these works are distinct from, although sometimes influenced by, Latin American Literature, which is written in Spanish or Portuguese by authors native to Latin American and Caribbean countries. U.S. Latino (a) texts in this course- poetry, fiction, drama, memoir, chronicle-depict various issues and themes pertinent to this ethnic segment of the United States, including Latino (a) writers' stylistic and thematic contributions to American mainstream literature. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 130}

\section*{Children's Literature}

Survey of children's books, stories, magazines, and related audio-visual material; criteria evaluated for building a literature program within the classroom. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 131}

\section*{Survey of Afro-American Poetry}

Historical and critical survey of African-American poetry; minor emphasis on Harlem Renaissance and major emphasis on contemporary AfricanAmerican arts movements. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 132}

\section*{Native American Literature}

Emphasizing perceptions and perspectives, this introductory course will examine the construction of Native American identity by exploring the works of different Native American writers and filmmakers. .Engages with and interrogates the Eurocentric view of the Native Americans and the Native Americans' view of themselves. Emphasizes the history, style, and content of the literature, situating it in a political, social, and cultural context. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 133}

\section*{African-American Fiction}

Aesthetic values that determine quality of fiction written by AfricanAmericans who profess a national consciousness; short fiction from anthologies, environment, style, and social implications emphasized; critical and creative writings required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 137}

\section*{The Black Woman In Black Fiction}

Exploration of images of the African-American in novels and short stories. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 140}

\section*{Great Books: Literary Sources of Art}

Focuses on the Great Books Foundation's Great Books texts and examines literary works as inspiration for art. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{LITERATURE 141}

\section*{Great Books: Literary Sources of Music}

Focuses on the Great Books Foundation's Great Books texts and examines literary sources as inspiration for music. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English
100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 142}

\section*{Great Books: Literary Sources of Opera}

Focuses on the Great Books Foundation's Great Books texts and examines literary sources as inspiration for opera. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 143}

\section*{Great Books: Literary Sources of Dance}

Focuses on the Great Books Foundation's Great Books texts and examines literary sources as inspiration for dance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 150}

\section*{Women's Literature}

Ideas and philosophy of women writers as represented in their works; problems of women and works portraying women characters in modern British and American literature. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 153}

\section*{Gay and Lesbian Literature}

Guided each year by a central sub-theme of the Queer culture, this course focuses on literary words by gay, lesbian, bisexual transgendered individuals. Examines theories and their relevance in contemporary Queer Culture. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 155}

\section*{Literature and Film}

Analysis of literature in film; comparison of literary and film techniques, verbal and visual language, and film and modern literature. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 156}

\section*{Creative Non-Fiction}

A survey course of creative nonfiction in a variety of forms; personal narrative essays, true crime nonfiction novels, and first person cultural criticism. This course introduces students to a genre of literature, to practical approaches to the determination of literary meaning, and to the concerns of literature in general. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 157}

\section*{Graphic Novels}

The world of graphic novels is a vast universe of stories ranging from the realistic and contemporary to the supernatural and historical. Students will read and discuss representative works with some attention to critical work and increase their enjoyment and appreciation of a variety of graphic novels, genres, and creators while determining literary meaning, form, and value. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.

\section*{LITERATURE 211}

\section*{Shakespeare}

Critical reading and discussion of representative Shakespearean histories, tragedies, comedies and sonnets. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 220}

\section*{World Literature}

Survey of masterpieces in world literature: principal works and writers, literary periods, and traditions with selections from ancient times through present day. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 221}

\section*{Topics in Literature:}

\section*{Romanticism in British and American Literature}

A study of works that exhibit the trends in literature and thought in Britain and America in the nineteenth century, and their Continental cross-currents. The course may emphasize particular authors, literary movements, or the development of a genre, or early examples of contemporary concerns. It may trace a problem, such as industrialization of the shift to urban life. Topics may change semester to semester but the chronological parameter will remain the same and the relevance to Literature 220 will be emphasized. Writing assignments, as appropriate the discipline, are part of the course.
Prerequisite: Grade of C or better in Literature 220, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{LITERATURE 223 \\ Introduction to Literary Genres}

Introduction to basic literary genres and their characteristics. Includes development of critical judgment and skill in analysis of literary works. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LITERATURE 299}

\section*{Science Fiction: Psychology and Prophecy}

A survey of major writers of science fiction. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{LOGISTICS/TRANSPORTATION/DISTRIBUTION (Also, see TRNS 330)}

\section*{[340MFGT] MANUFACTURING (340)}

\section*{340MFGT 101}

\section*{Introduction to Welding}

Introduction to the principles of welding techniques and various welding shop equipment presently used in most welding shops, including welding techniques, welding shop measurement, layout work, sawing, MIG welding operation, TIG welding operation, oxy/act cutting, and plasma cutting. Writing assignments, as appropriate to the discipline, are part of the course.
6 lab hours per week. 3 credit hours.

\section*{340MFGT 102}

\section*{Blueprint Reading, Dimensioning and Tolerances}

This course is an introduction to blueprint reading in the Manufacturing Technology program. Emphasis on analysis and interpretation of drawings applicable to all gear manufacturing. Includes principles and multi-view projection, sections, dimensions, characteristics, notes and specifications. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{340MFGT 103}

\section*{Intro to Total Quality Control}

Introduction to Quality Control and the development of the concept of total quality control engineering, process improvement and quality information systems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{340MFGT 104}

\section*{Statistical Process Control (SPC)}

Introduction to various distribution curves. Statistical control charts and the interpretation and use of process and product control data, including statistical process control and how to implement SPC in a manufacturing environment. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{340MFGT 111}

\section*{Machining Processes I}

Study of the theory and techniques in a multiple spindle manufacturing production environment. Covers orientation, physical requirements and procedures, housekeeping and safety, work habits and attitudes, screw machine prints, screw machine terminology, and tool crib familiarization and procedures. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT112}

\section*{Machining Processes II}

Study of Screw Machine Metrology, covering use of machinists' scales, snap and other gauges, micrometers, and other instruments utilized in the multiple spindle production environment. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 113}

\section*{Multiple Spindle III}

A study of theories and principles of multiple spindle practitioners utilizing practical lab applications. Study will include equipment operations such as tool grinding, electrical operations, tooling, and various service setting techniques. Writing assignments, as appropriate to the discipline, are part of the course.
4 lecture and 4 lab hours per week. 6 credit hours.

\section*{340MFGT 114}

\section*{Multiple Spindle IV}

A study of the theories and principles utilized by multiple spindle practitioners in manufacturing industries. The course includes various machine set-ups including turret tool bits, turret drilling, cross slide finishes, tapping and accelerating tools. The study will also include uncommon problems and solutions as well as employability skills. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 10 lab hours per week. 7 credit hours.

\section*{340MFGT 123}

\section*{CNC Milling Operations \& Programming}

This course introduces the programming setup and operation of CNC machining center. Topics include programming formats, control functions, program editing, part production, and inspection. Various projects will strengthen the proper use, programming, troubleshooting of this equipment in the manufacturing setting. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 137}

\section*{CNC Turning Operations \& Programming}

This course introduces the programming, setup, and operation of CNC turning centers. Topics include: programming formats, control function, program editing, part production and inspection. Various projects will strengthen the proper use, programming and troubleshooting of this equipment in the manufacturing setting. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 4 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{340MFGT 138}

\section*{Introduction to Solidworks}

This course is an introduction to the new designing techniques and capabilities of solid modeling using the Solidworks software and provides hands-on experience to build parametric models of basic parts and assemblies with dynamic operation of components. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{340MFGT 139}

\section*{Print Requirements - Quality Assurance}

This course teaches the fundamentals of production requirements and the measuring skills needed to verify print requirements. Engineering and process drawings are covered in detail including symbols, dimensions, part geometry and assembly requirements. Geometric dimensioning and tolerancing is introduced. Metrology includes micrometers, calipers, and layout instruments. Students will be introduced to Statistical Process Control (SPC) and will prepare control charts and solve problems in teams. Students will also earn the MSSC Quality Procedures and Measurement credentials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for Math 99 or Higher or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{340MFGT 140}

\section*{CNC Fundamentals}

This course is designed to introduce students to the CNC process and to the operation of the CNC lathe and mill. The information presented will include introduction to CNC basic set-up, tooling, operation, and trouble shooting. Students will earn a NIMS Level 1 CNC Operator credential. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Math 099 and 340MFGT 111 OR 340MFGT 112 OR Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 141}

\section*{Manufacturing Materials \& Processes}

This course will provide the student with a general understanding of the behavior of the materials commonly used in manufacturing; the basic techniques used in processing them into useful products, the scientific theory underlying those processes, and the criteria for selecting particular tools, machines, and processes. Students will earn the MSSC Manufacturing Processes and Production credential. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{340MFGT 142}

\section*{Geometric Dimensioning \& Tolerancing}

This course expands upon the student's basic knowledge of mechanical drawings by adding form and feature controls in order to meet assembly requirements at the lowest cost. Topics include datums, feature of size, material condition, the envelopment principle, and GD\&T callouts for form, orientation, position, profile and runout. The differences between traditional dimensioning and geometric dimensioning will be stressed. This course also helps students prepare for an ASME certification in GD\&T. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340MFGT 139 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{304MFGT 143}

\section*{Advanced Metrology}

The course focuses on the use of the Coordinate Measuring Machine (CMM) and the optical comparator to inspect machine parts to the current ASME Y 14.5 Geometric Dimensioning and Tolerancing (GD\&T) standards. Lab exercises will focus on the set up and operation of precision measuring tools, including the CMM and the optical comparator, to inspect complex parts. Bore gages, attribute gages, gage blocks and pins and their use in calibration will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion OR Concurrent enrollment in 340MFGT 142 OR Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 144}

\section*{Wire Electrical Discharge Machining}

The course covers operations and procedures for wire EDM machining systems. Includes wire EDM overview, EDM operating processes, EDM machine functions, EDM manual part programming, and EDM machining operations. Students may also earn the NIMS Wire EDM credential. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340MFGT 140 OR Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 145}

\section*{Computer Integrated Manufacturing (CIM)}

Students will study aspects of automated assembly and process control, including programmable controllers, computer assisted part programming, CAD/CAM systems computerized instrumentation and robotics. This course stresses a systems approach and how hydraulic, pneumatic and electromechanical components function together as a system. Troubleshooting automation is a major activity of this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340MFGT 140, 340MFGT 291 AND 340MFGT 191 OR Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 146}

\section*{Team Dynamics in Manufacturing}

This course provides an exploration into how employees work in groups for the completion of organizational objectives. Emphasis is placed on the growing dependency on self-directed work teams in a manufacturing environment. This course equips students with the ability to manage work teams, work in teams successfully, and to obtain the results via team dynamics. In addition, impacts upon customer satisfaction are explored. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{340MFGT 191}

\section*{Industrial Electricity}

A study of DC and AC electricity as applied to industrial circuits. The topics include fundamentals of circuit analysis, single and three phase circuits, parameters, safety issues in industrial electricity, such as current, voltage and power and troubleshooting methods using test equipment. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{340MFGT 201}

\section*{Supervised Work Based Learning}

Provides an opportunity to perform in an industrial setting. Students are placed in a college-approved employment situation for eight weeks on a full-time basis. Writing assignments, as appropriate to the discipline, are part of the course.
15 lab hours per week. 3 credit hours.

\section*{340MFGT 207}

\section*{Introduction to MASTERCAM}

Covers MASTERCAM software to create post geometry and assign toolpath to the geometry. By translating using a post- processor, CNC programs can be automatically generated and communicated to the machine tolls in the Manufacturing Lab. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{340MFGT 215}

\section*{Multiple Spindle V}

Advanced study emphasizing practical and theoretical problems involving multiple spindle set up, operation, and production. Strongly recommend concurrent enrollment in Manufacturing Technology 201. Writing assignments, as appropriate to the discipline, are part of the course.
12 lab hours per week. 6 credit hours.

\section*{340MFGT 216}

\section*{CNC Machining}

CNC machinery as it applies to the operator, including introduction to CNC set-up, tooling, operation, and trouble shooting. Writing assignments, as appropriate to the discipline, are part of the course.

\section*{340MFGT 253}

\section*{Pneumatics}

Study of the basic principles of pneumatics, with emphasis on schematic interpretation, valves, actuators, compressors, line sizing and dryers, including the use of supplier catalogs and technical manuals. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{340MFGT 255}

\section*{Industrial Hydraulics}

Study of basic principles of hydraulics; emphasis on schematic interpretation, valves, actuators, compressors, line sizing, fluid viscosity, and reservoir capacity, including instruction in the proper use of supplier catalogs and technical manuals. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{340MFGT 291}

\section*{Programmable Logic Controllers}

Basic concepts and skills needed to program and apply programmable logic controllers in industry. Overview of basic terminology, ladder programming, memory structure, processing and programming devices. Students will also experiment in operation, programming and industrial applications. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{340MFGT 292}

\section*{Principles of Mechanisms}

Understanding and analysis of basic principles of motion characteristics as it relates to industrial mechanisms. Introduction to working principles of drive mechanisms, bearings, lubricants, cams, gears, and pulleys, including basic troubleshooting and maintenance procedures used in industrial settings. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{340MFGT 295}

\section*{Electrical Motor Controls}

A study of different types of electrical motor controls applied currently to industrial circuits, including safety issues, instrumentation, tools, interpretation of line diagrams, and the overview of different types of motor controls. Troubleshoot and repair problems related with different motor control applications in the industry. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{340MFGT 297}

\section*{Advanced Mechanical Systems}

Introduction to Mechanical Drive systems, basis and key fasteners, power transmission systems, v-belt drives, heavy duty v-belt drives, v-belt selection and maintenance, lubrication concepts, torque and power measurement, selection and application of hand and power tools, ratchets, torque wrenches, and torque settings for equipment assembly. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{[MATH] MATHEMATICS (045)}

\section*{MATHEMATICS 098}

\section*{Beginning Algebra with Geometry}

Algebra of real numbers, integer exponents, polynomial operations, factoring, rational and complex expressions, linear equations, word problems, quadratic equations and graphical and algebraic solutions of simultaneous linear equations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in FS Math 3001 and FS Math 3002, or COMPASS placement test score within ranges for PRE-ALGEBRA (29-99) and ALGEBRA (15-23).
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 099}

\section*{Intermediate Algebra with Geometry}

Algebraic operations involving rational exponents, including scientific notation. Algebraic expressions , including radical and rational expressions. Solutions of quadratic, quadratic in form, rational, radical, and absolute value equations. Solutions of compound linear inequalities. Solutions and manipulations of literal equations. Graphical and algebraic solutions of systems of linear equations in two and three variables; graphical solutions to systems of linear inequalities. Graphs of linear and quadratic equations. Geometry topics: perimeter, area of geometric figures, triangles, rectangles, and circles; volume of sphere, cylinder and pyramid. Pythagorean Theorem and distance formula. Similarities and proportions. Applications of problem-solving skills are emphasized throughout the course. Student should be exposed to graphing calculator technology and/or computer algebra systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 98, or Grade of S in FS Math 3004, or COMPASS placement test score within ranges for PREALGEBRA (17-99) and ALGEBRA (24-42), or Consent of Department Chairperson.
250 minutes per week. 5 credit hours.

\section*{Course Descriptions}

\section*{MATHEMATICS 107}

\section*{Mathematics for Technicians I}

Designed to provide mathematical tools for students in terminal technical curricula; emphasis on practical aspects of mathematics and less upon the theoretical; topics include elementary algebra operations, simultaneous and quadratic equations, exponents and radicals, logarithms, introduction to trigonometry, vectors, and use of calculator. Writing assignments, as appropriate to the discipline, are part of the course.
50-250 minutes per week. 1-5 credit hours.

\section*{MATHEMATICS 108}

\section*{Mathematics for Technicians II}

Continuation of Mathematics 107. Topics include trigonometric functions, solution of oblique triangles, vectors, Cartesian and polar coordinate systems, graphs of functions and basics of differential and integral calculus. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 107, or Consent of Department Chairperson.
50-250 minutes per week. 1-5 credit hours.

\section*{MATHEMATICS 109}

\section*{Concepts in Mathematics}

Selected topics from various branches of mathematics illustrate the development of important ideas in mathematics and how these concepts are interrelated. Topics include sets and logic, numbers and sequences; measurement, interest and percent; calculators and computers; equations and linear programming, probability and statistics. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 118}

\section*{General Education Math}

This course is designed to fulfill general education requirements. It is not designed as a Prerequisite for any other college mathematics course. This course focuses on mathematical reasoning and the solving of reallife problems. Three topics are to be studied in depth, chosen from the following list: counting techniques and probability, game theory, geometry, graph theory, linear programming, logic/set theory, mathematics of finance, and statistics. Mathematical modeling must be integrated in any combination of topics selected. Applications involving problem-solving skills are emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50), or Consent of Department Chairperson. 200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 120}

\section*{Modern Mathematics}

Foundations of elementary mathematics to develop appropriate backgrounds for pre- and in-service teachers. Introduction to new materials of present day mathematics programs. Art and science of mathematics stressed over the usual skills and development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 99, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 121}

\section*{Mathematics for Elementary Teachers I}

Focus on mathematical reasoning and problem solving. Topics include operations with rational and irrational numbers, sets, functions, logic, numeration systems and number theory, solution of linear equations in one variable. Included Are problem-solving with the use of calculators and computers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50) or Consent of Department Chairperson. 200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 122}

\section*{Mathematics for Elementary Teachers II}

A continuation of Math 121. Topics include probability and statistics; lines, angles, polygons, Pythagoran Theorem, circles, solids, areas, volume, measurements. Applications are included throughout course. Problem solving with the use of calculators and computers is emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 121, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 125}

\section*{Introductory Statistics}

Emphasizes on interpretations and applications of techniques using descriptive and inferential statistics. Topics include: frequency distributions, histograms, and measures of central tendency, measures of dispersion, and measures of position, probability concepts, the binomial distribution, the normal distribution, the Central Limit Theorem, confidence intervals, hypothesis testing, and an introduction to correlation. The use of technology, e.g., graphing, calculator, computer software, etc., is an integral part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50), or Consent of Department Chairperson.
50-200 minutes per week. 1-4 credit hours.

\section*{MATHEMATICS 126}

\section*{Algebra for Middle School Teachers}

Focuses on the concept of functions in college algebra and the needs of middle school teachers in accordance to the National Council of Teachers of Mathematics Standards for Teaching Mathematics. Topics include basic definition of different functions and their properties. The following algebraic concepts will be explored: linear functions, systems of linear equations, quadratic functions, non-linear data, combinatorics, probability, exponential functions, log functions, square root functions, absolute value, and trigonometry as periodic functions. Problem solving using calculators, CBLs, and computers is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 121 and Math 122.
200 minutes per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{MATHEMATICS 127}

\section*{Geometry/Trig For Middle School Teachers}

This course focuses on the concepts of plane and solid geometry and trigonometry. It is designed to meet the needs of a middle school teacher in accordance with the National Council of Teachers of Mathematics Standard and the Professional Standards for Teaching Mathematics. Topics include basic definitions and properties of plane and solid figures, congruence, similarity, constructions, Pythagorean Theorem, measurements, transformations, the unit circle and right triangle trigonometry. Problem solving with the use of calculators and computers is emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 140}

\section*{College Algebra}

Emphasis on the notion of a function as a unifying concept. Families of functions and their characteristics include: polynomial, rational, exponential and logarithmic functions, solving inequalities and systems of non-linear equations, and applications involving problem-solving skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50), or Consent of Department Chairperson. 200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 141}

\section*{Plane Trigonometry}

Trigonometric functions and application of trigonometry to the sciences, including definitions, properties and graphical characteristics of trigonometric functions; radian measure; trigonometric identities and equations; Law of Sines and Law of Cosines; inverse trigonometric functions; DeMoivre's Theorem; and vectors, and applications involving problem- solving skills will be emphasized throughout the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Math 140 with a grade of \(C\) or better, or Placement Test, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 143}

\section*{Precalculus}

Emphasizes the notion of a function as a unifying concept for the topics of college algebra and trigonometry. Families of functions and their characteristics include: polynomial functions; rational functions; exponential and logarithmic functions; and trigonometric functions; and applications involving problem-solving skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50), or Consent of Department Chairperson. 300 minutes per week. 6 credit hours.

\section*{MATHEMATICS 144}

\section*{Finite Mathematics}

Covers mathematical applications that are useful in solving problems in business and social science, including linear functions, linear systems, linear programming, finance, set theory, logic, counting techniques, and probability theory. The use of technology, e.g., graphing calculator, computer software, etc., is an integral part of this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 140, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (4399) and College ALGEGRA (51-99) and TRIGONOMETRY (1-50), or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 146}

\section*{Discrete Mathematics}

Introduction to mathematical analysis of finite collections and mathematical foundations of sequential machines, digital logic circuits, data structures, and algorithms. Includes sets, counting, recursion, graph theory, nets, automata, and formal grammars and languages. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 140, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (4399) and College ALGEGRA (51-99) and TRIGONOMETRY (1-50), or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 165}

\section*{Computer Mathematics}

Concepts concerning sets, significant digits, flow charts. The decimal, octal, binary and hexadecimal number systems. Elementary symbolic logic. Rational numbers in non- decimal bases. Scientific notation. Operations with matrices. Graphical methods of linear programming and introduction to the simplex method. Elements of Boolean algebra. Rudiments of a programming language will be presented. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 99, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (43-99) and College ALGEGRA (1-50), or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 202}

\section*{Number Concepts/Mid School Teaching}

This course has been designed keeping both the Illinois Professional Content Standards for Teaching (Mathematics) content necessary to prepare students to be middle school mathematics and science teachers. A wide range of topics across number of theory and measurement will give the students a grasp of the depth and breadth of mathematics outside of the traditional course structure. Problem solving, estimation, measurements, and construction of simple theories of numbers will be treated with and without the use of technology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 126, or Math 140, or Math 143. 200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 204}

\section*{Calculus for Business and Social Sciences}

Introduction to differential and integral calculus with applications pertinent to business and social science. The five-credit hour course will include functions of several variables, partial derivatives, maximum, minimum of functions of several variables and LaGrange multipliers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 140, or COMPASS Placement Test Score range within PRE-ALGEBRA (17-99) AND ALGEBRA (4399) and College ALGEGRA (51-99) and TRIGONOMETRY (1-50), or Consent of Department Chairperson.
50-250 minutes per week. 1-5 credit hours.

\title{
Course Descriptions
}

\section*{MATHEMATICS 207}

\section*{Calculus and Analytic Geometry I}

Equations of lines, circles and conic sections, limits, and continuity. Derivatives and their applications to curve sketching, maxima-minima and related rate problems. The anti-derivative and definite integral, including change of variables and the fundamental theorem of calculus. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Math 140, and Math 141, or Math 143, or Placement Test, or Consent of Department Chairperson.
250 minutes per week. 5 credit hours.

\section*{MATHEMATICS 208}

\section*{Calculus and Analytic Geometry II}

Derivatives of trigonometric and inverse trigonometric functions, logarithmic, and exponential functions. Techniques and applications of integration. Indeterminate forms and L-Hospitals rule. Improper integrals, series and power series. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 207, or Consent of Department Chairperson.
250 minutes per week. 5 credit hours.

\section*{MATHEMATICS 209}

\section*{Calculus and Analytic Geometry III}

Curves in the plane and in 3 spaces. Polar coordinates and parametric equations. Vectors in 2 dimensional and 3 dimensional space. Derivatives of vector-valued functions. Partial derivatives. Double and triple integrals. Applications. Line integrals and Greens theorem. Divergence and curl. Surface integrals. Gauss theorem and Stokes theorem. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 208, or Consent of Department Chairperson.
250 minutes per week. 5 credit hours.

\section*{MATHEMATICS 210}

\section*{Differential Equations}

A first course in ordinary differential equations; solutions of first order and first degree differential equations, linear differential equations with constant co-efficients. Linear differential equations of higher order, special differential equations of second order and differential equations of first order but not of first degree. Numerical methods, series solutions, and applications included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 208, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 212}

\section*{Linear Algebra}

Introduction to Linear Algebra for students who have studied some calculus. Emphasis on computations with vectors and matrices including systems of linear equations and matrices, determinants, vectors in Euclidean space, abstract vector spaces, linear mappings, computation of eigenvalues and eigenvectors. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 208, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 214}

\section*{Advanced Calculus for Business and Social Science}

Topics include related rates, differentials, LaGrange and simple differential equations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 204.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 216}

\section*{Statistics for Business Majors}

The basic concepts of statistical analysis used in business decisionmaking, including probability and how uncertainty is dealt with in real life. Included are: measure of central tendency and variability, random variable and probability distributions, estimation, tests of hypotheses, chi square tests, linear regression and correlations and one-way analysis of variance. Applications are included throughout the course. Problem solving with the use of calculators and computers is emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Math 140, or Math 143,with a grade of C or better, or Placement Test, or Consent Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{MATHEMATICS 225}

\section*{Honors Math Survey I}

Survey in general mathematics for the liberal arts student, includes history, sets, number bases and logic, algebra of the real number system, an introduction to probability and statistics, calculators and computers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MATHEMATICS 299}

\section*{Special Topics Mathematics}

Special Topics in Mathematics will be discussed along with appropriate computer and calculator activities. New developments will be emphasized, especially materials useful in K-12 education and industry. Each special topics course will have a sub-title. Students can take courses with different sub-titles for credit. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
50-300 minutes per week. 1-6 credit hour.

\section*{MECHANICAL TECHNOLOGY \\ (also see CAD Technology 049)}

\section*{[MEDIACM] MEDIA COMMUNICATIONS 011}
(also see Communication Media (004)

\section*{MEDIA COMMUNICATIONS 102}

\section*{Announcing}

Develops the ability to transform written copy or script into voice performance, emphasizing copy preparation, breath control, pronunciation, articulation, use of full dynamic range, microphone techniques, and hand signals. A variety of copy, including commercials, news, and public service announcements are covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 145}

\section*{Introduction to Media Communication}

A survey of the history, technology, structure and operation of the telecommunications industry. Topics include advertising, audience measurement, network television, radio station operations, cable television, broadcast regulations and licensure, satellite communications, pod casting, and careers in media communications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: : Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 160}

\section*{History of Radio Genres}

An in-depth look at the progression of radio since its inception, as well as examination of the huge impact that its had on American culture. Introduction to the different radio genres, and they will examine the drastic transition these genres have undergone over the years. Writing assignments, as appropriate to the discipline are part of the course.
Prerequisite: : Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 170}

\section*{The History of Television}

An in-depth look at the progression of television since its inception and examination of the massive impact that its existence has had on American culture. Students will also study the different television program genres, such as soap operas, sitcoms, newscasts, reality shows, and many others, as they examine the sweeping changes that have taken place in television programming over the past several decades. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: : Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 190}

\section*{Language, Culture and Media}

Television, radio, print, and film reflect and transmit culture through language and images. Using the media as a context, this course will examine a variety of depictions of culture and language and will evaluate perceptions about language and culture within various segments of society. Students will be encouraged to think critically about language choices and to analyze the impact of language and media on those choices. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or Grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 203}

\section*{Media Writing}

Creation and preparation of scripts for radio and television programs and segments which include news copy, commercial copy, public service announcements, continuity and dramatic copy. Special attention will be paid to format and form. Word processing skills will be utilized in this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 210}

\section*{Radio and TV Workshop}

Workshop in both mediums, emphasizing variety of producing air programs; location instruction and televising of meetings, plays, sports events for TV and radio; both media will be used to compare and isolate various techniques of each area. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 221}

\section*{Radio Production I}

Introduction to the audio control system and training in operation of related equipment. Emphasis on how the various components integrate into a system. Demonstration of expertise through class exercises laboratory projects will be required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, and concurrent enrollment in MEDIACM 145, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 222}

\section*{Radio Production II}

Review of the audio control system and its various equipment components. Emphasis on creating, producing, and directing announcements, news and drama which may be utilized by Kennedy Kings College's own WKKC FM. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 221, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 223}

\section*{Advanced Broadcast Writing}

A direct continuation of \#MC 203, this class is provides experience in writing longer scripts, for various types of media outlets such as television, radio, and the Internet. With an emphasis on content, clarity and flow. Basic script formats, terminology, and writing techniques for documentaries, commercials, public service announcements, promos, as well as entertainment and fictional programs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and MEDIACM 203. 150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 224}

\section*{Broadcast Performance}

Enhances and extends the skills developed in (MC
102). Develops the ability to perform in various on-air capacities in radio, television and other broadcast formats, emphasizing copy analysis and preparation, ad-libbing, constructive self-critiques, and development of personality, style and conversational delivery. Use of full dynamic range, microphone techniques, and hand signals will be emphasized. A variety of copy and situations, including hosting, anchoring, reporting, commercial announcing, and other specialties will be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, and Grade of C or better in MEDIACM 102 and MEDIACM 203, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{MEDIA COMMUNICATIONS 231}

\section*{TV Production I}

Introduction to the television production system and training in the operation of the video and audio equipment necessary to produce programming. Emphasis will be how the various components integrate into a system. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, and concurrent enrollment in MEDIACM 145, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 232}

\section*{TV Production II}

Continuation in the development of expertise in the use of various audio and video components. Television production projects will require creating treatments, storyboards, and scripts, for the production of a final program. Emphasis on integration of equipment, production personnel, and script to create finished television production. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 231, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 234}

\section*{Producing for Television}

An examination of the vital role of the television producer, focusing on the three areas of production: pre-production, production and post production. Emphasis of the importance of planning, show creation, budgeting, scheduling, management, team building, field producing, and delivery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 231, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 240}

\section*{Mini-Cam and Videotape Editing}

Evaluate, set-up, light, mike, and properly record in a single- camera remote environment for desired production results. Learn to log and digitally edit recorded footage into professional programs and segments, using video editing software and digital effects generator. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 231, or MEDIACM 232, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 241}

\section*{Video Editing}

Introduction to the fundamentals of digital non-linear editing concepts and practices. Basics of importing (digitizing) video, basic editing techniques, trimming clips, basic effect palettes, overlaying audio with video, recording narration and music; and saving the finished production to digital as well as Quick Time file. Students learn to storyboard their ideas and develop the ability to edit in sequence to tell a story. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 231 and MEDIACM 240.. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 242 (formerly 235)}

\section*{Television Graphics}

The important function of television graphics in the packaging of television programs, focusing on the operation of the character generator, digital effects generator, still store, 35 mm slide projector, 16 mm film projector, and the graphics capabilities of the video switcher and their use in graphics packaging.. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 231, or MEDIACM 241, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 244}

\section*{Adv. Video Gripping \& Lighting}

Advanced television production experience, focusing on in studio multicamera productions, with an emphasis on production (lighting, equipment setup, etc.) as well as single camera EFP (electronic field production), and ENG (electronic news gathering) techniques. Students will examine the tools and techniques of lighting for television, both on location and in the studio. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100, and concurrent enrollment in MEDIACM 231 and MEDIACM 240, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 245}

\section*{Advanced Production Workshop}

Learn the steps necessary to develop a program concept and to turn it into a completed radio and/or television program. Emphasis is placed upon coordinating of technical, budgetary, personnel, scheduling, and equipment aspects of achieving effective productions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in MEDIACM 222, and MEDIACM 232, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 260}

\section*{Media Sales and Marketing}

A study of sales and marketing relative to broadcasting, cable television, and the internet. Introduction to the principles of packaging a product to advertisers and program buyers. Review of organization management at television stations, networks, cable outlets, and Internet Service Providers (ISP). Emphasis is placed upon theoretical practical aspects of developing presentation skills, including instruction and utilization of media research materials such as rating books in positioning sales. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 145, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 261}

\section*{Project Mgmt. \& Team Dynamics}

Basic principles of management, including the role of "executive producer" of a media related project. The course emphasizes skills and techniques used for goal setting, strategic planning, organization, communication, risk management, and team collaboration. Student will work together in production teams, as they conceptualize, design and execute a digital media production project. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or Grade of C or better in English 100 and Grade of C or better in MEDIACM 221 and MEDIACM 231, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{MEDIA COMMUNICATIONS 270}

\section*{Intro to Radio \& TV Programming}

Survey of programming from various perspectives, including: comparison and contrast of major network approaches vs. approaches of independent producers. Introduction to program strategies through elements to be considered in positioning programs on the air. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MEDIACM 145 and MEDIACM 221 and MEDIACM 231, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 271}

\section*{Intro to Interactive Media}

A practical introduction to interactive media, otherwise known as the Internet, including While in this course, students will become better acquainted with new technologies and methods for creating participatory media, while making it available through nontraditional outlets. Students will develop new ideas for assisting in this tradition, with both the Internet, as well as the traditional broadcast space. Class topics will also cover the technologies that go hand in hand with both the creation and utilization of interactive "new" media., emphasizing group projects. Introduction to the unique issues encountered while producing for interactive media, such as streaming, bandwidth, compression, memory allocation, and optimization. Various distribution media will be examined including CDROM, DVD, and the Internet. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, Or Grade of C or better in English 100 and Grade of C or better in (MEDIACM 145 and CIS 120, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 272}

\section*{Adv AUD/VID Prod-Interactive Media}

Provides advanced practical knowledge and experience in the area of digital video production as it relates to interactive media. Students will explore further the changes and technical challenges associated with web-based video as a communication medium. Through group and individual projects, students will learn to use interactive delivery systems to create effective user experiences. Writing assignments, as appropriate to the discipline are part of the course.
Prerequisite: Eligibility for English 101, Or Grade of C or better in English 100 and Grade of C or better in (MEDIACM 231 and MEDIACM 271, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{MEDIA COMMUNICATIONS 295 (formerly 250) \\ Practicum Internship}

Planned and supervised training in which the application of theory to actual practice prepares a student for working independently toward specific career objectives. The internship/practicum generally occurs after the student has completed eighteen Media Communications credit hours. It takes place at a regular worksite and instruction/supervision is provided by an employee at the worksite. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{MEDIA COMMUNICATIONS 298 (formerly 275)}

\section*{Audio, Video or Internet Capstone}

This course is intended to provide students with the opportunity to integrate their television, radio, and internet skills be preparing an actual portfolio suitable for employment in the media industry. With an emphasis on quality, the Capstone portfolio will feature a variety of product projects to showcase specific, industry related skills obtained while enrolled in the

Media Communications program at Kennedy- King College. In addition, students will create a marketing package for themselves, including a resume, business cards, interactive website, and audition/resume disk. Student must obtain consent of Program Director to take this course concurrently with their internship course, MEDIACM 250. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairpeson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{[MENHLTH] MENTAL HEALTH (118)}

\section*{MENTAL HEALTH 223}

\section*{Introduction to Addictions Studies}

Includes treatment strategies, perspectives, and understanding of the addiction process and its effects upon the individual, the family, employers, and society. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MENTAL HEALTH 224}

\section*{Principles and Practices of Addictions Studies}

Basic clinical skills in alcoholism and substance abuse field; strategies in working with denial and resistance; diagnostic and assessment skills; history-taking; individual, family and group treatment modalities utilized with the alcoholic and/ or substance abuser; termination process; aftercare and referral process. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MENHLTH 223, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MENTAL HEALTH 225}

\section*{Introduction to Developmental Disabilities}

Survey of developmental disabilities, from birth through adulthood, with emphasis on identification and evaluation. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MENTAL HEALTH 228}

\section*{Principles of Mental Health Practices}

Mental health, the settings in which mental health problems are treated, and common types of mental health problems; review of treatment strategies and methods of intervention. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MENTAL HEALTH 229}

\section*{Practicum In Addictions Treatment}

Students work 20 hours per week in a mental health setting in the community under supervision of mental health professionals and participate in a two-hour seminar once a week, relating field experiences to mental health theory. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MENHLTH 228, or Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{Course Descriptions}

\section*{MENTAL HEALTH 230}

\section*{Addictions and Family Treatment}

Study of affects of alcoholism and substance abuse on the family; how spouse, children and extended family react to problematic drinking or drug abuse; examination of treatment, including self-help groups. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MENHLTH 223, and MENHLTH 224, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MENTAL HEALTH 231}

\section*{Addictions Treatment of Special Populations}

Application of needs of special treatment populations, diagnosis and treatment of adolescent and elderly clients, sexual issues; patient education, prevention strategies, spirituality, relapse prevention and employee assistance programming, AIDS, and eating disorders. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in MENHLTH 223, and MENHLTH 224, and MENHLTH 230, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{[MCROBIO] MICROBIOLOGY (024)}

\section*{MICROBIOLOGY 233}

\section*{General Microbiology}

Morphology, physiology, classifications and culture of bacteria and related organisms. The role of bacteria related to human welfare and to plants and animals. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 8 credit hours will be counted towards graduation.
Prerequisite: Grade of C or better in Biology 114, or Biology 121, or Biology 226, or Consent Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{MICROBIOLOGY 234}

\section*{Applied Microbiology}

A sequence course to a second semester fundamentals course in microbiology. Designed for students majoring in biotechnology. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Grade of C or better in Microbiology 233.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{MICROBIOLOGY 235}

\section*{Pathogenic Microbiology}

Classification, morphology, and biochemical activities of microorganisms found in skin, eyes, nose and throat sputum, blood, urine and feces. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Microbiology 233, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{MICROBIOLOGY 236}

\section*{Environmental Microbiology}

This course examines the interaction of microorganisms with other organisms and the physical environment. In particular, microbial ecology, biogeochemical cycles, and public health microbiology will be addressed. The use of microorganisms in environmental clean-up (bioremediation) will also be discussed. Field sampling methods and analytical techniques (including molecular biology methods) will be utilized. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 121.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{MICROBIOLOGY 240}

\section*{Microbiology of Water and Dairy Products}

Principles and procedures of proper water, soft drink, and milk supply. Theory and techniques of routine analysis, comparison, and evaluation of methods and tests. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Microbiology 233, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{[MOR SCI] MORTUARY SCIENCE (128)}

\section*{MORTUARY SCIENCE 102}

\section*{Microbiology for Embalmers}

The basic principles of microbiology related to the principles of funeral service education, especially as they pertain to embalming sanitation, morgue disinfection, public health, and embalming practice. The development and use of personal, professional, and community hygiene and sanitation is discussed. The methods of transmission of infectious diseases, control procedures of these diseases with special emphasis on protection to the embalmer; differentiating between indigenous microorganisms and pathogens and /or opportunists causing diseases commonly associated with the human host and dead human remains. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and Biology 121, and Health Science 102.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 103}

\section*{Chemistry for Embalmers}

The basic principles of chemistry related to the principles of funeral service education. Especially stressed are the principles and precautions involved in the sanitation and disinfection of dead human remains, focusing strictly on chemistry and embalming chemicals, modifying agents, supplemental fluids and autopsy compounds. Potentially harmful chemicals used in the preparation room and their regulations are emphasized along with the essential characteristics of fermentation, and putrefaction in the area of the chemistry of decomposition of dead human remains. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and Biology 121, and Health Science 102.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{MORTUARY SCIENCE 104}

\section*{Pathology for Embalmers}

Pathological conditions of the human body in its postmortem state and how those pathological conditions affect various parts of the body, with particular emphasis on those conditions which relate to or affect the embalming or restorative art process. Pathological conditions discussed will dictate the embalming procedures, methods, and chemicals for preservation demand required by the embalmer. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 120, and Biology 121, and Health Science 102.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 108}

\section*{Accounting in Funeral Service}

An introduction to basic principles of accounting theory; applications to funeral home operations, including financial statements and their analysis, worksheets, journalizing, receivables, payables, deferrals and accruals. Inventory cost models for funeral merchandise, is covered along with depreciation models and payroll accounting. Accounting proficiencies will enable understanding of funeral service records and the funeral directors guidelines of funeral arrangements as prescribed by Federal Trade Commission Regulations rule on funeral industry practices. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Acceptance into the Mortuary Science program/plan 257. 150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 109}

\section*{Sociology for Funeral Service}

Sociology studies family structures, social structures, and the factors of change within those groups. This course relates those factors of change to the impacts of death and the relationship of the role of the funeral director in providing closure through funeral rites, ceremonies, customs, religion and rituals. Emphasis is placed on the cultural requirements and diversities of each family the funeral director is privileged to serve and an awareness of the changing social factors, which affect American Funeral Rites and the families served. Blackboard Course ( BbOC ) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Acceptance into the Mortuary Science program/plan 257. 150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 111}

\section*{History of Funeral Service}

Survey of current expectations in American Funeral practice with emphasis on task and personality of the practitioner. Trends and issues in embalming practice from ancient Egyptian burial rites to current American practices and foreign procedures. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Acceptance into the Mortuary Science program/ plan 257. 150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 203}

\section*{Funeral Directing}

Recognizes the wide variation of funeral customs across the country, and attempts to point out some general practices that contain minimal geographic and cultural differences, including general information on notification of death, transfer of remains, conduct of the arrangement conference, pre- funded/preplanned funerals. Included is the crosssection of religious funeral practices, fraternal and military funerals, shipment of remains, cremation and aftercare. Guidelines for the course are designed to introduce the Federal Trade Commission and the Trade Regulation Rule on Funeral Industry Practices. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Grade of C or better in Mortuary Science 111. 150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 204}

\section*{Mortuary And Business Law}

Introduction to the sources of law and the legal status of the dead human body. The funeral director's responsibilities are examined as practicing professionals in relationship to that of the final disposition. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of two semesters in the Mortuary Science program/plan 257.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 207}

\section*{Restorative Art}

Study of techniques employed to bring about restoration of a deceased human being to as near a normal appearance as possible. The subject area for Restorative Art is designed to introduce the techniques and importance of creating an acceptable appearance of the deceased for the benefit of the surviving family members. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 226 recommended.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 209}

\section*{Funeral Management and Merchandise}

Covers the construction of and features of caskets, outer burial containers, and other funeral related products such as cemetery headstones and markers. Merchandising examines methods of purchasing, pricing, display, and sale of funeral merchandise as well as services. Emphasis is placed on the component parts of funeral merchandise, including materials used, component part styles, finishes, dimensions/functions and pricing methods. General management techniques and theory as they relate to specific funeral home operational procedures and practices are emphasized. Management examines specific areas of funeral service practice and the managerial guidelines for the contemporary concepts of funeral service management as they relate to client families and community, staff personnel, and professional associates and associations/agencies. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mortuary Science 203
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{MORTUARY SCIENCE 210}

\section*{Advanced Mortuary Science Practice/Ethics}

A survey of topics presented by the Director of the Mortuary Science program/plan 257, providing an overview of various tasks and subjects a director will encounter in the role of a practitioner. Legal and Moral Ethics are covered. An overview of the curriculum and the practical application of theory as it relates to the ethnical practice of mortuary science. Exit Examinations/Core Competency Capstone Course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{MORTUARY SCIENCE 211}

\section*{Psychology of Funeral Service}

The underlying value and relevance of this course for preparing the funeral director is that the symbolic and ritualistic aspects of the funeral have a significant impact upon the emotional experience of the bereaved. Emphasis on the grief process and its variations across individuals as influenced by psychological factors aids the funeral director in becoming a facilitating agent for effective mourning through personal interactions as well as the design and implementation of the funeral service. This course will also prepare the funeral director to know when to make a referral for mental health services. Issues relating to children and death and particular theories/theorist are also stressed. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Acceptance into program/plan 257 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 213}

\section*{Embalming Theory I}

The involvement of all aspects of embalming theory. From the evaluation of features to the case analysis, embalming reports and instrumentation. A study of phenomenon of death in the human body is detailed. Theory I includes the study of government regulations applicable to the embalming process. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mortuary Science 102, and Mortuary Science 103, and Mortuary Science 104.
150 minutes per week. 3 credit hours.

\section*{MORTUARY SCIENCE 214}

\section*{Embalming Laboratory}

Practical application of embalming techniques and laboratory procedures of the deceased human body. Blackboard Course ( BbOC ) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mortuary Science 102, and Mortuary Science 207, and Mortuary Science 213, and Mortuary Science 215, and Mortuary Science 216, and Biology 130, and Biology131, and Biology 226, and Biology 227.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{MORTUARY SCIENCE 215}

\section*{Restorative Art Laboratory}

Applied experience in restoring damaged human remains to achieve a normal life appearance of the deceased. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mortuary Science 207, and Biology 226, and Biology 227.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MORTUARY SCIENCE 216 \\ Embalming Theory II}

Course examines the difficulties encountered by the embalmer due to disease and pathological changes of the deceased, examination of and preparation of autopsied cases as well as the procedures for handling and embalming more difficult cases. Theory II includes the study of special treatments and techniques for different conditions encountered in the dead human body. Blackboard Course (BbOC) computer skills recommended but not required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mortuary Science 213, and Biology 130, and Biology 131, and Biology 226, and Biology 227.
150 minutes per week. 3 credit hours.

\section*{[MUSIC] MUSIC (060)}

\section*{MUSIC 101}

\section*{Fundamentals of Music Theory}

Introduction to music theory and application: rhythm, meter, scales, intervals, triads, and musical terminology; development of aural and keyboard skills. Writing assignments, as appropriate to the discipline, are part of the course. No credit toward graduation for music majors.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{MUSIC 102}

\section*{Music Theory I}

Realization of figured and unfigured bases and harmonization of melodies. Triads and inversions. Harmonic analysis. Keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better I Music 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 103}

\section*{Music Theory II}

Realization of figured and unfigured bass and harmonization of melodies. Chords of the seventh and ninth sequences, diatonic modulation. Harmonic analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 102 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 105}

\section*{Group Piano I}

Class instruction in beginning piano techniques through study in small groups. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{MUSIC 106}

\section*{Group Piano II}

Continuation of Music 105. Minimum of six hours practice per week required for credit. Students majoring in music are required to take two semesters of study with a private instructor following this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 105, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 107}

\section*{Jazz Improvisation Pt I}

Fundamentals of improvisation; performing improvised solos, both on standard chord changes and original compositions. Topics covered include: ear training, II-V-I progressions, substitutes of the II-V-I progression, simple blues, bebop scales, intervals and random chord exercises which lead to altered dominants and more contemporary concepts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 101 and concurrent enrollment in Music 135, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 108}

\section*{Jazz Improvisation Pt II}

Further study of improvisation: performing improvised solos on standard chord changes and original compositions. The covered topics include altered dominant seventh chords, the 12 tone row, advanced blues, rhythm changes, turnarounds, learning tunes by ear, and improvising on them, extensions, substitute chords, modal harmony, free improvisation, note positions and other scales. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 107 and concurrent enrollment in Music 135, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 109}

\section*{Jazz/Pop Ensemble}

Rehearsal and performance of songs from jazz and popular music repertoires. In addition, the course will cover the skills needed as a professional musician. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 111}

\section*{Aural and Keyboard Skills I}

Sight singing, ear training, and rhythmic dictation with keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 101, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 112}

\section*{Aural and Keyboard Skills II}

Continuation of Music 111. Advanced ear training and sight singing, melodic dictation, and more complex harmonic structures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 111, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{String Class}

Class instruction in fundamentals of violin, viola, violoncello and string bass; principles of bow control and elementary left hand technique. Writing assignments, as appropriate to the discipline, are part of the course
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 114}

\section*{Guitar Class}

Programmed, audio-visual music course, emphasizes the development of guitar playing skills. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 115}

\section*{Woodwind Class}

Class instruction in woodwind instruments. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 117}

\section*{Brass Class}

Class instruction in brass instruments. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 119}

\section*{Percussion Class}

Class instruction in percussion instruments. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 120}

\section*{Introduction to Music Business}

Overview of the music business, including recording, publishing, management, marketing, and other related topics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 121}

\section*{Introduction to Music}

Elements, structure, listening, literature, aesthetic perspective; concert attendance. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MUSIC 122}

\section*{Perspectives In Jazz}

Introduction to jazz, its historical background and its development in the United States. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{MUSIC 124}

\section*{Trends in Modern American Music}

Exploration of what has been happening in this century in American music; includes review of social conditions that have nourished these trends and discussion of folk, blues, jazz, country and western, rock, musical theater, and classical music. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 131}

\section*{Chorus}

This course trains students in vocal performance, familiarizes them with choral literature, and provides opportunities for public performances and musical performances for college functions. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 6 credit hours will be counted towards graduation.
1 lecture and .5 or 2 lab hours per week.
1 or \(\mathbf{2}\) credit hours.

\section*{MUSIC 132}

\section*{A Cappella Singing}

Limited to students with adequate music background and vocal training. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
Prerequisite: Grade of C or better in Music 111, or Consent of Department Chairperson.
1 lecture and .5 lab hours per week. 1 credit hour.

\section*{MUSIC 133}

\section*{Concert Band}

Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
Prerequisite: Consent of Department Chairperson.
1 lecture and .5 lab hours per week. 1 credit hour.

\section*{MUSIC 134}

\section*{Orchestra}

Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
Prerequisite: Consent of Department Chairperson.
1 lecture and .5 lab hours per week. 1 credit hour.

\section*{MUSIC 135}

\section*{Instrumental Ensembles}

String quartets, brass ensembles, jazz workshops, stage band. Writing assignments, as appropriate to the discipline, are part of the course.
Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
Prerequisite: Consent of Department Chairperson.
1 lecture and .5 lab hours per week. 1 credit hour.

\section*{MUSIC 136}

\section*{Vocal Ensembles}

Madrigal groups, trios, quartets, etc. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
Prerequisite: Consent of Department Chairperson. 1 lecture and .5 lab hours per week. 1 credit hour.

\section*{MUSIC 147}

\section*{Music for Classroom Teacher}

Required of students in elementary school education. At least one term of class/piano recommended. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MUSIC 150}

\section*{Class Voice I}

Group instruction in fundamentals of singing, voice production, breathing, diction, vocalizing, and technical exercises; elementary song literature as student progresses. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 151}

\section*{Class Voice II}

Continued development of proper use of the voice; greater attention to literature; songs in English, Italian, German. Writing assignments, as appropriate to the discipline, are part of the course. Juried examination for credit.
Prerequisite: Grade of C or better in Music 150, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 180}

\section*{Applied Music - Elective Level}

Individual instruction in applied music to prepare students for Music 181. Includes private lesson (minimum of one hour). Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Students must own (or have access to) the instrument they plan on studying.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 181}

\section*{Applied Music/Freshman level I}

Individual instruction in applied music. Includes private lesson (minimum of one hour). First of a four-course sequence of private lessons required of students in Associate in Fine Arts music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 182}

\section*{Applied Music/Freshman II}

Continuation of the process initiated in Music 181. Individual instruction in applied music. Includes weekly private lessons (minimum one hour). Second of a four-course sequence of private music lessons required of students in Associate in Fine Arts Music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 181 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{Course Descriptions}

\section*{MUSIC 183}

\section*{World Music}

A study of representative music of the non-Western world, with an emphasis on its function within the culture of which it is a part. Elements, structure, listening, aesthetic perspectives; concert attendance. Students need no prior formal training or education in music to take this course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 200}

\section*{Black Music Workshop}

Contributions of African-American musicians to the development of classical music, American style; study of work of contemporary artists, use of Afro-Cuban instruments. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{MUSIC 201}

\section*{Music Theory III}

Written harmonization of melodies with strict style figuration. Eleventh and thirteenth chords, modal and chromatic alterations, chromatic modulation. Harmonic analysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 103 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 202}

\section*{Music Theory IV}

Extended tonality, chromatic harmonies, contemporary harmonic trends, inharmonic modulation. Harmonic analysis. Keyboard application. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 201 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 204}

\section*{Commercial Music Workshop I}

Composition, arrangement, and performance of commercial music. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 205}

\section*{Commercial Music Workshop II}

Continuation of Music 204. Extended original composition; use of microphone and recording techniques; their influence upon orchestration. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 204 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 211}

\section*{Aural and Keyboard Skills III}

Continuation of Music 112. Further development of aural perception (melodic, rhythmic, and harmonic dictation) and abilities in sight-singing (single melodies and duets). Application of harmonic concepts at the keyboard. This course is the third in a four-semester sequence of courses in which music majors need to enroll each term of the freshman and sophomore year. The course may be offered separately or with one or more topics combined. Aural skills include sequential development of ear training, sight singing, and dictation and may also include computerassisted instruction and/or other applications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 112 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 212}

\section*{Aural and Keyboard Skill IV}

Continuation of Music 113. Further development of aural perception (melodic, rhythmic, and harmonic dictation) and abilities in sight-singing (single melodies and duets). Application of harmonic concepts at the keyboard. This course is the fourth in a four-semester sequence of courses in which music majors need to enroll each term of the freshman and sophomore year. The course may be offered separately or with one or more topics combined. Aural skills include sequential development of ear training, sight singing, and dictation, and may also include computerassisted instruction and/or other applications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 113 or Consent of Department Chairperson..
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 221}

\section*{Music Literature and History}

Introduction to the standard concert repertory through intensive guided listening. Representative works by major composers are chosen to illustrate the principal styles, forms and techniques of vocal and instrumental music. Assumes a fundamental knowledge and understanding of the elements of music. Introduction to the standard concert repertory through intensive guided listening. Representative works by major composers are chosen to illustrate the principal styles, forms and techniques of vocal and instrumental music. Assumes a fundamental knowledge and understanding of the elements of music. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{MUSIC 223}

\section*{Music History to 1750}

Music from primitive times to 1750 . Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{MUSIC 224}

\section*{Music History From 1750}

Music from 1750 to the present. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 223, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{MUSIC 225}

\section*{Individual Project}

Individual project as determined with the instructor. Students would also be required to complete an internship as chosen through a discussion with the instructor. Eligibility for course repetition for additional credit hours determined by the instructor. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
1 lecture and .5 or 2 lab hours per week.
1 or 2 credit hours.

\section*{MUSIC 281}

\section*{Applied Music - Sophomore Level I}

Individual instruction in applied music. Includes weekly private lesson (minimum of one hour). Third course in a four-course sequence of private music lessons required of students in Associate in Fine Arts music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 181 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{MUSIC 282}

\section*{Applied Music-Sophomore Level II}

Individual instruction in applied music. Includes weekly private lesson (minimum of one hour). Last course in a four- course sequence of music lessons required of students in Associate in Fine Arts music curriculum. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Music 281 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{[NET TEC] NETWORKING TECHNOLOGIES (165)}

\section*{NETWORKING TECHNOLOGIES 101}

\section*{Client-Server Database I}

The basics Client-Server database commonly used in industry; including basic terminology and concepts, conceptual modeling and Entity Relationship (ER) diagram, normalization, structure query language (SQL), and procedure language (PL/SQL). Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 111}

\section*{Introduction to Computer Electronics}

Introduction to concepts and principles used in modern computers and computer circuits; basic computer numbers systems; computer architecture; exposure to computer languages; digital logic. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 116, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NETWORKING TECHNOLOGIES 119}

\section*{Introduction to Networking}

Covers the basics of networking, from the component hardware to the topology and theoretical foundation of networks. Emphasis will be placed on current networking theoretical models and on supporting and maintaining a network, and various types of networks and various topologies will be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 116, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NETWORKING TECHNOLOGIES 121}

\section*{Internetworking I}

Introduction to the various communication equipment used in building an effective Internet infrastructure. Provides product- specific installation and configuration. Equipment used includes bridges, routers, gateways, integrated services, digital network (ISDN) modems, digital and channel service units (DSU/CSUs), and ISDN pipeline devices. Writing assignments, as appropriate to the discipline, are part of the course. Lab fee is required.
Prerequisite: Grade of C or better in CIS 101, and CIS 116, or CIS 120, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 122 \\ Internetworking II}

A hands-on introduction to Cisco multi-protocol routers, including basic router operations, architecture, configuration and troubleshooting. Students will set up, wire, and configure various Cisco routers in an intranet work environment. Topics include: Cisco IOS, Telnet, router operating modes, RIP, IGRP, IP, and Apple Talk. Writing assignments, as appropriate to the discipline, are part of the course. Lab fee required. Prerequisite: Grade of C or better in Networking Technologies 121, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 201}

\section*{Client-Server Database II}

Manage a Client-Server database; serve as database management administrator (DBA); learn techniques to create initial database, configuring storage space, add/ delete/modified users, and security issues for a database. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 202}

\section*{Client-Server Database III}

Manage a Client-Server database, serve as database management administrator learns procedures necessary to recover a database failure and ensure network accessibility for a Client-Server database. Student will learn both command- line and GUI interfaces to perform these procedures. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{NETWORKING TECHNOLOGIES 203}

\section*{Client-Server Database IV}

Tune a Client-Server database - serve as database management administrator (DBA), learn tuning concept, diagnose and prevent lock contention, discuss difference between dedicated and shared servers, prevent performance degradation as well as use tools to diagnose, troubleshoot and optimize database productivity. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NETWORKING TECHNOLOGIES 221}

\section*{Internetworking III}

A hands-on experience in implementing and configuring complex Cisco multi-protocol routes and switches, including an introduction to switched Ethernet networks, Virtual LAN technology, spanning - tree protocols and configuration of Cisco switching devices. This class will also include advanced router concepts including access list management, IP and IP filtering, traffic management, and IGRP implementation. Students will demonstrate the use of the Cisco IOS to configure network switching and routing devices. Writing assignments, as appropriate to the discipline, are part of the course. Lab fee is required.
Prerequisite: Grade of C or better in Networking Technologies 122, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 222 \\ Internetworking IV}

This course is a project in WAN design. An overview of WAN technologies and WAN configurations on a Cisco router, involving the design, implementation, configuration and demonstration of a fully functional enterprise intranet, including HTTP, FTP, NNTP, and e-mail services. Writing assignments, as appropriate to the discipline, are part of the course. Lab fee is required.
Prerequisite: Grade of C or better in Networking Technologies 221, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{NETWORKING TECHNOLOGIES 240}

\section*{Computer Network Operating System}

Introduction to selected computer network operating systems. Installation, administration, management, optimization, organization, analysis and upgrading of computer network operating systems. Writing assignments, as appropriate to the discipline, are part of the course.
Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Grade of C or better in CIS 116, or Networking Technologies 270, or Consent of Department Chairperson.
1-2 lecture and 2-4 lab hours per week. 1-4 credit hours.

\section*{NETWORKING TECHNOLOGIES 260}

\section*{Microcomputers}

Introduction to microcomputer architecture, peripheral, and input/ output devices. Testing, troubleshooting, upgrading, and repair of microcomputer systems. Writing assignments, as appropriate to the discipline, are part of the course. Consent of Department Chairperson required for repeatability.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NETWORKING TECHNOLOGIES 270}

\section*{Local Area Networks}

Selection and installation of network hardware and software. Management and maintenance of networks. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Grade of C or better in CIS 116, or Networking Technologies 240.

2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NETWORKING TECHNOLOGIES 299}

\section*{Special Topics Networking Systems and Technologies}

Special topics in Networking Systems and Technology will be discussed along with appropriate lab and/or field trip activities. New developments especially materials useful in K-12 education and industry. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of four variable credits. Consent of Department Chairperson required for repeatability. Prerequisite: Consent of Department Chairperson.
50-200 minutes per week. 1-4 credit hours

\section*{[NURSING] NURSING (063)}

\section*{NURSING 101}

\section*{Fundamentals of Nursing I}

Introduction to the nursing process and practice; impact of illness and hospitalization affecting basic human needs regardless of age, sex or diagnosis; laboratory experience in hospitals and health agencies to acquire skills in application of nursing measures; student to demonstrate preparation for planned learning experience, all clinical laboratories under supervision of professional nurse faculty; clinical laboratory preceded and followed by group seminar. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into Nursing program/plan 239.
5.5 lecture and 4.5 lab hours per week. 7 credit hours.

\section*{NURSING 102}

\section*{Fundamentals of Nursing II}

Continuation of Nursing 101. Effects of illness and hospitalization on normal growth and development; laboratory experience to develop increased skills in basic nursing measures of care; all clinical laboratory experience supervised by professional nursing faculty, and preceded and followed by group seminar. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 101.
5.5 lecture and 4.5 lab hours per week. 7 credit hours.

\section*{Course Descriptions}

\section*{NURSING 140}

\section*{Nursing Process and Documentation}

Introduction to nursing process and documentation. Nursing theories are briefly surveyed. Emphasis is placed on the development of critical thinking skills in the application of nursing process through exercises in care planning and nursing documentation. Students learn and utilize nursing diagnosis (NAN), nursing interventions classification (NIC), critical pathways, and other nursing documentation methods for these exercises. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into Nursing program/plan 239.
150 minutes per week. 3 credit hours.

\section*{NURSING 150}

\section*{Nursing Fundamentals I}

The concepts of holism, nursing practice, multicultural society, and communication are studied for purposes of assisting persons to meet their basic needs. The role of the
practical nurse in the use of the nursing process is studied and practiced in classroom, laboratory , and long-term settings specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination and nutrition needs. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Practical Nursing program/plan 240. [2 lecture, 1 lab,
3 clinical hours per week \(=4\) credit hours
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NURSING 151}

\section*{Nursing Fundamentals II}

Administration of medications and use of the nursing process to care for persons having surgery. The nursing process is used to assist persons with oxygen, wound care, fluid and electrolyte, and rest and sleep needs and to assist persons who need relief from pain. Learning in classroom, lab and clinical settings foster professional growth. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 150. [2 lecture, 1 lab, 3 clinical hours per week \(=4\) credit hours]
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{NURSING 152}

\section*{Nursing Perspectives}

Introduction to the philosophy, conceptual framework, outcomes and competencies of the program. Nursing practice, nursing process, and the therapeutic relationship are studied along with the ethical and legal aspects of nursing from the perspective of nursing practice in today's society. Contemporary health care delivery issues are also discussed. Theoretical concepts and clinical nursing skills contained in this course are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Practical Nursing program/plan 240. 100 minutes per week. 2 credit hours.

\section*{NURSING 153}

\section*{Nursing Thru Life Span 1}

Focus on meeting the basic needs of families; preventive, supportive, and therapeutic care is learned in class, lab and clinical settings. Students are expected to demonstrate professional growth and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 151, and Nursing 152, and Biology 226. [3 lecture, I lab 3 clinical hours per week \(=5\) credit hours] 3 lecture and 4 lab hours per week. 5 credit hours.

\section*{NURSING 154}

\section*{Nursing Thru Life Span II}

Focus on the care of persons throughout the life span, experiencing grief and death, and the common disorders interfering oxygenation, nutrition, elimination, hormonal balance, and protection from infection. Students integrate previous related learning and are expected to demonstrate professional growth, and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 153, and Biology 227.
[2 lecture, I lab, 5 clinical hours per week \(=5\) credit hours]
2 lecture and 6 lab hours per week. 5 credit hours.

\section*{NURSING 155}

\section*{Nursing Thru Life Span III}

Focus on the care of persons throughout the life span, experiencing the most common disorders interfering with sexuality, mobility, and safety (including mental health disorders.) Cancer is also studied because of its interferences with all basic needs. Students integrate previous related learning and are expected to demonstrate professional growth and to function within the provisions of the Illinois Nursing Act of 2007. Theoretical concepts and clinical nursing contained are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 154, and Biology 227.
[2 lecture, 1 lab, 7 clinical hours per week \(=6\) credit hours]
2 lecture and 8 lab hours per week. 6 credit hours.

\section*{NURSING 156}

\section*{Nursing Fundamentals I Lecture}

The concepts of holism, nursing practice, multicultural society, and communication are studied for purposes of assisting persons to meet their basic needs. The role of the practical nurse in the use of the nursing process is studied and practiced in classroom, laboratory, and long term care settings, specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination, and nutrition needs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Nursing 157.
100 minutes per week. 2 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{NURSING 157}

\section*{Nursing Fundamentals I Lab}

The concepts of holism, nursing practice, multicultural society, and communication are studied for purposes of assisting persons to meet their basic needs. The role of the practical nurse in the use of the nursing process studied and practiced in classroom, laboratory and long term care settings, specifically in relation to protection against infection and providing for safety, mobility, comfort, hygiene, elimination, and nutrition needs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Nursing 156.
4 lab hours per week. 2 credit hours.

\section*{NURSING 203}

\section*{Nursing in Perspective}

Survey of the nursing career; responsibilities and changing role of a registered nurse. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 210, and Nursing 211. 150 minutes per week. 3 credit hours.

\section*{NURSING 210}

\section*{Nursing Process and Alterations In Homeostasis I}

Care for the family in crisis. Application of concepts of growth and development, health maintenance, and promotion. Emphasis on observational skills, interpersonal relationships, communications, and psychodynamics of human behavior. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing
102, and Biology 226, and Biology 227, and Microbiology 233.
3 lecture and 6 lab hours per week. 6 credit hours.

\section*{NURSING 211}

\section*{Nursing Process and Alterations in Homeostasis II}

Continuation of the nursing process with focus on alteration in health status within the expanding family system. Physical, social, and psychological assessments of patients. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 102, and Biology 226, and Biology 227, and Microbiology 233.
3 lecture and 6 lab hours per week. 6 credit hours.

\section*{NURSING 212}

\section*{Nursing Process and Alterations in Homeostasis III}

Continuation and implementation of the nursing process in the care of patients within the family unit. Consideration given to various stages of growth and development across the life cycle where patients and family are adapting to stressors. Use of a variety of learning experiences for initiating and implementing change in nursing approaches to client care. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 210, and Nursing 211.
3 lecture and 6 lab hours per week. 6 credit hours.

\section*{NURSING 213}

\section*{Nursing Process and Alterations in Homeostasis IV}

Terminal integrating experiences utilizing the nursing process to meet the needs of patients and families in complex health care situations. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Nursing 210, and Nursing 211. 3 lecture and 6 lab hours per week. 6 credit hours.

\section*{NURSING 250}

\section*{Health Assessment}

Introduction to health assessment through the application of holistic nursing theory and nursing process to clinical nursing practice. The nursing process and the role of the nurse are examined in relation to the health assessment of individuals across their lifespan. Emphasis is placed on modes of investigation and inquiry in gathering data concerning physiological, psychosocial, cultural, and spiritual aspects of human experiences. Legal and ethical considerations related to the nurse's role in health assessment are explored. Theoretical concepts and clinical nursing skills are consistent with the skills standards developed for the State of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into Nursing program/plan 239, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{NURSING 299}

\section*{Special Topics Nursing}

Special topics in Nursing will be presented along with appropriate lab and/or clinical activities. New developments will be emphasized, related to National League of Nursing Accreditation Commission and changes in Department of Professional Regulations rules, as well as best practices issues. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of eight variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Admission to the Nursing program/plan 239.
1-4 lecture and 2-8 lab hours per week. 1-8 credit hours.

\section*{[OTA] OCCUPATIONAL THERAPY ASSISTANT (122)}

\section*{OCCUPATIONAL THERAPY ASSISTANT 106}

\section*{Foundations of Human Occupation}

Exploration of the meaning of human occupation and its relationships to health, illness, and disability. The historical roots of occupational therapy are explored and linked to the roles of contemporary occupational therapy practitioners. Students will experience a variety of learning strategies and activities as a means to gaining understanding of the occupation, the occupational therapy process, and the skills needed by a healthcare professional. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement test, and English 101.
2 lecture and 2 lab hours per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{OCCUPATIONAL THERAPY ASSISTANT 107 Occupations of Childhood}

The first in a sequence of courses addressing the emergence of occupational behaviors, skills, and life roles in humans throughout the life span. This course presents occupational and developmental frameworks for understanding the occupational nature of infants and children through 12 years of age, their families, and caregivers. Means of applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions, and circumstances affecting this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 108}

\section*{Practice Skills of OT Assistant I}

Structured experiential learning will provide opportunities for the student to solidify knowledge, develop and practice professional skills and behaviors utilized in the occupational therapy process with infants, children, through twelve years of age, and their families in a variety of settings. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 109}

\section*{Occupations of Adolescence Early Adulthood}

The second in a sequence of courses addressing emergence of occupational behaviors, skills, and life roles in humans throughout the life span. This course presents theoretical frameworks and models for understanding the occupational nature of adolescents and young adults at home, at school and in the community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions, and circumstances affecting this period of human development. Writing assignments, as appropriate to the discipline, are part of the course. 4 lecture and 2 lab hours per week. 5 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 110 \\ Practice Skills for OT Assistant II}

Structured experiential learning will provide opportunities for the student to solidify knowledge, develop and practice professional skills and behaviors utilized in the occupational therapy process in a variety of settings with adolescents and young adults. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 209}

\section*{Occupation of Middle Adulthood}

The third in a sequence of courses addressing the emergence of occupational behaviors, skills, and life roles in humans throughout the life span. Presents theoretical frameworks and models for understanding the occupational nature of the middle adulthood years in home settings, work environments, and in multiple levels of community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studies within the contexts of a variety of disorders, conditions, and circumstances affecting period of human development. Writing assignments, as appropriate to the discipline, are part of the course.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 210 \\ Practice Skills of OT Assistant III}

Structured experiential learning will provide opportunities for the student to solidify knowledge, develop, and practice professional skills and behaviors utilized in the occupational therapy process in a variety of settings with middle-aged adults. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 211}

\section*{Special Topics for OTA I}

The first of a two course sequence designed to develop knowledge and skills needed for the provision of occupational therapy services to special populations. Exploration of the role of the occupational therapy assistant in a variety of service delivery contexts. A variety of strategies used to engage in collaborative occupational therapy supervisory relationships in settings without occupational therapists will be addressed. Writing assignments, as appropriate to the discipline, are part of the course.
1-2 lecture and 2 lab hours per week. 2-3 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 212}

\section*{Occupations of Later Adulthood}

The fourth in a sequence of courses addressing the emergence of occupational behaviors, skills, and life roles in humans throughout the life span. Presentation of theoretical frameworks and models for understanding the occupational nature of later adulthood in multiple living settings, work- related environments, and in the community. Approaches to applying the occupational therapy process by the occupational therapy assistant is studied within the contexts of a variety of disorders, conditions and circumstances occurring during this period of human development. Writing assignments, as appropriate to the discipline, are part of the course.
4 lecture and 2 lab hours per week. 5 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 213 \\ Practice Skills for OT Assistant IV}

Structured experiential learning will provide opportunities for the student to solidify knowledge, develop, and practice professional skills behaviors utilized in the occupational therapy process in a variety of settings with elders. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 214 \\ Special Topics for the OTA II}

The second of a two course sequence designed to develop knowledge and skills needed for the provision of occupational therapy services to special populations. Exploration of the role of the occupational therapy assistant in a variety of service delivery contexts. A variety of strategies used to engage in collaborative occupational therapy supervisory relationships in settings without occupational therapists will be addressed. A special populations independent study incorporating fundamentals of Entrepreneurship and marketing is included. Writing assignments, as appropriate to the discipline, are part of the course.
1-2 lecture and 2 lab hours per week. 2-3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{OCCUPATIONAL THERAPY ASSISTANT 215}

\section*{Fieldwork Level II}

Students will apply and synthesize the knowledge base skills and attitudes of an occupational therapy assistant in a supervised health care fieldwork experience. Fieldwork placements in a community settings or institutions will afford students' opportunities to engage in occupationbased practice with individuals across the lifespan and who may experience a variety of disorders and conditions. The course includes a campus-based student seminar to support the process of professional acquisition. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{OCCUPATIONAL THERAPY ASSISTANT 216}

\section*{Fieldwork Level B}

Students will apply and synthesize the knowledge base, skills and attitudes of an occupational therapy assistant in a supervised health care fieldwork experience. Fieldwork placements in community settings or institutions provides opportunities to engage in occupation-based practice with individuals across the lifespan and who may experience a variety of disorders and conditions. Includes a campus- based student seminar to support the process of professional acquisition. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{[OCEAN] OCEANOGRAPHY (070)}

\section*{OCEANOGRAPHY 101}

\section*{Introduction to Oceanography}

Third dimension of the ocean, its depth, and as a new frontier awaiting exploration; interdisciplinary study of ocean and interphase between air and water and how it affects the physical environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[OPH TC] OPHTHALMIC TECHNOLOGY}

\section*{OPHTHALMIC TECHNOLOGY 112}

\section*{Anatomy and Physiology of the Eye}

Structure and function in the human visual systems are covered. Anatomy and physiology of the eyeball, orbit and ocular adnexae, related to pharmacology and pathology are explored in detail. Laboratory and literature assignments, as appropriate to the visual pathway are part of the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 114}

\section*{Ophthalmic Optics}

Basic optical principles of lenses and the human eye from both theoretical and practical standpoints are discussed. The course involves study of the physical properties of light and how refractive materials relate to the human visual system in the ophthalmic profession. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 120}

\section*{Ophthalmic Pre-Testing}

This course prepares students to perform duties of a technical nature relating to the assisting of a licensed practitioner in a dependent clinical relationship. These duties include case history, visual acuity measurement, pupilary evaluation, color vision testing, depth perception, and blood pressure measurement. The care, calibration and maintenance of the instrumentation used to perform the appropriate testing are included in the course. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, and OPH TC 114, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 125}

\section*{Retinoscopy and Refractometry}

Principles and techniques of refractometry and retinoscopy with emphasis on skill development using schematic eye are covered. Students will be presented with theoretical principles behind and ophthalmic correction, as well as have the opportunity to learn various techniques of retinoscopy and refractometry, with both manual and automated equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 120, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 130}

\section*{Ophthalmic Dispensing}

An introduction to the basic principles of frame selection, materials, parts, adjustment, repair, and facial measurement appropriate to the dispensing of single vision and multi- focal eyewear. This course also assists the student in the alignment of frames for dispensing, as well as spectacle lens insertion and removal. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, and OPH 114, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 141}

\section*{Ophthalmic Office Procedures}

This course introduces students to their personal and vocational responsibilities as an ophthalmic technician. Office procedures as applied to ophthalmic, including telephone etiquettes, appointment systems, bookkeeping, payroll record, third-party billing and authorization, recalls, computers, and other business management methods. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 150}

\section*{Ocular Pharmacology}

Actions and uses of diagnostic and therapeutic pharmaceutical agents, and their function based on interference with normal ocular physiology will be covered. The principles of drop delivery techniques and the effect of the delivery system, as well as allergic reactions are also discussed. The actions, indications and side effects of common drugs will be included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{Course Descriptions}

\section*{OPHTHALMIC TECHNOLOGY 160 \\ First Aid, Emergency Care, CPR}

This course trains responders to act appropriately in emergency situations and to recognize and care for life- threatening respiratory or cardiac emergencies. Lecture and demonstration on first-aid protocol to address wounds, hemorrhage, burns, exposures, sprains, dislocations, fractures, unconscious conditions, suffocation, drowning, and poisoning are covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 221}

\section*{Ophthalmic Ancillary Testing}

Principles and techniques of specialty visual system examinations are presented. The visual pathway, common causes of visual field loss and related subjects will be covered with emphasis on visual field testing, scanning laser polarimetry, optical coherence tomography, and other technology based testing procedures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 120 or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 223}

\section*{Advanced Ophthalmic Assisting}

Principles and techniques of keratometry, pachmetry, exophthalmometry, applanation tonometry, ultrasound, advanced ocular motility, minor surgical procedures, and scribing are covered with an emphasis on skill development in these areas. This course prepares the technician to assist the doctor in advanced office techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 230}

\section*{Clinical Practicum I}

Assigned clinical experience is designed to provide detailed education and training, while applying the technical skills acquired in previous course work. The student is expected to achieve specific educational objectives determined for this experience. Recording of clinical data, patient handling, optical dispensing, and preliminary examination techniques are stressed. Clinical conferences are included. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, and OPH TC 120, and OPH TC 130, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 235}

\section*{Contact Lenses}

This course provides an introduction to contact lens theory, and practice, related to contact lens types, materials, patient care instructions, insertion and removal techniques, and fitting parameters. Procedures for ordering, verifying and modifying contact lenses are also included, with an emphasis on patient instruction, education and advancements in contact lens technology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, and OPH TC 114, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 240}

\section*{Integrated Science for Ophthalmic Technicians}

Students are exposed to pathology of the eye and related structures, integrated with the symptomology and treatment of these conditions. Systemic conditions with ocular manifestations are also presented. Basic clinical microbiology and practical microbiology as they relate to the diagnosis, treatment and management of ophthalmic diseases are also included. Medical/Insurance Coding Procedures and Insurance in ophthalmology are introduced. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, and OPH TC 130, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 242}

\section*{Clinical Practicum II}

This course provides for the use of skills acquired in secondary course work to perform contact lens instruction, minor surgery assistance, refractometry, retinoscopy, advanced motility testing, scanning laser polarimetry, optical coherence tomography and advanced visual field testing. Clinical conferences are scheduled. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 141, and OPH TC 230.
9 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 243}

\section*{Advanced Ophthalmic Procedures}

The technician is taught to assist in the management of pre- operative and post-operative patients, with a review of the related pharmaceuticals, or advanced ophthalmic procedures are included, such as laser assistance, ultrasound, potential acuity meter, and endothelial cell counts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 223.
150 minutes per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 244}

\section*{Advanced Ophthalmic Technique}

Principles and techniques of advanced ophthalmic procedures such as fundus photography, fluorescein angiography, ophthalmometry, and care of the refractive surgery patients including advanced refractometry and retinoscopy are discussed. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in OPH TC 112, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{OPHTHALMIC TECHNOLOGY 260}

\section*{Introduction to Surgical Technology}

Technology principles and procedure used in set up and preoperative care of the patients, assisting the surgeon during the procedure, monitoring patients during the surgery, and assisting the patients through the recovery and post- operative period. Pharmaceuticals as appropriate to this discipline are reviewed. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{COURSE DESCRIPTIONS}

\section*{OPHTHALMIC TECHNOLOGY 290}

\section*{Electronic Medical Record}

Electronic business management and electronic medical record systems are introduced. The ethical implications and responsibilities of technicians in relation to record keeping are review in detail. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisites: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{[PHARM] PHARMACOLOGY (028)}

\section*{PHARMACOLOGY 103}

\section*{Pharmacology for Nurses}

Weights and measures in pharmacy, drug standards and techniques, and skills for safe and accurate preparation of oral and hypodermic doses of drugs. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{PHARMACOLOGY 104}

\section*{Pharma-Codynamics and Nursing Care}

An introduction to pharma-codynamics through the application of holistic nursing theory and nursing process to clinical nursing practice. General principles of drug action are discussed as they relate to the nursing care of patients of all age groups. The uses and modes of action for various classifications of medications will be presented. Principles from the basic sciences to include a holistic nursing perspective will be reinforced. Emphasis is placed on the nursing role in medication administration and evaluation of patient response to medications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Biology 226, and Biology 227, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[PHAR TC] PHARMACY TECHNOLOGY (062)}

\section*{PHARMACY TECHNOLOGY 101}

\section*{Pharmacology for Allied Health Personnel}

Principles and characteristics of drugs, including physical and chemical properties, dosage calculations, effects and reactions, toxicity, emergency procedures, and methods of administration. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into Pharmacy Technology program/plan 254. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHARMACY TECHNOLOGY 102}

\section*{Basic Science for Allied Health Personnel}

Fundamental biological and biochemical principles as applied to allied health personnel. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Pharmacy Technology program/plan 254. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHARMACY TECHNOLOGY 103}

\section*{Introduction to Pharmacy Technology}

Introduction to the field of pharmacy technology. Included is an overview of the Pharmacy Technician certificate program/ plan 254, definition of the pharmacy technician's role, and a review of opportunities open to the pharmacy technician. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Pharmacy Technology program/plan 254. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHARMACY TECHNOLOGY 104}

\section*{Pharmaceutical Calculations}

Designed to provide mathematical tools for students enrolled in the pharmacy technology program. Emphasis is on practical aspects of mathematics and less upon the theoretical. Topics include, but are not limited to fundamentals of measurement and calculation; interpretation of prescription or medication order; the metric system; calculation of doses; reducing and enlarging formulas; and percentage and ratio calculation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Pharmacy Technology program/plan 254, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHARMACY TECHNOLOGY 113}

\section*{Prescription Processing}

Provides basic understanding of the person/pharmacy computer prescription processing software and the development of keyboarding skills, and the production of all requisite documentation for the pharmacy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission the Pharmacy Technology program/plan 254. 100 minutes per week. 2 credit hours.

\section*{PHARMACY TECHNOLOGY 121}

\section*{Pharmacy Communication}

Provides basic communication skills and pharmacy practice, including verbal, and nonverbal communication. Communication barriers, listening/empathic responding, assertiveness, interviewing assessment, patient outcomes, communications with special patients/children about medications are explored. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{PHARMACY TECHNOLOGY 201}

\section*{Introduction to Pharmacy Law}

Overview of legal aspects of the pharmacy practice, including the review of the Federal Controlled Substances Act and Illinois statues, rules and regulations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission to the Pharmacy Technology program/plan 254. 50 minutes per week. 1 credit hour.

\section*{PHARMACY TECHNOLOGY 202 \\ \section*{Pharmacy Operations}}

Fundamentals and specifics of drug distribution in hospital and retail pharmacies, including bulk compounding, packaging, quality control, inventory control, drug storage, and a variety of drug delivery systems. Mathematical calculations for basic pharmacy operations. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Admission to the Pharmacy Technology program/plan 254. 3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHARMACY TECHNOLOGY 204}

\section*{Clinical Practicum I}

Provide employment skills as a concurrent and integral part of a student's educational program in pharmacy technology. Supervised work experience in ambulatory care pharmacy practice is provided by applying the knowledge and training learned in related pharmacy technology courses. Training also involves progression from role of observer to assistant, then to relative independence under the direct supervision of a registered pharmacist and clinical coordinator. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Pharmacy Technology 103, and Pharmacology 103. 2 lecture and 10 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{PHARMACY TECHNOLOGY 205}

\section*{Clinical Practicum II}

Provide employment skills as a concurrent and integral part of a student's educational program in pharmacy technology. Supervised work experience in ambulatory care pharmacy practice is provided by applying the knowledge and training learned in related pharmacy technology courses. Training also involves progression from role of observer to assistant, then to relative independence under the direct supervision of a registered pharmacist and clinical coordinator. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Pharmacy Technology 101, and Pharmacy Technology 102, and Pharmacy Technology 201, and Pharmacy Technology 202, and Pharmacology 103.
2 lecture and 10 lab hours per week. 4 credit hours.

\section*{[PTKAPPA] PHI THETA KAPPA (131)}

\section*{PHI THETA KAPPA 101}

\section*{Phi Theta Kappa Leadership Development}

Development of leadership abilities through the classic examples in The Great Books and through experiential exercises. Includes topics on leadership and group dynamics, moral and ethical responsibilities of leadership, delegation of authority. Conflict resolution, essential leadership skills, and productive leadership behavior. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{[PHIL] PHILOSOPHY (043)}

\section*{PHILOSOPHY 105}

\section*{Logic}

Introduction to methods of reasoning, inference, and argument. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 106}

\section*{Introduction to Philosophy}

Introduction to philosophical methods of inquiry through analysis and evaluation of influential philosophical ideas. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 107}

\section*{Ethics}

Introduction to representative ethical systems; approaches to problems of values and conduct. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 108}

\section*{Philosophy of Religion}

Introduction to major religious traditions, analyzing various conceptions of God, values, reason, and faith. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 110}

\section*{Social and Political Philosophy}

Discussion of readings in philosophy, covering issues such as justice, authority, obligation, rights, power, freedom, and well-being. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 151}

\section*{Bioethics}

This course will prepare students to develop and apply explicit, coherent reasoning and judgment to important issues in the ethics of healthcare to address the philosophical issues of human personhood, life, death and suffering. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 201}

\section*{Greek Philosophy to the Renaissance}

Introduction to philosophical problems encountered in science, ethics, politics, and art. Readings from Plato, Aristotle, St. Augustine, St. Thomas, St. Bonaventure, and other Renaissance thinkers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 202}

\section*{Enlightenment to Present}

Continuation of Philosophy 201; covers the periods from the 17th Century to the present. Readings from Descartes, Spinoza, Locke, Hume, Kant, Russell, and Sartre. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 215}

\section*{Problems In Philosophy}

Philosophical problems from such fields as ethics, metaphysics, aesthetics, and philosophy of science. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHILOSOPHY 216}

\section*{Critical Thinking}

Introduction to the development of cognitive skills to evaluate claims and arguments in order to make sound judgments about beliefs and actions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{PHILOSOPHY 225}

\section*{Philosophy of Art}

Basic artistic concepts, including artistic creation and the aesthetic experiences; focus on values and meaning in the arts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[PHLEB] PHLEBOTOMY (113)}

\section*{PHLEBOTOMY 109}

\section*{Phlebotomy Practicum and Seminar I}

Provides principles of phlebotomy techniques and examines the phlebotomist role as a member of the healthcare delivery team. Students will perform simulated phlebotomy procedures on campus and actual procedures in a clinical setting. Medical terminology, anatomy and physiology, communications, interpersonal relations, professional behavior, safety requirements in the healthcare institution, venipuncture and capillary puncture techniques will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 9 lab hours per week. 5 credit hours.

\section*{PHLEBOTOMY 209}

\section*{Phlebotomy Practicum and Seminar II}

Provides with 200 hours of hands-on experience in both intravenous and capillary blood drawing in a clinical setting, plus 40 lectures on campus in phlebotomy related theory. Topics such as stress management, legal aspects, quality control and quality assurance, data entry and basic computer skills, and cardio-pulmonary resuscitation (CPR), continuation of medical terminology will be discussed. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 15 lab hours per week. 6 credit hours.

\section*{[PHYS ED] PHYSICAL EDUCATION (065)}

\section*{PHYSICAL EDUCATION 110}

\section*{Fitness}

Concepts, techniques, methods of personal fitness, stressing effects of exercise, relaxation, and weight control; fitness programs directed to individual improvement. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation. .5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 112}

\section*{Gymnastics and Tumbling}

General calisthenics and fundamentals of combinations of simple tumbling, gymnastics, stunts and/or modern gymnastics and practice; competitive aspects and scoring. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 114}

\section*{Jogging}

Running techniques to improve organic fitness through individualized programs. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation. .5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 116}

\section*{Self Defense and Combatives}

Elements of self-defense; understanding of combatives; conditioning, offensive and defensive tactics, rules and strategy for competition. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 118}

\section*{Weight Training}

Development of physical fitness through weight training devices; lifting techniques, circuit training, competitive lifting procedures. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 120}

\section*{Team Sports}

Combination of one or more seasonal sports such as basketball, hockey, soccer, softball, touch football, and volleyball; theory and practice of fundamental skills, rules of the game, and strategy; competition and tournaments within classes. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation. .5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 122}

\section*{Individual Sports}

One or more lifetime sports such as archery, badminton, bowling, fencing, golf, skating, skiing, tennis, and track and field; theory and practice of individual skills, rules of the game, techniques of game strategy; competitive tournaments within class. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 130}

\section*{Fundamentals of Swimming}

For beginning and intermediate swimmers; breathing techniques, basic strokes, diving and water safety skills. American Red Cross card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{PHYSICAL EDUCATION 132}

\section*{Advanced Swim and Water Games}

Instruction in all strokes to improve efficiency and speed; diving from pool side, springboard, rescue skills and surface dives; preparation for lifesaving course; individual and team competition in such games as water basketball and water polo. American Red Cross Card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 134}

\section*{Aquatic Skills and Synchronized Swimming}

Development of skills for participation in synchronized swimming activities; stunts and combinations of strokes for simple rhythmic routine composition; advanced diving and underwater skills. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 140}

\section*{Dance Survey}

Introduction to dance techniques such as square, folk, tap, contemporary, social, and ballet. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 142}

\section*{Square and Folk Dance}

Fundamentals and practice in basic steps and figures of American and foreign folk dance. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 144}

\section*{Ethnic Dance}

Rhythms, dance, and cultures of Africa and their interrelationships with Latin American dance and calypso movements. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 146}

\section*{Contemporary Dance I}

Contemporary dance including warm-ups, technique, dance patterns, analysis of rhythm, and creative experience in improvisations and simple movement studies. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 148}

\section*{Contemporary Dance II}

Advanced technique, training, and principles of movement perception; introduction to fundamentals of dance composition with emphasis on design, form and production. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 150 \\ Ballet}

Form, style, and performance of basic ballet movements and practice of beginning dances; fundamentals of music related to dance. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 152 \\ \\ Tap} \\ \\ Tap}

Techniques of tap dance; practice and experience in creating simple routines. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 160}

\section*{Adaptive Physical Education}

For students restricted by health limitations; activity programs to meet specific needs of the individual. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 4 credit hours will be counted towards graduation.
.5-1 lecture and 1-2 lab hours per week. 1-2 credit hours.

\section*{PHYSICAL EDUCATION 200}

\section*{Introduction to Physical Education}

History and objectives of physical education; opportunities in physical education, health and recreation; off-campus observations. Writing assignments, as appropriate to the discipline, are part of the course. 100 minutes per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 201}

\section*{Dance Fundamentals}

Rhythm as related to movement and dance; skill practice with emphasis on correct performance, interpretation of dance patterns, and opportunities for student teaching. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 202}

\section*{Ballet}

Principles of classical ballet, terminology, and methods of teaching elementary composition. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 1 lab hours per week. 1 credit hour.

\section*{COURSE DESCRIPTIONS}

\section*{PHYSICAL EDUCATION 203}

\section*{Contemporary and Modern Jazz Dance}

Analysis through movement, exploration of dance forms, and their similarities and differences; skill practice and teaching experience in each area. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 204}

\section*{Wrestling}

Analysis, instruction and theories of coaching, officiating and match strategy. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 206}

\section*{Football}

Analysis, instruction, demonstration of fundamental skills; theory of coaching and officiating, styles of play, and team strategy. Writing assignments, as appropriate to the discipline, are part of the course. .5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 207}

\section*{Introduction to Personal Training}

This course is designed to prepare students to sit for the personal trainer's exam. The course bridges the gap between exercise science related course work and the practical application skills of personal training. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICAL EDUCATION 212}

\section*{Volleyball}

Instruction, demonstration, and practice of skills; coaching and officiating, styles of play, and team strategy. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 216}

\section*{Track}

Skills and teaching techniques of track and field events; rules of competition, strategy, and team organization of the sport. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 218}

\section*{Basketball}

Fundamentals of basketball and techniques of team organization; skills of each position, offensive and defensive skills, team play, strategy and officiating. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 219}

\section*{Sports Officiating}

Rules and mechanics of officiating of various team and individual sports; responsibilities and qualifications of an official. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 221}

\section*{Play and Rhythmic Activities of Early Childhood}

Methods and materials for teaching simple rhythmic games, singing games, and other movement experiences for pre- school children; analysis of play situations appropriate to their needs and abilities. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 224}

\section*{Tumbling and Gymnastics}

Instruction and practice in teaching fundamental exercises; correct execution, development of skills, methods of giving gymnastic commands, tumbling and pyramid building; instruction and theories of coaching, officiating and competitive needs. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 226}

\section*{Swimming and Senior Life Saving}

Skills of fundamental strokes to improve efficiency and speed; diving from pool side and springboard, rescue skills and surface dives; introduction to coaching of competitive swimming; safety, accident prevention, defense methods, and rescue techniques. American Red Cross card issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 229}

\section*{Water Safety Instructor}

Swimming skills and techniques in all strokes, skills, and techniques of life saving and, water safety; practice in class management and teaching progressions; requirements meet those of American Red Cross Water Safety Instructors' training program; American Red Cross Water Safety Instructors certificate issued to qualifiers. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 230}

\section*{Baseball and Softball}

Basic skills, coaching, and officiating styles of play, teaching techniques, and team strategy. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 234}

\section*{Soccer}

History, basic skills, playing tactics, officiating, and teaching methods. Writing assignments, as appropriate to the discipline, are part of the course.
. 5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 236}

\section*{Fitness Programs}

Individual physical development; methods and teaching techniques of various fitness programs; introduction to physiology of exercise. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{Course Descriptions}

\section*{PHYSICAL EDUCATION 237}

\section*{Body Mechanics}

Principles of fitness, including exercise, nutrition, diet, self- analysis, relaxation, posture, movement, and sport activity analysis. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICAL EDUCATION 244}

\section*{Tennis}

Basic skills, strategy, and playing techniques, and teaching methods, rules, history, and court etiquette. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{PHYSICAL EDUCATION 246}

\section*{Golf}

Basic practices and teaching of grip, stance, and swing; rules, strategy, course layout, and etiquette. Writing assignments, as appropriate to the discipline, are part of the course.
.5 lecture and 1 lab hours per week. 1 credit hour.

\section*{[PHY SCI] PHYSICAL SCIENCE (076)}

\section*{PHYSICAL SCIENCE 101}

\section*{General Course}

Introduction to the scientific method, astronomy, geology, meteorology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICAL SCIENCE 102}

\section*{General Course}

Introduction to physics and chemistry; the relationship of matter and energy to physical and chemical changes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICAL SCIENCE 107}

\section*{Current Public Issues in Physical Science}

Interdisciplinary approach to physical sciences; current public issues serve as framework for course that covers earth sciences (conservation, pollution, space exploration) as well as other branches of science and social humanistic aspects; integrates significant aspects of physical science with daily living. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICAL SCIENCE 111}

\section*{General Course I (with lab)}

An introduction to the scientific method, geology, oceanography, meteorology, and astronomy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 99 or higher 3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICAL SCIENCE 112}

\section*{General Course II (with lab)}

An introduction to physics and chemistry; the relationship of matter and energy to physical and chemical changes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 99 or higher 3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICAL SCIENCE 118}

\section*{Introduction to Meteorology}

An introductory course examining the physical properties of the atmosphere, radiation heating and cooling, precipitation, clouds, weather disturbances, climate controls, map reading, and application of the scientific method in analyses of the weather elements. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101 and Eligibility for Math 99 or higher 3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICAL SCIENCE 201}

\section*{Fundamentals of Vector GIS}

Fundamentals and application of vector GIS, using Arc-GIS. Focus on modeling and analyzing spatial problems in many economic sectors and environmental fields in which spatial data can be represented by points, lines, and planes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101 and completion of Math 099 or equivalent placement test or Consent of Department Chairperson. 2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICAL SCIENCE 202}

\section*{Raster GIS and Remote Sensing}

Fundamentals and application of raster GIS, using Arc-GIS. Focus on modeling and analyzing spatial problems in many economic sectors and environmental fields in which spatial data can be represented by arrangements of pixels in a matrix such as digital elevation models and imagery. Writing, assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101, and eligibility for Math 118 or higher, (Grade of C or better in Math 99, or concurrent enrollment in Math 118 or higher, or Placement Test), or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICAL SCIENCE 205}

\section*{Meteorology for Educators}

This course is designed to provide educators with a fundamental understanding of the atmosphere, its structure and its behavior. Weather, climate, the composition of the atmosphere and pollution will be explored and mapped to Illinois State Learning Goals for meteorology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102, and Eligibility for Math 140, and Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICAL SCIENCE 295}

\section*{Independent Research in Physical Science}

This course emphasizes independent, student-driven research under the close supervision of a faculty member. Eligibility for course repetition for additional credit hours is determined by the instructor. Allowed Repeatable Course: Not more than an accumulated 12 credit hours will be counted towards graduation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, eligibility for Math 140 or higher, and Consent of Department Chairperson.
1 lecture and 2-6 lab hours per week. 2-6 credit hours

\section*{COURSE DESCRIPTIONS}

\section*{PHYSICAL SCIENCE 299}

\section*{Special Topics Physical Science}

Special topics in Physical Science will be discussed along with appropriate computer and laboratory activities. Emphasis on New developments , especially materials useful in K-12 education and industry. Each special topic course will have a sub-title. Students can take courses with different sub-titles and get credit for each. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
50-300 minutes per week. 1-6 credit hour.

\section*{[PHY AST] PHYSICIAN ASSISTANT (129)}

\section*{PHYSICIAN ASSISTANT 101}

\section*{Applied Clinical Skills I}

The student will learn how to interpret labs and perform medical procedures associated with the Eyes, Ears, Nose and Throat, Cardiac, Respiratory and Genitourinary systems of the human body.
Prerequisite: Physician Assistant 110 with a grade of C or better, and Admission into the Physician Assistant program/plan 262.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICIAN ASSISTANT 102}

\section*{Medical Sciences I}

The student will learn how to systematically approach the theory of clinical medicine, including the pathophysiology of human disease.
Prerequisite: Physician Assistant 110 with a grade of \(C\) or better, and Admission into the Physician Assistant program/plan 262.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICIAN ASSISTANT 103}

\section*{History and Physical Assessment I}

The student will learn clinical data gathering skills, and introduction to physical examination using the problem-oriented medical record and patient simulation.
Prerequisite: A grade of C or better in Physician Assistant 100, and Physician Assistant 110, and Admission into the Physician Assistant program/plan 262.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 104}

Applied Clinical Skills II
The student will review topographical and radiographic anatomy. They will be introduced to concepts of electrocardiography and cardiopulmonary resuscitation.
Prerequisite: Admission into the Physician Assistant program/plan 262. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICIAN ASSISTANT 105}

\section*{Medical Sciences II}

The student will learn the systematic approach to the theory of clinical medicine, including the pathophysiology of human disease.
Prerequisite: Physician Assistant 102, and Admission into the Physician Assistant program/plan 262.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICIAN ASSISTANT 106}

History and Physical Assessment II
The student will learn how to acquire a patient history and physical examination. Case studies, patient simulations, patient models will be used to correlate clinical symptoms using the knowledge developed in Physician Assistant 105.
Prerequisite: Admission into the Physician Assistant program/plan 262, and Physician Assistant 103 course, and Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 107}

\section*{Medical Pharmacology I}

The student will learn the basic principles of pharmacology, including pharmacokinetics, drug actions, interactions and toxicity. The student will use the concepts of physiological and biochemical actions, absorptions, distribution and metabolism in this course.
Prerequisite: Admission into the Physician Assistant program/plan 262. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICIAN ASSISTANT 109}

\section*{Medical Sciences III}

The student will enhance their approach to the theory of clinical medicine. They will learn basic concepts and procedures of surgery, preoperative and postoperative conditions. This course includes an orientation to anesthesiology, radiology, emergency triage and care.
Prerequisite: Physician Assistant 105 course with a grade of \(C\) or better, and Admission into the Physician Assistant program/plan 262.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 110}

\section*{Gross Anatomy for Physician Assistants}

The student will identify and describe major organ systems. This course includes laboratory (cadaver) experience and pathophysiology.
Prerequisite: Admission into the Physician Assistant program/plan 262.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 111}

\section*{Professional Development for Physician Assistants}

The student will learn core competencies of political and ethical issues, cross-cultural perspectives and current trends of the Physician Assistant profession and healthcare industry.
50 minutes per week. 1 credit hour.

\section*{PHYSICIAN ASSISTANT 112}

\section*{Pathophysiology 1 for Physician Assistants}

The student will be introduced to clinical medicine and will receive an orientation to disease as altered health physiology. The student will learn basic disease entities and the mechanisms underlying disease. This course covers Genetic diseases and disorders of the immune system, infectious as well as skin diseases.
Prerequisite: Admission into the Physician Assistant program/plan 262. 100 minutes per week. 2 credit hours.

\section*{Course Descriptions}

\section*{PHYSICIAN ASSISTANT 113}

\section*{Pathophysiology II For Physician Assists}

The student will learn to analyze mechanisms that produce the signs and symptoms of disease in: the Cardiovascular system; Respiratory Function; Renal function and Fluid and Electrolytes; the Nervous system; Neoplasia and Blood Disorders; Gastrointestinal and Liver disease; Exocrine pancreas; Parathyroid and calcium metabolism; Hypothalamus and pituitary gland; Thyroid disease; Adrenal cortex and Reproductive Tract of the male and female.
Prerequisite: Physician Assistant 112 course, and Admission into the Physician Assistant program/ plan 262.
100 minutes per week. 2 credit hours.

\section*{PHYSICIAN ASSISTANT 114}

\section*{Medical Pharmacology II}

The student will learn drug physiological and biochemical actions, absorption, distribution, metabolism and excretion as well as the therapeutic use of drugs.
Prerequisite: Admission into the Physician Assistant program/plan 262. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICIAN ASSISTANT 201}

\section*{Internal Medicine}

Students in the Department of Internal Medicine will learn assessment of medical history, physical examinations, diagnostic testing and patient management; diagnosis and formulation of therapeutic plans. Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 202}

\section*{Emergency Medicine}

Students on site in the Department of Emergency Medicine will, under supervision, participate in the acute assessment, diagnosis, and treatment of patients presenting to the emergency department. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 203}

\section*{General Surgery}

Students in the Department of Surgery will learn how to perform a medical history review, physical examination, diagnostic testing, patient management, including supportive involvement in major and minor surgical procedures.
Prerequisite: Admission into the Physician Assistant program/plan 262.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 204}

\section*{Trauma Surgery}

Students in the Department of Surgery will learn how to perform a medical history, physical examination, diagnostic testing and patient management, including supportive involvement in major and minor surgical procedures. This rotation includes preoperative confirmation of clinical impression and preparation of patient surgical procedures, as well as post-surgical care.
Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 205}

\section*{Pediatrics}

Students in the Department of Pediatrics participate in patient care activities in outpatient clinics, pediatric emergency room and inpatient services. The rotation includes medical history review, physical examination, and diagnostic testing as well as patient management.
Prerequisite: Admission into the Physician Assistant program/plan 262.

\section*{PHYSICIAN ASSISTANT 206}

\section*{Obstetrics and Gynecology}

Students in the Department of Obstetrics and Gynecology will focus on patients who have reproductive tract abnormalities and to those involved with normal or complicated pregnancies.
Prerequisite: Admission into the Physician Assistant program/plan 262.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 207}

\section*{Family Practice}

Students in the Department of Family Practice will focus on medical history review, physical examinations, diagnostic testing and patient management.
Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 208}

\section*{Psychiatry and Mental Health}

Students in the Department of Psychiatry and Mental Health will be able to perform a psychiatric history and mental status examination. They will participate in and understand the basics of therapeutics in the Mental Health Education Log.
Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 209}

\section*{Geriatric Medicine}

Students in Geriatric Medicine will provide patient care in Geriatric Medicine and Long-term care, assigned to patients for medical history, physical examinations, diagnostic testing, medical procedure and patient management. The student will learn how to develop diagnostic formulation of medical plans and interventions. Course requires a minimum of 40 clinical rotation hours per week for 4 weeks including oncall, weekend, and swing shift medical coverage.
Prerequisite: Admission into the Physician Assistant program/plan 262.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 210}

\section*{Orthopedics}

Students in the Department of Surgery will learn to develop orthopedic medical history, physical examinations, diagnostic testing, medical procedure and patient management, as well as diagnosis and formulation of medical plans and interventions. This program requires a minimum of 40 clinical rotation hours per week for 4 weeks, including on-call, weekend and swing shift medical coverage.
Prerequisite: Admission into the Physician Assistant program/plan 262. 2 lecture and 5 lab hours per week. 3 credit hours.

\section*{PHYSICIAN ASSISTANT 211}

\section*{Elective Clinical Rotation}

A focus on Primary Care is encouraged. Students will participate, where possible, in the diagnosis and formulation of medical plans and interventions.
Prerequisite: Admission into the Physician Assistant program/plan 262.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{PHYSICIAN ASSISTANT 213}

\section*{Special Topics in Health Care}

The primary areas of study in Special Topics in Health Care include topics related to but not limited to Internal Medicine, Primary Care and issues in the PA profession.
Prerequisite: Admission into the Physician Assistant program/plan 262.
50-200 minutes per week. 1-4 credit hours.

\section*{PHYSICIAN ASSISTANT 214}

\section*{Independent Study}

This course provides a general introduction to research design, process, statistical reasoning, and interpretation of the medical/scientific literature. Prerequisite: Admission into the Physician Assistant program/plan 262. 50-150 minutes per week. 1-3 credit hours.

\section*{PHYSICIAN ASSISTANT 215}

\section*{Nutritional Concepts}

The student will apply the concepts of applied anatomy, physiology and chemistry to human metabolism and nutrition; they will address the planning, selection and preparing diets for specific disease or combination of disorders requiring modified diets
150 minutes per week. 3 credit hours.

\section*{[PHYSICS] PHYSICS (077)}

\section*{PHYSICS 102}

\section*{Alternating Current}

Principles of electromotive force, current and power in AC circuits, vector solution of AC circuits, series and parallel resonance, measurements, transformer, and impedance matching. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 132, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICS 131}

\section*{Mechanics and Power}

Limited number of principles is covered with stress placed on applications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.

\section*{PHYSICS 132}

\section*{Electricity Heat and Light}

Continuation of Physics 131. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 131, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{PHYSICS 205}

\section*{Physics I for Educators: Mechanics \& Heat}

This course is designed to provide educators with a fundamental understanding of force, motion and heat from both a qualitative and quantitative perspective. Newtonian mechanics, gravity, and thermodynamics will be explored and mapped to Illinois State Learning Goals for physics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102, Grade of C or better in Math 141, or high school Trigonometry with Math 140, and Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICS 206}

Physics II for Educators: Electricity, Sound, and Light
This course is designed to provide educators with a fundamental understanding of waves, and electromagnetism from both a qualitative and quantitative perspective. Electromagnetism, sound, light, and selected modern physics topics will be explored and mapped to Illinois State Learning Goals for physics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 205, and Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{PHYSICS 215}

Statics Rigidbodies, fluidstatics, friction, momentsofinertia,centroids, and virtual work. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 235, and Mathematics 208, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICS 216}

\section*{Dynamics}

Problems in kinematics, dynamics of a particle and a system of particles, dynamics of a rigid body, work, energy, small oscillations, and general plane motion. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 235, and Mathematics 208, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICS 217}

\section*{Mechanics of Materials}

Study of elastic and inelastic relationships of external forces acting on deformable bodies. Includes stresses and deformations produced by tension and compression, torsion and bending, combined stresses, buckling, repeated loads, impact, and influence of properties of materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 215, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PHYSICS 220}

\section*{Physics Calculations and Practice}

Detailed practice in problems and application of theory for better understanding of physics; application of ideas of physics such as conservation laws, wave motion, invariance and trigonometry, analytic geometry, vector analysis, probability, and statistics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Concurrent enrollment in Physics 221, or Physics 231, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICS 221}

\section*{Mechanics, Waves and Heat}

Foundations and concepts in physics, including elementary problems in mechanics and heat; Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 141, or higher or concurrent enrollment in Math 141 or Math 143, and Eligibility for English 101 or Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 5 credit hours.

\title{
Course Descriptions
}

\section*{PHYSICS 222}

\section*{Electricity, Light, and Modern Physics}

Continuation of Physics 221. Exploration of Electromagnetism, Light and Modern Physics using an algebra based approach. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 221 and Math 141 and Eligibility for English 101 or Consent of Department Chairperson. 2 lecture and 6 lab hours per week. 5 credit hours.

\section*{PHYSICS 224}

\section*{Physics Calculations and Practice}

Detailed practice in problems and applications of theory involving calculus to provide better understanding of physics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 235, or Consent of Department Chairperson.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{PHYSICS 231}

\section*{General Physics I: Mechanics and Wave Motion}

Statics and dynamics of a particle and a rigid body; oscillatory and wave motion with application to sound. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Mathematics 141, and Physics 220, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICS 232}

\section*{General Physics II: Electricity and Magnetism}

Electrostatics, magneto statics, laws of DC and AC electromagnetic radiations, and elementary electronics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 231, or Physics 235, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICS 233}

\section*{General Physics III: Heat, Light and Modern Physics}

Introductory thermodynamics, geometrical and physical optics, atomic and nuclear radiations, and associated elementary quantum aspects. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 231, or Physics 232, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICS 235}

\section*{Engineering Physics I: Mechanics and Wave Motion}

Exploration of the laws of mechanics and wave motion using calculus to analyze practical and theoretical problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Credit or concurrent enrollment in Math 207 and eligibility for English 101 or Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 5 credit hours.

\section*{PHYSICS 236}

\section*{Engineering Physics II: Electricity and Magnetism}

Exploration of electricity and magnetism as they relate to fields, forces and energy using calculus to analyze theoretical and practical problems in lecture and laboratory. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 235 and Math 207 and eligibility for English 101 or Consent of Department Chairperson. 2 lecture and 6 lab hours per week. 5 credit hours.

\section*{PHYSICS 237}

Engineering Physics III: Heat, Light and Modern Physics
Exploration of the laws of heat, light, and modern physics and analysis of practical and theoretical problems through the use of calculus. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 207 and Physics 235 and Eligibility for English 101 or Consent of Department Chairperson.
2 lecture and 6 lab hours per week. 5 credit hours.

\section*{PHYSICS 238}

\section*{Physics I for Educators-Mechanics \& Heat}

This course is designed to provide educators with a fundamental understanding of force, motion and heat from both a qualitative and quantitative perspective. Newtonian mechanics, gravity, and thermodynamics will be explored and mapped to Illinois State Learning Goals for physics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 102, and Math 141, or high school Trigonometry with Math 140, and Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICS 239}

\section*{Physics II for Educators Electricity, Sound \& Light}

This course is designed to provide educators with a fundamental understanding of waves and electromagnetism from both a qualitative and quantitative perspective. Electromagnetism, sound, light, and selected modern physics topics will be explored and mapped to Illinois State Learning Goals for physics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Physics 238, and Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{PHYSICS 295}

\section*{Independent Research in Physics}

This course emphasizes independent, student-driven research under the close supervision of a faculty member. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Eligibility for course repetition for additional credit hours is determined by the instructor. No more than an accumulated 12 credit hours will be counted towards graduation.
Prerequisite: Eligibility for English 101, eligibility for Math 140 or higher, and Consent of Department Chairperson.
1 lecture and 2-6 lab hours per week. 2-6 credit hours

\section*{[POLISH] POLISH (046)}

\section*{POLISH 101}

\section*{First Course}

Pronunciation and basic structures, speech patterns, reading, and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{POLISH 102}

\section*{Second Course}

Continuation of Polish 101. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 101.
200 minutes per week. 4 credit hours.

\section*{POLISH 103}

\section*{Third Course}

Review and development of basic language skills, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 102. 200 minutes per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{POLISH 104}

\section*{Fourth Course}

Review of language structure and interpretation of readings, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 103.
200 minutes per week. 4 credit hours.

\section*{POLISH 206}

\section*{Intensive Oral Practice/Polish}

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 104.
200 minutes per week. 4 credit hours.

\section*{POLISH 210}

\section*{Modern Civilization and Culture/Polish}

Recent social, cultural, and historical trends, conducted in Polish and English. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 100 with a grade of \(C\) or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLISH 213}

Introduction to Modern Literature/Polish
Selections from contemporary writings, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 104.
150 minutes per week. 3 credit hours.

\section*{POLISH 214}

\section*{Readings in Literature Polish}

Works from selected historical periods, conducted in Polish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Polish 104.
150 minutes per week. 3 credit hours.

\section*{POLISH 221}

\section*{Cultural Background of Poland}

Conducted in English. The course is planned to present an overall picture of the historical and cultural development of the Polish nation from its beginning to the present. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or English 100 with a grade of \(C\) or better, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[POL SCI] POLITICAL SCIENCE (086)}

\section*{POLITICAL SCIENCE 200}

\section*{Principles of Political Science}

Basic principles of political science. History, theories, and various traditional and modern approaches to the study of political institutions and ideas. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 201}

\section*{The National Government}

Development, organization, and functioning of the American national government; origin, growth, and interpretation of the Constitution; legislative, executive, and judicial processes; administrative development, controls, organization and activities. Successful completion of this course may be used to fulfill the graduation requirement to pass the United States Constitution examination. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 202}

\section*{Urban Government and Politics}

Development, forms, functions, powers, and problems of urban government in the United States. Emphasis on metropolitan areas, such as Chicago, and intergovernmental relations; examination of local politics and pressure group activity, administrative organization, and fiscal responsibilities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 203}

\section*{Comparative Government}

Principles of comparative study of political systems; political culture, governmental structures and institutions, political parties, groups and ideology; understanding of political systems other than American. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 204}

\section*{International Relations}

Study of international relations, analysis of international behavior; role of nation-state and international organizations; factors underlying and the development, character, and application of foreign policy; war and peace; major social and political forces at work in the contemporary world system. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 205}

\section*{Public Administration}

Introduction to principles of public administration, including the role of administration in modern government and administrative responsibility; organization, personnel management, fiscal operations, budgeting, purchasing, and planning. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{POLITICAL SCIENCE 206}

\section*{American Foreign Policy}

Examination of conduct and control of American foreign policy in today's complex world; analysis of development of American traditions in foreign policy, machinery which exists for conduct of American foreign relations, factors influencing foreign policy of the United States, and policies and problems relating to other countries and regions of the world. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 207}

\section*{United States and Local Government}

Study of state and local political jurisdictions and systems, including their powers, organization, functions, development and contemporary problems. This course will examine the American federal system with special focus directed to the governmental structures and public policies of Illinois. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 211}

\section*{Analysis of White Racism}

Nature of white racism: political, economic, social, psychological effects on Blacks and Whites. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 213}

Labor and Law in the United States
Legal foundations of unionism and statutes, such as the conspiracy acts. Federal Anti-Injunction Act; study of National Labor Relations Act and landmark court decisions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{POLITICAL SCIENCE 215}

\section*{Politics of Community Organization}

Analysis of voting trends; discussion with community spokesmen and politicians; class participation in community politics such as registration and political education; how Chicago is governed; role of Republican and Democratic parties and independents. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[340PRTE] PROCESS TECHNOLOGY}

\section*{340PRTE 115}

\section*{Introduction to Process Technology}

Introduction to the field of process industry operations and a review of the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems that they operate. Introduction to many process industry equipment concepts, including purpose, components, operation, and the Process Technician's role toward the equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, and Eligibility for Mathematics
140, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{340PRTE 116}

\section*{Process Instrumentation I}

Introduction to the field of instrumentation as it relates to equipment used in the process industry. The study of instruments and instrument systems used in the petrochemical process industry, including terminology, process variables, symbology, control loops, and basic troubleshooting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, and Eligibility for Math 140, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 117}

\section*{Process Instrumentation II}

This course is to provide an overview into the field of instrumentation as it relates to operations within the process industry. Within this course, students will use existing knowledge of equipment, systems, and instrumentation to understand the operation of an entire unit. Concepts related to commissioning, normal startup, normal operations, normal shutdown, turnarounds, and abnormal situations, as well as the Process Technician's role in performing the task associated with these concepts within an operating unit. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340PRTE 116.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 118}

\section*{Process Technology Equipment}

An overview and introduction into some of the equipment and vessels, and their operations, within the Process Industry. Introduction to process industry equipment fundamentals, such as purpose, terminology, components, operation, and Process Technician's role for operating and troubleshooting the equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340PRTE 116.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 119}

\section*{Safety, Health and Environment}

Introduction to various types of plant hazards, safety and environmental systems and equipment, and regulations under which the process industry is governed. Designed to impart the knowledge and skills that dictate the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis is on safety, health, and environmental issues in the performance of all job tasks and regulatory compliance issues. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340PRTE 115.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\author{
340PRTE 202 \\ \section*{Quality Control} \\ introduces many process industry-related quality concepts, including operating consistency, continuous improvement, plant economics, team skills, and statistical process control (SPC). Writing assignments, as appropriate to the discipline, are part of the course. \\ Prerequisite: Grade of C or better in 340PRTE 118. 150 minutes per week. 3 credit hours.
}

\section*{340PRTE 203}

\section*{Unit Systems}

Introduces the concept of system and plant economics; studies the interrelation of process systems by arranging process equipment into basic systems; explains how factors affecting process systems are controlled under normal conditions; and recognizes abnormal process conditions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 340PRTE 119.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 204}

\section*{Operations}

Introduction to the various types of plant hazards, safety, and environmental systems and equipment, and regulations under which the industry is governed. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in340PRTE 203.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 205}

\section*{Process Troubleshooting}

The application of process control with the use of computer- simulated exercises. The use of process control simulations challenges the student to exercise logical troubleshooting techniques to solve operational problems. Utilization of "what if drills" to enhance troubleshooting skills. Writing assignments, as appropriate to the discipline, are part of the course
Prerequisite: Grade of C or better in 340PRTE 203.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{340PRTE 206}

\section*{Process Technology Internship}

Participation in occupational area of study work experience under supervision of both college and employer. Internship objectives developed by student and faculty adviser, with approval of employer, to provide appropriate work-based learning experience. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{[PS REHB] PSYCHIATRIC REHABILITATION (134)}

\section*{PSYCHIATRIC REHABILITATION 101}

\section*{Survey of Psychiatric Rehabilitation}

This course is the first in the series for the Psychiatric Rehabilitation Certificate. The survey course has four major themes: Understanding psychiatric disability and current approaches to treatment; the mental health system and surrounding issues; psychiatric rehabilitation through vocational and skills training; family and community support systems. The orientation of the course is more practical than theoretical, and there is considerable opportunity to observe and practice relevant skill. Consumers serve as guest speakers to highlight issues of empowerment and to increase understanding of consumer experiences with the mental health community. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{PSYCHIATRIC REHABILITATION 102}

\section*{Psychiatric Rehabilitation Skills}

This course is the second in the series for the Psychiatric Rehabilitation Certificate. The orientation of the course is more practical than theoretical, and there is considerable opportunity to observe and practice relevant skills. Focus on basic techniques for conducting interviews for use in assessment, treatment planning, and therapeutic interactions with consumers, conducting skills training groups applying behavioral techniques for implementing programs that promote desired skills, for intervening in crisis situations and preventing and managing aggression. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability. Consent of Department Chairperson required for repeatability.
Prerequisite: Grade of C or better in Psychiatric Rehabilitation 101. 150 minutes per week. 3 credit hours.

\section*{PSYCHIATRIC REHABILITATION 103}

\section*{Health Skills Psychiatric Rehab}

Examines three-dimensions of wellness: physical, emotional, and environmental. Focus on the fundamentals of physical wellness, including diet, nutrition, exercise, sanitation, disease prevention and control, and special health considerations for persons with serve mental illness. The emotional dimension of wellness includes social support, physical and sensory accommodations, and geriatric and developmental disabilities, and the essentials of environmental safety, including use of safety equipment and proper mechanics. Students will develop and practice skill for determining vital signs and documenting their observations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Psychiatric Rehabilitation 101 and Psychiatric Rehabilitation 102.

150 minutes per week. 3 credit hours.

\section*{PSYCHIATRIC REHABILITATION 104}

\section*{Vocational \& Community Living Skills}

Emphasizes on the practical applications of vocational and community living skills development for individuals with serve mental illness. Observation and of practice with the fundamentals of vocational rehabilitation, including the duties and tasks commonly required in vocational settings and the development of employment sites, including the practical application of current policies affecting employment sites, networking skills, common state and federal benefit programs and community-based service provision. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Psychiatric Rehabilitation 101. 150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{PSYCHIATRIC REHABILITATION 105}

\section*{PRCP Internship}

This internship requires a minimum of 76 clock hours of field experience. Experiences are a combination of observation and participation/ interaction with consumers of mental health services. The first half (or a minimum of 38 hours) will include five of the following areas: 1) inpatient milieu and general activities; 2) case management activities; 3) vocational training activities; 4) skills training activities; and 5) consumer led activities. The second half of the internship (a minimum of 38 hours) includes interviewing skills and leading skills training groups, and at least one of the following: behavior definition and task analysis, aggression management, assessment and treatment and planning, or crisis intervention. All experiences should focus on a rehabilitative approach to serving individuals with serve mental illness. Group or individual supervision with on-site clinical staff and/or supervision by the field placement director are also required. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of Psychiatric Rehabilitation 101 and Psychiatric Rehabilitation 102., Psychiatric Rehabilitation 103, and Psychiatric Rehabilitation 104.
15 lab hours per week. 3 credit hours.

\section*{[PSYCH] PSYCHOLOGY (087)}

\section*{PSYCHOLOGY 201}

\section*{General Psychology}

Historical survey of psychology and a study of the sensory and perceptual processes: learning, thinking, remembering, emotional behavior, motivation, mechanism of adjustment, and the total personality. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 203}

\section*{The Psychology of Women}

An application of the general principals of psychological scholarship and research to the subject of gender and women. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: : Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 205}

\section*{Applied Psychology}

Applications of principles of psychology in industry, business, the professions, social welfare, and personal adjustment; career selection, industrial efficiency, advertising, sales, the arts; detection and treatment of delinquents and criminals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 101, or English 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 206}

\section*{Business and Industrial Psychology}

Psychological principles and techniques applied to activities and problems in business and industry; selling, advertising, market research, personnel work, employee selection and training, supervision, and morale. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 207}

\section*{Child Psychology}

Development, adjustment, and psychological problems from birth of the child through adolescence; relationship of scientific psychological findings to practical methods of child guidance and training by parents, teachers, and others. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 208}

\section*{Psychology of Exceptional Children}

Considers children who do not respond to usual classroom teaching procedures. Includes problems of identification, diagnosis and potential assessment; surveys appropriate instruction and remedial teaching of mentally retarded, physically handicapped, gifted, culturally deprived and maladjusted children. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 207, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.
PSYCHOLOGY 209

\section*{Black Psychology}

Relationship of psychology to colonized situation; understanding Colonial experience in psychological terms, emphasis on effects for Black and White persons in America of the status of Blacks during and after legalized slavery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 210}

\section*{Principles of Supervisory Psychology}

Psychological principles applied to problems with employees, both from the standpoint of management and of employees. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: : Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 211}

\section*{Social Psychology}

Analyzes development of personality structures and patterns; cultural environment, social roles and status, attitude formation, personality types and measurement of personality. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 213}

\section*{Abnormal Psychology}

Abnormal behavior and its social significance; symptoms and dynamics of psychological disorders; neuroses and psychosomatic reactions, sociopathic psychoses; consideration of therapies and theories of prevention. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{PSYCHOLOGY 214}

\section*{Adolescent Psychology}

Continuation of Psychology 207. Physical, intellectual, educational, personality, and social development of adolescents in contemporary society; emphasis on problems of the adolescents' adjustment to personal and social environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 207, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 215}

\section*{Psychology of Personality}

Major personality theories and systems concerned with comprehensively and dynamically interrelating developmental, motivational, and adaptive aspects of behavior; methods of personality assessment and experimental evidence relevant to the theories. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 217}

\section*{Brain, Mind and Behavior}

Study of behavior from the biological point of view, analyzing behavior in physiological, genetic, developmental and evolutionary terms, emphasizing the interaction of the brain, behavior, and environment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 222}

\section*{Adult Development and Aging}

Introduction to psychological problems, issues, facts, and theories relating to later adulthood and old age; societal values and institutions, socio-economic variables, biological and psychological changes, perception, cognition, psychosocial development, personality factors, sexuality and relationships, work and skill issues, adjustment and coping, psychopathology, and therapeutic intervention. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 223}

\section*{Death, Dying and Bereavement}

Introduction to psychological problems, issues, facts, theories, opinions, and controversies pertaining to death or loss, the dying process, and bereavement as a response to loss. Focus on societal values, institutions, psychological variables, the nature of dying and bereavement, the effects of loss on the surviving individual, adjustment and problems, relevant behavioral and emotional reactions, and alternatives to societal institutions surrounding death. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 224}

\section*{Life Span Developmental Psychology}

Introduction to developmental psychology, covering fundamental biological, cognitive, and psychological factors as they apply to the whole span of development, including theories, research design and findings, facts, and principles, as they apply to each age level. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Psychology 201, or Consent of Department Chairperson
150 minutes per week. 3 credit hours.

\section*{PSYCHOLOGY 240}

\section*{Research and Statistical Methods in the Behavioral Sciences}

Study of methods used in the systematic study of psychology, including psychometric concepts, understanding and application of statistical operations (computer-based), and critique of scholarly empirical reports. Written assignments, as appropriate to the discipline, are part of this course
Prerequisite: Grade of C or better in Psychology 201 and Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours

\section*{PSYCHOLOGY 299}

\section*{Special Topics in Psychology}

Special Topics in Psychology will be discussed along with appropriate lab and/or field trip activities. New developments in the field will be emphasized. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times when topics are different, and may count for a maximum of six variable credits. Consent of Department Chairperson required for repeatability.
Prerequisite: Grade of C or better in Psychology 201 or Consent of the Department Chair.
50-300 minutes per week. 1-6 credit hours

\section*{[PUB SRV] PUBLIC SERVICE (069)}

\section*{PUBLIC SERVICE 130}

\section*{Police Operations I}

Orientation; police administration and organization; rules and regulations; policy and procedures. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hour.

\section*{PUBLIC SERVICE 131}

\section*{Communication and Case Reporting}

Fundamentals of note taking, directives, traffic reports, and interviews. Emphasis will include composition of police narrative, writing primarily in terms of the organization and language of such reports commonly used by law enforcement officers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{PUBLIC SERVICE 132}

\section*{Law and Court Procedures}

Principles of constitutional law, arrest, ethics, search and seizure; review of court systems, procedures from initial incident to final court disposition. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{PUBLIC SERVICE 133}

\section*{Law Codes I}

Analysis of state and municipal codes as they apply to law enforcement. Emphasis on structure, essential elements, and most frequently used sections. Review of day to day duties of a law enforcement officer. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, and Public Service 131, and Public Service 132, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{PUBLIC SERVICE 134}

\section*{Criminal Investigation I}

Fundamentals of investigation, identification and arrest, collection of evidence; modus operandi. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, and Public Service 131, and Public Service 132, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{PUBLIC SERVICE 135}

\section*{Problems in Human Behavior}

Study of normal and deviant behavior, collective behavior, and narcotics offenses. Study of interpersonal relations from the perspective of working and serving the public from various background and cultures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, and Public Service 132, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{PUBLIC SERVICE 136}

\section*{Professional Skills for Police Officers}

Field training and techniques used in conducting criminal investigations, or in another appropriate area of law enforcement approved by the instructor. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, and Public Service 131, and Public Service 132, and Public Service 133, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{PUBLIC SERVICE 230}

\section*{Police Operations II}

Review of police line operations, including patrol, traffic, and special operational units; operations for civil disorders and disasters. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Public Service 130, and Public Service 131, and Public Service 132, and Public Service 133, or Consent of Department Chairperson.
100 minutes per week. 2 credit hours.

\section*{[RADIOGR] RADIOGRAPHY (021)}

\section*{RADIOGRAPHY 101}

\section*{Introduction to Radiation Sciences}

Fundamental concepts of medical imaging and the radiation sciences; includes origins of the profession, common terminology and chemicals; technical factors influencing development of the radiograph and technical factors which produce the image. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RADIOGRAPHY 102}

\section*{Attitudes In Patient Care}

Skills needed for proper patient care; includes physical and psychological skills to cope with various situations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
100 minutes per week. 2 credit hours.

\section*{RADIOGRAPHY 105}

\section*{Imaging Physics}

Structure of matter, electric circuitry, especially the x-ray circuit, interactions between ionizing radiation and matter and principles necessary for production of radiographic image. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246, and Radiography 101 course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RADIOGRAPHY 115}

\section*{Basic Principles of Image Production}

Analysis of various technical factors and accessories which affect radiographic image; includes basic qualitative factors of image production and laboratory experiments. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246, and Radiography 101 course..
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RADIOGRAPHY 124}

\section*{Introduction to Patient Care}

Proper positioning and basic nursing procedures necessary for patient care; includes proper placement and manipulation of patient and equipment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RADIOGRAPHY 128}

\section*{Image Evaluation}

Analysis of image and quality of radiographs images submitted for interpretation; covers the patient's size, cooperation and pathological condition relative to and influencing accuracy and quality of resultant image. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
50 minutes per week. 1 credit hour.

\section*{COURSE DESCRIPTIONS}

\section*{RADIOGRAPHY 131}

\section*{Radiographic Procedures I}

Proper positioning of patient for demonstration of suspect pathology of abdomen and its contents, correlated with course in anatomy and physiology, and routine and contrast media procedures. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Admission into the Radiography program/plan 246. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RADIOGRAPHY 140}

\section*{Introduction to Clinical Education}

Physical and technical skills needed to apply ionizing radiation to human beings; clinical orientation and evaluation to determine professional preparedness. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246. 1 lecture and 30 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 141}

\section*{Radiography Clinical Education I}

Orientation and initial skills development in basic radiographic procedures; visualization of abdomen and its contents stressed to prepare for further study in major area of specialization; includes communication, operation of equipment, patient care, and technical skills development. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
1 lecture and 30 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 200}

\section*{Pathology}

Covers disease process with radiographic manifestations; laboratory sessions include use of radiographs and images from other modalities to visualize various types of pathologic conditions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RADIOGRAPHY 202}

\section*{Radiology Management}

Administration, purchasing, and personnel control; practical experience in department administration. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Advanced standing in the Radiography program/plan 246. 50 minutes per week. 1 credit hour.

\section*{RADIOGRAPHY 205}

\section*{Applied Radiographic Techniques}

Practical applications of previously learned concepts; effects of technical factor selection, use of accessories and changes in patient type and condition. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Advanced standing in the Radiography program/plan 246. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RADIOGRAPHY 206}

\section*{Imaging}

The components of radiological imaging system chains. Exploration of systems, including current systems and new and emerging modalities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RADIOGRAPHY 208}

\section*{Radiobiology}

Effects of radiation on cells, organs, and organisms and implications on present and future populations, use of ionizing radiation in internal and external treatment of benign and malignant disease. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RADIOGRAPHY 232}

\section*{Radiographic Procedures II}

Positioning and patient-care skills applied to additional body systems and correlated with clinical study; proper positioning of patient for demonstration of suspect pathology correlated with previous procedures; includes skeletal and urinary systems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 233}

\section*{Radiographic Procedures III}

Study of additional body systems; includes procedures less frequently performed and those requiring special skills or equipment; procedures covered will not normally require invasive techniques. Writing assignments, as appropriate to the discipline, are part of the course. Prerequisite: Admission into the Radiography program/plan 246.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 234}

\section*{Special Radiographic Procedure}

Procedures frequently performed in modern departments, but which employ surgical or other invasive techniques and injection of contrast media into circulatory system; covers emergency procedures and pertinent aspects of some pharmaceuticals. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Advanced standing in the Radiography program/plan 246. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RADIOGRAPHY 242}

\section*{Radiography Clinical Education II}

Application of concepts learned in related radiography classes; emphasis on progression from role of observer to assistant, then to relative independence under supervision of qualified clinical instructors, radiographers, and faculty. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
1 lecture and 30 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 243}

\section*{Radiography Clinical Education III}

Progression from role of assistant to greater independence under supervision of qualified clinical instructors. Quality and related aspects of special consent will be covered. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246.
1 lecture and 30 lab hours per week. 4 credit hours.

\section*{RADIOGRAPHY 244}

\section*{Radiography Clinical Education IV}

Progression of student to full clinical independence. Upon demonstrating clinical competency, student can refine skills through independent practice, including field experiences in elective specialization. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Radiography program/plan 246. 1 lecture and 40 lab hours per week. 5 credit hours.

\section*{CoUrse Descriptions}

\section*{[READING] READING (037)}

\section*{READING 099}

\section*{Developmental Reading Skills I}

Provides skills necessary for efficient reading of textbooks and other materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{READING 125}

\section*{Developmental Reading Skills II}

Efficient reading of textbooks and other materials, including work in mechanics of reading, vocabulary development, comprehension, and rate of reading. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Reading 099, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{READING 126}

\section*{Structural Analysis and Critical Reading}

Focus on reading and analyzing college level materials. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Reading 125, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{RELIGION [SEE COMPARATIVE RELIGION (133)]}

\section*{[REN TC] RENAL TECHNOLOGY / NEPHROLOGY (018)}

\section*{RENAL TECHNOLOGY / NEPHROLOGY 101}

\section*{Introduction to Health Care Field and Nephrology}

Concepts of the health care field and hemodialysis, and the history and theory of dialysis; batch systems and proportioning systems, single and multiple patient systems, types of dialyzers: plate, coils and capillaries. Types of membrane surfaces, filtration, diffusion; dialysis clearance, and physics of extra-corporeal circuits. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/ plan 247 or 248.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 102}

\section*{Basic Hemodialysis Principles I}

Overview of dialysis equipment, types of dialyzers, blood lines, conductivity meter, blood pump, air bubble detector, dialysis monitoring; negative and positive pressure dialysis, blood flow, vital signs, water treatment (deionization, reverse osmosis). Heparinization, safety monitor, and single needle apparatus. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 103}

\section*{Basic Hemodialsys Principles II}

Drug therapy and complications, antihypertensive agents, antibiotics, anticoagulants, and phosphate binders. Calculation of dosages, and apothecary metric. Administration procedures, circulatory hemodynamics of the heart, CHF normal EKG, EKG and ESRD. Writing assignments, as appropriate to the discipline, are part of the course. Admission into the Renal Technology program/plan 247 or 248.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 104 \\ Hemodialysis Procedures I}

Advantages and disadvantages of various types of machines, dialyzers and supplies. Dialysis related problems: disequilibrium, air embolism, excessive ultrafiltration, dialyzer rupture, dialyzer clotting, line separation, pyrogenic reaction, hemolysis, convulsions, hepatitis. Conductivity and temperature; effect of end stage renal disease on the patient, family, and dialysis personnel; disease control. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

6 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 105}

\section*{Heparinization/Bacteriology in Dialysis}

Aseptic technique, medical ethics, legal aspects in the field of nephrology, infectious disease control, isolation techniques, patient care techniques, professional relationships of being a member of a health care team, legal aspects of medical records, patient care plan, physician orders, EKG for normal ESRD and arrhythmias. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

6 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 106}

\section*{Diagnostic Tests and Procedures in Nephrology}

Diagnostic tests and their interpretations, urinalysis, collection and examination, hematology, serology, clinical chemistry, including \(\mathrm{Na}+\) and \(\mathrm{K}+\), flame photometry, diagnostic tests for renal, pulmonary, cardiovascular disorders, EKG and EEG overview. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

6 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 107}

\section*{Hemodialysis Procedures II}

Theory of negative pressure; laboratory instructions in building, sterilizing, priming, testing, washing, and preparing for use. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{RENAL TECHNOLOGY / NEPHROLOGY 108}

\section*{Clinical Experience I}

Observation of hemodialysis in medical units. Surgical principles and techniques, and care and maintenance of the AV fistula, AV shunt, use of the AV fistula or shunt for hemodialysis, venipuncture techniques, types of access devices and accessories, Thomas femoral shunt, dual lumen catheter, types of water treatment delivery systems, blood pumps. Interactions and seminars with nephrologists, social worker, and dietician. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 109}

\section*{Clinical Experience II}

Introduction to diagnostic procedures; evaluation and interpretations of physiological or psychological status of the nephrology patient; emphasis on diagnostic tests and their interpretations; evaluation of skills and sterile techniques, setting up plate and hollow fiber dialyzers; infection control. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 6 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 201}

\section*{Renal Physiology and Renal Diseases}

Anatomy of the kidney; microscopic description of renal parenchyma; physiology - general mechanism of urine formation; urinary renal function; principal symptoms of end stage renal disease. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 202}

\section*{Renal Disease and Pathophysiology}

Renal failure; conditions under which renal failure may appear; hypertension, infection, obstruction, nitrogen retention; equilibrium of water and electrolytes; hyperkalemia, acidosis; conservative management; peritoneal dialysis, hemodialysis, diets in renal disease. Writing assignments, as appropriate to discipline, are part of the course. Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 203}

\section*{Clinical Experience III}

Clinical experience in medical facilities under the supervision of the college coordinator, clinical facilities staff, and nephrologist. Complete hemodialysis treatment of chronic dialysis patients. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 204 \\ Clinical Experience IV}

Continuation of clinical experience in medical facility. Primary emphasis on developing new skills in care and treatment of acute and chronic renal patient; equipment maintenance procedures, emergency procedures, special procedures patient dietary and fluid regulation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/ plan 247 or 248.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 205}

\section*{Uremic Syndrome}

Renal failure; chronic renal disease; classification - glomerular, tubular, interstitial, vascular, and others; general manifestations of chronic renal disease; anemia; water imbalance, electrolyte abnormalities, gastrointestinal manifestation, neurological manifestations of renal disease; treatment, chronic hemodialysis; renal transplantation and acute hemodialysis. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 206}

\section*{Advanced Technology in Nephrology}

Completion of didactic experiences in a classroom setting. New modalities in dialysis; CAPD and new delivery system for dialysis, self-care, home training, complications. Patient pre- and post-teaching for nephrectomy and transplants; peritoneal dialysis; manual and automated. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Renal Technology program/plan 247 or 248.

150 minutes per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 207 Clinical Experience \(\mathbf{V}\)}

Continuation of clinical experience in medical facility, under the supervision of the college coordinator, clinical instructor, staff personnel, and nephrologist. Development of the following skills: advanced cannula and fistula care, administration of blood, blood sample collection, medical community support; advanced principles of hemodialysis, dietary and fluid review. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Renal Technology 203, and Renal Technology
204, or Consent of Department Chairperson.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{RENAL TECHNOLOGY / NEPHROLOGY 208 Clinical Experience VI}

Completion of clinical experiences in medical facility CAPD and new delivery systems for dialysis, self-care, home training, complications; chronic and acute patients. Patient pre- and post-teaching for nephrectomy and transplants; peritoneal dialysis, manual and automated; complications and emergency procedures, plasmapheresis, bicard, short- time, hemoperfusion. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Renal Technology 203, and Renal Technology 204, or Consent of Department Chairperson.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{[RESP TC] RESPIRATORY THERAPY (061)}

\section*{RESPIRATORY THERAPY 114 Basic Respiratory Care}

Theoretical and protocol based applications of, indications for, and evaluation of efficacy and patient response to basic respiratory care modalities in the cardiopulmonary compromised patient population. Includes such therapeutic modalities as: O2/gas therapy, aerosol and humidity therapy, bronchial hygiene, and hyperinflation therapy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 116, and Biology 120, and Chemistry 121, and English 101, and Mathematics 118.
3 lecture and 2 lab hours per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{RESPIRATORY THERAPY 115}

\section*{Cardiopulmonary/Renal Anatomy and Physiology}

Study of cardiac, pulmonary and renal structure, and function with emphasis on physiology as applied to the practice of respiratory care. This includes the integrated functions of ventilation, respiration, gas transport and acid base regulation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 114, and Respiratory Therapy 116, and Respiratory Therapy 117, and Respiratory Therapy 118, and Respiratory Therapy 119, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 116}

\section*{Patient Assessment}

Introduction to the role of a respiratory therapist in the hospital setting as a member of a health care team. Includes professional behavior, ethics, legalities, communications, medical terminology, medical charts, and cardiopulmonary assessment. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 116, and Biology 120, and Chemistry 121, and English 101, and Math 118.
100 minutes per week. 2 credit hours.

\section*{RESPIRATORY THERAPY 117}

\section*{Respiratory Pharmacology}

Anatomy and physiology of the nervous system as applied to the pharmacodynamics of bronchodilation and the effects various drugs have on the cardiovascular and pulmonary systems. Indications, dosages, routes of administration, contraindications, adverse effects, and dose calculations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 116, and Biology 120, and Chemistry 121, and English 101, and Math 118.
50 minutes per week. 1 credit hour.

\section*{RESPIRATORY THERAPY 118}

\section*{Respiratory-Microbiology}

Applied microbiology and infection control practices as related to the hospital environment and respiratory care modalities and equipment. OSHA, JCAHO infection control practices, including screening tests and risk factors as well as understanding of all hospital isolation techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 116, and Biology 120, and Chemistry121, and English 101, and Math 118.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{RESPIRATORY THERAPY 119}

\section*{Respiratory Care Lab I}

Introduction to basic equipment: design, function, troubleshooting, and care of respiratory therapy devices and circuitry used to deliver therapy, humidity and aerosol therapy, bronchial hygiene, and hyperinflation modalities. Professionalism, communication techniques, and monitoring in conjunction with laboratory simulated hospital procedures and situations. Basic CPR certification and all proficiency testing of clinical procedures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Biology 116, and Biology 120, and Chemistry 121, and English 101, and Math 118.
6 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 127}

\section*{Clinical Practice I}

Introduction to the hospital setting and the set-up, and maintenance and discontinuation of oxygen; aerosol and humidity therapy; intermittent modalities to include bronchial hygiene and hyperinflation therapies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 114, and Respiratory Therapy 116, and Respiratory Therapy 117, and Respiratory Therapy 118, and Respiratory Therapy 119, or Consent of Department Chairperson.
12 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 129}

\section*{Clinical Practice II}

Supervised clinical course with an introduction to airway management techniques, basic ventilator care techniques, pediatric respiratory care, and refinement of floor therapy skills with acute patients. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 115, and Respiratory Therapy 127, and Respiratory Therapy 137, and Respiratory Therapy 139, and Respiratory Therapy 141, or Consent of Department Chairperson.
12 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 137}

\section*{Advanced Pathology and Clinical Application}

Acute and chronic respiratory and cardiac pathological processes and their associated renal complications and compensations: diagnostic testing, including arterial blood gases, basic radiographic interpretation, pulmonary function studies, interpretation of laboratory studies, treatment, and prevention of disease processes. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 114, and Respiratory Therapy 116, and Respiratory Therapy 117, and Respiratory Therapy 118, and Respiratory Therapy 119, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 139}

\section*{Respiratory Care Lab II}

Introduction to hospital specific policies and procedures, continuation of application and practice of respiratory care modalities, now applied to the critically ill patient. Emphasis on airway management, mechanical ventilators, circuitry, mechanical ventilation management and techniques. Comprehensive laboratory competency testing. Clinical cases presented as technical management corollaries. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 114, and Respiratory Therapy 118, and Respiratory Therapy 119, or Consent of Department Chairperson
4 lab hours per week. 2 credit hours.

\section*{RESPIRATORY THERAPY 141}

\section*{Ventilatory-Mechanics I}

Theory of basic mechanical ventilator function, methods of ventilation, modes, classification of ventilators, demonstration of basic equipment and circuitry. Airway management indications, selection of type, intubation, management evaluation hazards, extubation, and troubleshooting the artificial airway. Writing assignments, as appropriate to the discipline are part of the course.
Prerequisite: Respiratory Therapy 117, and Respiratory Therapy 118, and Respiratory Therapy 119, or Consent of Department Chairperson. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{RESPIRATORY THERAPY 146}

\section*{Ventilatory Mechanics II}

Introduction to the theory of mechanical ventilation in the adult patient. Selection of ventilator parameters, commitment, maintenance, and weaning. In-depth presentation, discussion, demonstration of specific adult ventilator systems, CPAP, BiPAP circuits, practice and testing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 115, and Respiratory Therapy 127, and Respiratory Therapy 137, and Respiratory Therapy 139, and Respiratory Therapy 141, or Consent of Department Chairperson. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 200}

\section*{Respiratory Care Lab III}

In depth presentation, discussion, demonstration of specific pediatric/ neonatal ventilator systems, CPAP circuits, practice and testing. Continuation of adult ventilator practice, practice and integration of other critical care procedures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 129, and Respiratory Therapy 146, or Consent of Department Chairperson.
4 lab hours per week. 2 credit hours.

\section*{RESPIRATORY THERAPY 222}

\section*{Clinical Practice III}

Supervised clinical course, providing advanced airway management skills, advanced ventilator techniques, and diagnostic procedures in the hospital setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 129, or Consent of Department Chairperson.
12 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 224}

\section*{Clinical Practice IV}

Supervised clinical course, providing advanced airway management skills, advanced adult ventilatory techniques, neonatal respiratory procedures ,and advanced cardiopulmonary diagnostic procedures. Exposure to alternate sites of care. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 200, and Respiratory Therapy 222, and Respiratory Therapy 227, or Consent of Department Chairperson. 24 lab hours per week. 4 credit hours.

\section*{RESPIRATORY THERAPY 225}

\section*{Age Specific Care}

Introduction to age appropriate considerations of patient education, application of therapeutic modalities and manifestations of cardiopulmonary diseases throughout the human life span. Addresses managed care, management patient care plans, and alternate sites of care. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 129, and Respiratory Therapy 146, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 227}

\section*{Critical Care Services}

Advanced cardiopulmonary monitoring with emphasis on ECG interpretation and hemodynamic and exhaled gas monitoring and therapeutic interventions. Chest radiograph, CT and MRI interpretation. Pharmacological agents that affect the cardiopulmonary, renal, and acid base regulatory systems; paralyzing agents, analgesics, sedatives, administration safety, dose range monitoring response to and basic fluid and electrolyte balance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 129, and Respiratory Therapy 146, or Consent of Department Chairperson.
.3 lecture and 2 lab hours per week. 4 credit hours.

\section*{RESPIRATORY THERAPY 230}

\section*{Advanced Cardiopulmonary Monitoring}

Case studies with PFTs, blood gases, hemodynamic profiles, ECGs, and related diagnostic testing, including related patho physiological changes of cardiopulmonary diseases. Advanced adult, pediatric, neonatal cardiopulmonary life support. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 200, and Respiratory Therapy 222, and Respiratory Therapy 225, and Respiratory Therapy 227, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{RESPIRATORY THERAPY 250}

\section*{Cardiopulmonary Rehabilitation Home Care}

Care of patients with chronic cardiopulmonary disease in a subacute setting and in their homes. Long-term therapeutic prescriptions, equipment selection, cleaning and asepsis of equipment in the non-acute care setting. Pulmonary rehabilitation goals and programs presented along with adjunct exercises, equipment, and assistive devices. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 200, and Respiratory Therapy 222, and Respiratory Therapy 225, and Respiratory Therapy 227, or Consent of Department Chairperson.
50 minutes per week. 1 credit hour.

\section*{RESPIRATORY THERAPY 260}

\section*{Advanced Specialty Topics}

Respiratory care research topics presented, ethics and board examination preparation, computer-assisted clinical simulations along with branching logic, latent image practice, mock certification, and registry examination preparation and practice. Resume, portfolio, and job interview preparation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Respiratory Therapy 225, and Respiratory Therapy 227, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[SOC SCI] SOCIAL SCIENCE (088)}

\section*{SOCIAL SCIENCE 101}

\section*{General Course}

Introduction to the Scientific Study of Human Behavior
A survey of subject matter and concepts selected from the disciplines of anthropology, psychology, and sociology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{SOCIAL SCIENCE 102}

\section*{General Course II}

Introduction to the Scientific Study of Human Behavior
A survey of subject matter and concepts selected from the disciplines of economics, geography, history, and political science. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 103}

\section*{Introduction to Applied Social Science}

General introduction to the influence of modern scientific technology on the life of the worker, the study of social problems that affect lives of working people in the years to come, and contribution of social science to development of social participation skills necessary for vocational and marital success. Applicable for A.A.S. degree only. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 104}

\section*{Special Topics in the Social Sciences}

Focus on selected topics in social sciences, the characteristics of group life, the effect of the local action on the global scene, and the interrelationships between society, culture, and the individual. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Course may be repeated up to three times and may count for a maximum of six credit hours. Consent of Department Chairperson required for repeatability.
Prerequisite: Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{SOCIAL SCIENCE 105}

\section*{American Social Issues}

Critical study of selected current social problems such as labor relations, the welfare system, civil rights, and automation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 106}

\section*{North and South American Social Development}

Structure and culture of modern urban and industrial development; topics include industrialization and leisure, their consequences for status and class organization in the work place and social organization in the wider community, social inequality, social stratification and mobility, and changing and social structures. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 110}

\section*{Introduction to Global Studies}

To prepare students for an increasingly interdependent world, this multidisciplinary core course cultivates an active conversation about the interconnected global context of our lives. Examines shared and divergent histories, politics, aesthetics, communication practices, cultures, and economies, as well as human impacts on the environment by paying close attention to contradictions among ethnic and religious identities, strong national affiliations, and the fluidity of nation-state borders. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes. 3 credit hours.

\section*{SOCIAL SCIENCE 115}

\section*{Introduction to Health Education and Prevention}

This course is the first requirement of the HIVISTI Prevention Education Basic Certificate program/plan 195. Introduction to the fundamentals of community health education for prevention, early detection, self care, and recovery, particularly with regard to substance abuse. Survey of health education and outreach programs for diverse populations and communities, including methods of evaluation to determine the effectiveness of various programs, prevention strategies that attempt to motivate positive behavioral changes and the assessment, planning, and evaluation of interventions. Covers the teacher and application of important life skills and provides an overview of managed health care systems. This course is designed for those working or interested in community health occupations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 116}

\section*{HIVISTI Prevention Education}

This course is one of the requirements of the HIV/STI Prevention Education Basic Certificate program/plan 195. Designed to provide an introduction to the fundamentals of HIV/STI peer prevention education, the prevention education and related outreach programs geared to diverse populations and communities, methods of assessment to determine the health needs of different communities as well as methods of evaluation as applied to health programs to determine their effectiveness. Covers the areas of HIVIAIDS, other STI's, safer sex, and harm reduction, and the specific communities and neighborhoods that have a positive or negative impact on both individual and community health, particularly those that foster sexual risk-taking behavior. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 115.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 117 \\ HIV/STI and Special Populations}

This course is one of the requirements of the HIV/STI Prevention Education Certificate program/plan 195. Designed as an introduction to the concerns and issues of HIV/STI and their effect on special populations. Examines related needs and problems of those specific populations, which includes women and children, adolescents and young adults, minorities, men who have sex with men (MSM), the disabled, and those who are incarcerated., and the health needs of the different communities, particularly with regard to prevention, testing, treatment, substance abuse, and care efforts. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 115.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{SOCIAL SCIENCE 118}

\section*{The ABCs of STIs}

This course is one of the requirements of the HIV/STI Prevention Education Certificate program/plan 195. An overview of the more common sexually transmitted diseases (other than HIV) and the effect they have on different populations, including the basic epidemiology of these diseases, their transmission, diagnosis and treatment options, and their various stages. Explores the possibility of contagion and level of incidence, short and long term effects, as well as examines important issues and problems in harm reduction, prevention, and support. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 116.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 119}

\section*{HIV/STI and GLBT Health}

This course is one of the requirements of the HIVISTI Prevention Education Certificate program/plan 195. An overview of the state of health for gay, lesbian, bi-sexual, and transgender populations. Examines common behavior and trends of these populations as well as related needs and problems, such as accessing health and social services, and the health needs of the different communities, particularly in the areas of prevention, testing, treatment, and care. Analyzes the impact of HIV/AIDS, STIs, and other diseases on these communities. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 118.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 120 \\ HIVISTI Outreach Skills}

This course is one of the requirements of the HIV/STI Prevention Education Certificate program/plan 195. Provides advanced education and training in HIV/STI risk reduction in order to conduct peer education and risk reduction counseling in community-based outreach settings. It explores contemporary concerns, as well as recent findings regarding the transmission and risk reduction of STIs and issues relating to gender, sexual orientation, culture, and ethnicity in order to better prepare students to counsel multi-cultural groups. Covers training in careers in public health education. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of \(C\) or better in Social Science
116 or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 121}

\section*{Case Management/Individual Intervention}

This course is one of the requirements of the HIVISTI Prevention Education Certificate program/plan 195. An introduction to the areas of the case management process in health advising with a focus on skills development in the areas of communication skills and techniques for client-centered health advising for different populations, particularly those dealing with HIV/AIDS. Covers the required ethical documentation, and of case manager and in take interviewing, data collection and documentation, and effective use of referrals. Develops the skills necessary to work effectively in HIV/STI prevention health agencies, including the ability to correctly fill in required forms. Explores strategies for managing cases and encouraging client change in diverse populations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Science 120.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 201}

Group Facilitation
This course is one of the requirements of the HIV/STI Prevention Education Certificate program/plan 195. An introduction to both theoretical concepts and practical applications of group dynamics and facilitation skills for people working in the fields of addiction counseling and HIV/ STI prevention education. Explores the basic areas of goal setting, problem-solving skills, effective group facilitation concepts, dealing with different personalities, handling conflict, and reaching consensus, including observation and participation in group dynamics, group membership, and group facilitation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SCIENCE 221}

\section*{Black Economics}

African Americans as producers rather than consumers, evaluation, understanding of Black power and militancy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[SOC SER] SOCIAL SERVICE (091)}

\section*{SOCIAL SERVICE 101}

\section*{Introduction to Social Work}

Concepts, principles, and processes encountered by social service workers; questions of motivation, acceptance, attitude, techniques of listening and interviewing. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 102}

\section*{Introduction to Gerontology}

An overview of elder issues including the social, psychological, and physical aspects of the aging process. Examine the economic and social impact of the growing elderly population on US society and global community and career opportunities in this expanding field. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 103}

\section*{Aging and Social Policy}

A study of government policy to familiarize students with programs at the federal, state, and local levels that address elder issues from housing to health care to employment to nutrition and recreation. The creation of public policy, the role of elder advocacy groups in shaping legislative agendas, and issues affecting current and future government programs such as Medicare and Medicaid. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{SOCIAL SERVICE 104}

\section*{Special Topics in Aging}

A study of current issues in aging. Topics such as the economics of aging, sexually transmitted diseases, ageism, quality of life and support services for those aging in place (at home) will be explored from a holistic approach to problem identification and basic intervention strategies. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 105}

\section*{Physiology of Aging}

An exploration of the basic changes that occur in the physical make-up of men and women as a result of the aging process. Discussion of the causes and effects of disease and debility, as well as health assessment measures, health care options, and health maintenance strategies. Writing assignments, appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 106}

\section*{Aging and the Family}

An introduction to family theory as found in significant sociological traditions. The effect of the aging process on extended and nuclear families, the changing roles of parent and child, the family stresses and rewards of care giving, the role of aging siblings, relationships between the generations, and the financial and psychological impact of caring for the frail elder in the family setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 107}

\section*{Aging and Leisure}

An exploration of the opportunities that are available to the elderly from the well years to the frail years, for personal enrichment, intellectual development, volunteering, health improvement, travel, spiritual growth and second careers. Explores ways in which a majority of an individuals, older years may be a time of great opportunities for growth, development, and service. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 109}

\section*{Report Writing for Social Service Aides}

Introduction to records, reports, and forms required in social agencies; report writing and record keeping. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in English 101.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 110}

\section*{Introduction to Property Management}

This survey course is the first of the required courses in the Property Management/Desk Clerk program/plan 368. An overview of the different types of multi-family affordable and supportive housing, including housing linked with social services. Profiles the different populations living in affordable and supportive housing and the role of supportive service personnel in aiding at-risk tenants. Explores the different housing programs that pay for construction, rehabilitation and operating subsidies at the federal, state, and local levels and covers applicable legal concerns, such as the Fair Housing Law. It also introduces the major functions of property management, including specific responsibilities, usual practices, legal functions and issues, and confidentiality and other ethical concerns, and specific vocabulary to the field. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 111}

\section*{Tenant Services and Communications}

This course is one of the requirements in the Property Management/Desk Clerk program/plan 368. An overview and practice of the interpersonal skills needed for a clerical position in a supportive/affordable housing setting. Provides ways to understand as well as interact effectively with the different populations living in supportive housing. Explores the areas of front desk cordiality, problem identification, and problem solving, as well as the common procedures for oral and written communications and complaints. Provides common procedures for referring tenants for social services. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 110.
100 minutes per week. 2 credit hours.

\section*{SOCIAL SERVICE 112}

\section*{Desk Clerk Operations}

This course is one of the requirements in the Property Management/ Desk Clerk program/plan 368. An overview of desk clerk operations, procedures, and security. Explores the role of the front desk and the responsibilities of the position in affordable and supportive housing, covering areas of front desk policies, safety and security, interaction with external agencies and authorities, interaction with tenants and nontenants, confidentiality issues, and maintenance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 110.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 113}

\section*{Property Management Clerk Internship}

This course is the final requirement in the Property Management/Desk Clerk program/plan 368. Combines classroom training with practical property management clerk work experience through on the job training in a supportive or affordable housing project setting. Covers legal, ethical, and performance concerns, as well as interviewing and job placement skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of all previous Property Management/ Desk Clerk certificate program/plan 368 required courses: Grade of \(C\) or better in Social Service 110, and Social Service 111, and Social Service 112 and Consent of Department Chairperson.
1 lecture and 10 lab hours per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{SOCIAL SERVICE 114}

\section*{Marketing and Leasing}

This course is one of the requirements in the Property Management/ Leasing Specialist program/plan 369. An overview of the major functions and practices of the marketing and leasing specialist in a supportive housing environment. Explores the specific responsibilities, effective communication skills, usual practices, legal functions and issues, as well as applicable ethical concerns facing leasing specialists in a supportive housing setting and examines the characteristics of the different populations living in affordable and supportive housing and the various supportive funding streams. Covers compliance with government policies and procedures and the specific laws pertaining to supportive housing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of the Property Management/Desk Clerk certificate program/plan 368.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 115}

\section*{Finance and Accounting}

This course is one of the requirements in the Property Management/ Leasing Specialist program/plan 369. An overview of the areas of income and expenses for a supportive housing residence, as well as budgeting, and general business math skills necessary for keeping track of income and expenses. Examines different programs which subsidize rentals and low income subsidy regulations, including how to calculate rents under different programs and how to handle rent disputes. Introduces spreadsheets and financial reports and examines property management software such as Excel and Yardi, how to keep track of income and expenses, and how to compute accurate numbers. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of the Property Management/Desk Clerk certificate program/plan 368.
100 minutes per week. 2 credit hours.

\section*{SOCIAL SERVICE 116}

\section*{Maintenance and Risk Management}

This course is one of the requirements of the Property Management/ Leasing Specialist program/plan 369. An overview of the major functions and responsibilities involved in property management maintenance and risk management in a supportive housing environment. Explores building operating systems, maintenance standards and compliance, enforcement, securing of vendor bids, as well as fire, life safety, and other inspections. Covers the areas of insurance, keeping necessary computer data, and maintaining professional relationships with others. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 114.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 117}

\section*{Property Management Leasing Internship}

This course is the final requirement for the Property Management/ Leasing Specialist program/plan 369. Combines classroom training with work experience through on the job training in a supportive or affordable housing project setting. Covers legal, ethical, and performance concerns, as well as interviewing and job placement skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Successful completion of all previous Property Management/ Leasing Specialist certificate program/plan 369 required courses: Grade of C or better in Social Service 114, and Social Service 115, and Social Service 116 and Consent of Department Chairperson.
1 lecture and 10 lab hours per week. 3 credit hours.

\section*{SOCIAL SERVICE 201}

Principles of Social Work Practice
Introduction to social welfare resources of the community; discussion of methods to help persons make use of these resources, including analysis of the helping relationship, role of non-professional worker, problemsolving approach to individual, family, and community problems. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 202}

\section*{Aging and Human Services}

Explores the history of gerontological social work and the methods employed in providing the greatest benefits of human services to the elderly population. Focus on the practical principles of case management from interviewing to evaluation and familiarize with the characteristics of the service settings in which the Gerontology Specialist will encounter the elderly. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, and Social Service 106, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 203}

\section*{Inter Communication with the Elderly}

Basic principles of communication as employed in counseling and human services settings, emphasizing the development of the listening, speaking, behavioral and attitudinal skills that are required by gerontology professionals at the level of social work assistant. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, and Social Service 106, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 204}

\section*{Cross-Cultural Studies in Gerontology}

A comparative study of aging in a variety of cultures from traditional to modern. Examine Native American, traditional Chinese, modern European, dominant and minority. American cultures and their attitudes toward the elderly and how these attitudes are crystallized into social policy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 205}

\section*{Ethical Issues in Aging}

Focus on increases in the population of those fifty (50) and above increases, and so do the emerging issues relative to ethics. Explores issues such as elder abuse, dementia, intergeneration equity, guardianship and living wills, decision making, and personal safety in the context of preparation for those who work with the targeted population. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{Course Descriptions}

\section*{SOCIAL SERVICE 206}

\section*{Human Development and Aging}

Builds on human growth and development, specifically designed to focus on development tasks relative to those who are fifty (50) and beyond. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 212}

\section*{Introduction to Group Process}

Focus on groups; parent groups, community action programs, recreation programs, church groups, or in child care programs. How individuals function as group members; role of the leader; encouraging participation and group action for achieving group goals. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 213}

\section*{Advanced Group Process}

Focus on working with groups; discussion of techniques for working most effectively with different types of groups. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 212.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 215}

\section*{Social Problems and Social Action I}

Problems of urbanization, industrialization, cultural and educational deprivation, juvenile delinquency, and techniques and programs organized to combat these problems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 228}

\section*{Methodology for Social Work}

Principles of casework applied to work with families; community resources available to meet economic, emotional, and health needs, techniques for implementing referrals for such services. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, and Child Development 102, and Social Service 101, and Social Service 201, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 229}

\section*{Social Service Practicum}

Field work placement in a family welfare agency 20 hours per week, 8 or 16 weeks; 2-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 228, and Child Development 107, or Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{SOCIAL SERVICE 248}

\section*{Principles of Youth and Group Work}

Social development and behavior of young people and other adults in all group settings; church groups, street gangs, tutoring programs, recreational groups, YMCAs and YWCAs settlement or delinquency prevention programs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 102, and Social Service 201, and Social Service 213, and Social Service 215, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 249}

Practicum in Youth Work
Field work assignment in youth agency 20 hours per week, or 8-16 weeks; 2-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 101, and Child Development 102, and Social Service 101, and Social Service 248, or Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{SOCIAL SERVICE 250}

\section*{Practicum I}

Combines classroom training with field placement at a community agency or institution serving older persons. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 102, and Social Service 105, and Psychology 222.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{SOCIAL SERVICE 251}

\section*{Practicum II}

This capstone course provides a review of gerontology course work, field placement experience at a human services agency or institution serving older persons, advanced classroom training in practice concepts related to service delivery to older adults, and guidance in producing a final project that will summarize the students' gerontological course work. Writing assignment, as appropriate to the discipline, part of the course. Prerequisite: Grade of C or better in Social Service 250.
2 lecture and 5 lab hours per week. 3 credit hours.

\section*{SOCIAL SERVICE 252}

\section*{Nursing Home Administration}

Introduction to administrative practices in long-term care facilities including organization, financial management, staffing, community relations, managing the physical plant, in-service training, and alternatives to institutionalization. Preparation for the Nursing Home Administrator licensing exam. Focus on community health systems, auxiliary agencies and programs, chronic diseases and infirmities, the aging process and the care of the aged, and related local, state, and federal legislation. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 253}

\section*{Accounting for Long Term Care}

Focus on the financial knowledge needed to perform the duties of a health care administrator in the long-term care setting. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{SOCIAL SERVICE 258}

\section*{Principles of Practice in Community Organization}

Focus on community action programs, community planning, or neighborhood improvement. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Child Development 102, and Social Service 101, and Social Service 201, and Social Service 213, or
Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{SOCIAL SERVICE 259}

\section*{Practicum in Community Service}

Field work placement in a community service agency plus weekly seminars. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Social Service 258, or Consent of Department Chairperson.
2 lecture and 20 lab hours per week. 6 credit hours.

\section*{[SOC] SOCIOLOGY (089)}

\section*{SOCIOLOGY 110}

\section*{Religion and Society}

Sociological investigation into the relationship between religious values and forms of social organization. Focus on contemporary religious movements and includes examples from Christian, Jewish, Islamic and non- western religions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 201}

\section*{Introduction to the Study of Society}

Characteristics of group life, the effects of the group on human conduct, and the interrelationships between society, culture, and the individual. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 202}

\section*{Sociology of Urban Life}

Study of urbanization, personal, and social disorganization, collective behavior, social movements and voluntary associations, race and ethnic relations, social stratification, industrial relations, and political sociology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 203}

\section*{Marriage and the Family}

Study of the family as a dynamic social institution; emphasis on love, sex, dating, courtship and marriage, child rearing, marital problems, and divorce. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 207}

\section*{Sociology of Sex and Gender}

Examines the difference between behavior based on what society says is appropriate in order to be masculine or feminine. Examines the question of what forces in society are most influential in determining the place of men and women with special emphasis on power. Examines how this influence works in the process of socialization and core social institutions, including marriage and family, education, religion, the economy, and politics. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 209}

\section*{The Black Man in the United States}

Environmental factors that identify African-Americans as an ethnic group in the United States; study of social values, attitudes, definition, behavior, social institutions and processes of this ethnic group. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 210}

\section*{Diverse Cultures in a Global Age}

Examines the issues of diversity and prepares students to speak and act with sensitivity and awareness of others, global events and their implications, and how to interact with international visitors through the use of role playing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 211}

\section*{Race and Ethnic Relations}

A comparative analysis of racial, religious and ethnic groups. Examines how group identity is formed and how it is maintained or persists how group identity affects inter-group relations, social movements, government policy, and related social problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 220}

\section*{Poverty and the Law I}

Analysis of laws pertaining to credit buying, housing and real estate, and domestic relations (nonsupport, divorce, paternity); study of present state of these laws and impact on the poor. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 205}

\section*{Social Problems}

An analysis of concrete social problems. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{SOCIOLOGY 222}

\section*{Urban Planning Law}

Survey of ancient rights and common law rights that limit owners' use of property; includes restrictive covenants, easements, eminent domain, zoning, decision-making structure, housing, and building code violations.
Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 225}

\section*{Introduction to Criminal Justice}

Philosophical background of criminal justice; history, constitutional limitations, agencies, processes of justice, human nexus; efficiency, morality, legality, compassion criteria for judgment; research areas and trends. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 241}

\section*{Institutional Racism}

Survey of racism in basic institutions of American life: education, law enforcement, health services, government, business, industry, religion, entertainment, science, and housing. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SOCIOLOGY 280}

\section*{Human Relations}

Social and psychological aspects of inter-group relations; relationships between the dominant group and minority religious, ethnic, racial, and social class groups. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{[SPANISH] SPANISH (057)}

\section*{SPANISH 101}

\section*{First Course}

Pronunciation and basic structures, speech patterns, reading and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Exam or Consent of Department Chairperson. 200 minutes per week. 4 credit hours.

\section*{SPANISH 102}

\section*{Second Course}

Continuation of Spanish 101. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 101, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{SPANISH 103}

\section*{Third Course}

Review and development of basic language skills, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 102, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{SPANISH 104}

\section*{Fourth Course}

Review of language structure and interpretation of readings, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 103, or Consent Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{SPANISH 111}

\section*{Spanish for Hispanic Americans}

Formal structure of Spanish and preparation for enrollment in advanced courses. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{SPANISH 113}

\section*{Spanish For Near - Native Speakers I}

Review of formal structure and sound system of language for near-native speakers; emphasis on accurate, fluent, and effective oral expression. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{SPANISH 114}

\section*{Spanish for Near Native Speakers II}

Continuation of Spanish 113. Emphasis on reading and writing skills. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Spanish 113 with a C grade of better, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{SPANISH 191}

\section*{Survival Spanish Nursing}

Provides trans-cultural training for nurses and future nurses. Emphasis is on enhancing quality patient care. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPANISH 192}

\section*{Survival Spanish for Law Enforcement Officers}

Provides trans-cultural training for non-Spanish speaking police officers. Emphasis is on enhancing quality communication skills when aiding victims and contact with offenders. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson. 150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{SPANISH 198}

\section*{Study Abroad: Intensive}

Utilizes a collaborative cohort model for participation in the CCC Spanish summer language and cultural immersion study abroad program. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisites: Completion of Spanish 102, or concurrent enrollment and selection by committee.
100 minutes per week. 2 credit hours.

\section*{SPANISH 199}

\section*{Study Abroad: Immersion}

Bridges the content delivered in Spanish 198 and provides immersion in Spanish language and culture. This specifically designed course will consist of two parts: a pre and post set of sessions in Chicago and a fourweek immersion language program in Salamanca, Spain. The language program in Spain, to be delivered by the University of Salamanca, will consist of five-hour daily sessions. Monday through Friday. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Spanish 198.
200 minutes per week. 4 credit hours

\section*{SPANISH 206}

\section*{Intensive Oral Practice}

Practice in spoken language, fluency, and accuracy. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 104, or Consent of Department Chairperson.
200 minutes per week. 4 credit hours.

\section*{SPANISH 210}

\section*{Modern Civilization and Culture}

Recent social, cultural, and historical trends, conducted in Spanish and English. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPANISH 213}

\section*{Introduction to Modern Literature}

Selections from contemporary writings, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 104, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPANISH 214}

\section*{Readings in Literature}

Works from selected historical periods, conducted in Spanish. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Placement Test, or Spanish 104, or Consent of Department Chairperson.
150 minutes per week

\section*{[SPEECH] SPEECH (095)}

\section*{SPEECH 100}

\section*{Introduction to Oral Communication}

Study of the process of communication as it applies to interpersonal, group, or mass communication; emphasis on practical applications of communications in our lives; Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better In English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPEECH 101}

\section*{Fundamentals of Speech Communication}

Theory and practice of oral communication; development of poise and confidence, delivery, and speech organization; public speaking practice; small group discussion, and development of standards of criticism. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{SPEECH 102}

\section*{Public Speaking}

Advanced theory and practice of oral communication in public speaking in speaker-audience situations; discussion of psychological effects of speech techniques, choice of words, attitudes, and structuring; role of speech in gaining consensus in a confrontation of the rhetoric of agitation and control; studies of outside speakers from personal viewing, television viewing, and examination of speech texts, and argumentative techniques used in the persuasive speech. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Speech 101, or Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{SPEECH 104}

\section*{Group Communication}

Principles and theories involved in discussion techniques; participation in various kinds of discussion groups in preparation for leadership roles in community, business, and professional groups. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Speech 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPEECH 105}

\section*{Contemporary Communications}

Primary modes of communication used in modern society. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 106}

\section*{Human Communications}

Types of verbal and nonverbal communication, oral and visual as transmission of data and information to elicit a response; includes methods of encoding information for communication, history, social consequences of modern communication, both verbal and visual. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{CoUrse Descriptions}

\section*{SPEECH 112}

\section*{Introduction to Oral Communication}

Process of communication applied to interpersonal group and mass communication; emphasis on practical application of communication in our daily lives. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 131}

\section*{Introduction to the Theater}

Elementary principles of acting, directing, scene design, scene construction, costuming, lighting, sound and makeup for the stage. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 135}

\section*{Speech Projects}

A speech project performed outside of the classroom as an activity. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 2 credit hours will be counted towards graduation.
Prerequisite: Consent of Department Chairperson.
3 lab hours per week. 1 credit hour.

\section*{SPEECH 140}

\section*{Speech Clinic}

Focus on the treatment of problems in voice or diction: huskiness, lack of vocal melody, nasality, slovenly diction, sound substitution, and lack of ease in precise articulation of consonant and vowel sounds. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 2 lab hours per week. 2 credit hours.

\section*{SPEECH 143}

\section*{Training the Speaking Voice}

Improvement and development of an individual's speech, pitch, volume, and overall articulation through use of phonetics of American English. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 144}

\section*{Oral Reading and Interpretation}

Study of communication skills required for effective oral reading; experience in oral interpretation of representative examples from prose, poetry, and drama. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Speech 101, or Consent of Department Chairperson.
50-150 minutes per week. 1-3 credit hours.

\section*{SPEECH 145}

\section*{Radio and Television}

Historical development of broadcasting and analysis of existing programs; objectives of radio and television, study of program types, acceptable standards for broadcasting, and career opportunities. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{SPEECH 160}

\section*{Business and Professional Speech}

Speech techniques used in selling, administrative reporting, public relations, program speaking, conference procedures, and other industrial and professional presentations. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 202}

\section*{Interpersonal Communication}

Study of leadership, group process, and interpersonal relations in the small group, conference, and public forum. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{SPEECH 205}

\section*{Family Communication}

A study of the family as a communication system and the use of principles of healthy communication within a family context. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPEECH 206}

\section*{Argumentation}

Role of debate in a democratic society; principles of investigation analysis of issues, types and tests of evidence and reasoning as applied to public questions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Speech 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{SPEECH 243}

\section*{Speech for Teachers}

Correcting common errors of articulation, identifying and directing remedial cases, reading aloud with interest, controlling and directing simple classroom discussions, developing good speaking voices, and selecting and presenting assembly programs. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Speech 101, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{[SURG TC] SURGICAL TECHNOLOGY (016)}

\section*{SURGICAL TECHNOLOGY 111}

\section*{Introduction to Surgical Technology}

Basic concepts and principles for developing skill competencies required to assist in surgery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Surgical Technology program/plan 267 or 268.
150 minutes per week. 3 credit hours.

\section*{SURGICAL TECHNOLOGY 112}

\section*{Preparation for Surgery}

Focus on the skills necessary to help prepare the operating room for surgery. Emphasis is placed on psychosocial and physical needs of the patient requiring surgery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Surgical Technology program/plan 267 or 268.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 113}

\section*{Special Patient Care}

Acquisition of skills necessary to take care of unique patients. Emphasis is placed on ambulatory, geriatric, pediatric trauma surgeries and contemporary issues. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Surgical Technology program/plan 267 or 268.
150 minutes per week. 3 credit hours.

\section*{SURGICAL TECHNOLOGY 114}

\section*{Surgical Interventions I}

The clinical portion of the course allows putting into action the theory acquired in Surgical Technology 112. Emphasis is placed on reading a preference card, acquiring items needed for the case, hand washing, OSHA and CDC guidelines, don sterile gowns and gloves for self and others, ORSPD, back table set-up, and getting to their field successfully. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Surgical Technology 111, and Surgical Technology 112, and Surgical Technology 113, and Admission into the Surgical Technology program/plan 267 or 268.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 115}

\section*{Surgical Intervention II}

A study of surgical procedures with emphasis on surgery of the liver, biliary tract pancreas and spleen thyroid and parathyroid, breast surgery, ophthalmic, otology surgeries. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Surgical Technology 111, and Surgical Technology 112, and Surgical Technology 113, and Admission into the Surgical Technology program/plan 267. o 268.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 116}

\section*{Surgical Intervention III}

A study of surgical procedures with emphasis on laryngologic, head and neck orthopedic, neurosurgery, plastic, and reconstructive surgery. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Surgical Technology 111, and Surgical Technology 112, and Surgical Technology 113, and Admission into the Surgical Technology program/plan 267. or 268.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 117}

\section*{Surgical Pharmacology}

Introduces the scientific principles of compounds and chemicals as they are used in the surgical setting. This course defines the rationale for use of specific drugs, and their side effects. It renders the student competent in safe handling and labeling medications. Helps students measure and mix medications given to them by the nurse or physician to be used on the field. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Surgical Technology program/plan 267 or 268.
100 minutes per week. 2 credit hours.

\section*{SURGICAL TECHNOLOGY 200}

\section*{Application Aseptic Techniques}

The clinical portion of the course allows putting into action the theory acquired in previous courses. Hand washing, gowning, self and other, gloving self and other, establishing and maintaining a sterile field, getting to the field successfully. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Admission into the Surgical Technology program/plan 267 or 268.
15 lab hours per week. 3 credit hours.

\section*{SURGICAL TECHNOLOGY 211}

\section*{Surgical Intervention IV}

A study of surgical procedures with emphasis on thoracic, vascular, and cardiac surgery, and resume writing, job placement, interviewing, and negotiating in the job market. Review for the national exam. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Surgical Technology 200.
2 lecture and 1 lab hours per week. 2 credit hours.

\section*{SURGICAL TECHNOLOGY 212}

\section*{Clinical Practicum I}

A clinical course designed to develop proficiency in the skills required of an entry level Surgical Technologist. Current issues in surgery, resume writing, interviewing negotiating in the job market. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Surgical Technology 211.
15 lab hours per week. 5 credit hours.

\section*{SURGICAL TECHNOLOGY 213}

\section*{Clinical Practicum II}

After successful completion of all Surgical Technology courses, this course is a forum for the discussion of salient issues related to the practice of surgery as they affect the Surgical Technologist. Preparation for employment, as well as review of the comprehensive exam. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Consent of Department Chairperson..
24 lab hours per week. 8 credit hours.

\section*{Course Descriptions}

\section*{SURGICAL TECHNOLOGY 214}

\section*{Obstetrics/Gynecologic Technology}

Basic concepts and principles for developing skills competencies required for assisting in surgery, including aseptic techniques, scrubbing, gowning, and gloving the female anatomy, proper positioning, patient safety, skin preparation instrumentation, supplies and drugs, equipment, and the surgical interventions. Writing assignments, as appropriate to the discipline, are part of the course. The lab portion of the course allows the student to practice the theory offered.
Prerequisite: English 101, and Consent of Department Chairperson, and concurrent enrollment in Surgical Technology 215.
2 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 215}

\section*{Obstetrics/Gynecologic Technology}

Basic concepts and principles for developing skills competencies required for assisting in surgery. Application of aseptic techniques, scrubbing, gowning, and gloving the female anatomy, proper positioning, patient safety, skin preparation instrumentation, supplies and drugs, equipment, and the surgical interventions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: English 101, and Consent of Department Chairperson, and concurrent enrollment in Surgical Technology 214.
12 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 216}

\section*{Sterile Processing Technology}

Basic and principles for developing skills and competencies required for infection and control in the sterile processing department in a health care facility, including cleaning, disinfecting, decontamination, sterilization, Standard precautions, and Universal precautions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of English 101, and Consent of Department Chairperson, and concurrent enrollment in Surgical Technology 217 with a grade of \(C\) or better.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{SURGICAL TECHNOLOGY 217}

\section*{Sterile Processing Technology Lab}

Provide clinical training and the application of principles required for infection prevention and control in the sterile processing department in a health care facility, including clinical experience in cleaning, disinfecting, decontamination, sterilization, Standard precautions, and Universal precautions. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Completion of English 101, and Consent Department Chairperson, and concurrent enrollment in Surgical Technology 216 with a grade of \(C\) or better.
12 lab hours per week. 4 credit hours.

\section*{[332TECH] TECHNOLOGY}

\section*{332TECH 400}

\section*{Scaffold Safety}

General safety guidelines for constructing and dismantling scaffolds, including a review of local municipal and OSHA codes, rules and regulations. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 401}

\section*{Introduction To Labor \& Trade Occupations}

This course will provide the student with information about trades and crafts related training programs, unions, and working conditions. Writing assignments, as appropriate to the discipline, are part of the course. 100 minutes per week. 2 credit hours.

\section*{332TECH 406}

\section*{Construction Materials/Methods}

This course will provide the student with the information needed on construction materials and methods used in the construction of buildings. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 407}

\section*{Quality Abatement Supervisor}

This course emphasizes the supervisory responsibilities required to safely remove hazardous materials as asbestos and lead. The course will provide instruction on potential health effects, personal protective equipments and information on such hazardous materials as asbestos, lead and mold; removal practices and procedures and other related safety and health concerns. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332TECH 408}

\section*{Environmental Safety Worker}

This course is designed to provide the student with the general knowledge for environment safety workers. It fulfills OSHA's requirements to perform class I and II work. Students will receive instruction on the potential health effects, personal protective equipment, background information on such hazardous materials as asbestos, lead, and mold; removal practices and procedures, and other safety and health concerns. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332TECH 409}

\section*{Construction Safety}

This course is intended to provide the student with a basic understanding of safety practices found in the construction industry. Emphasis will be placed upon those areas in construction that are most hazardous, using OSHA standards as a guide. Upon successful completion, students will be issued the OSHA construction safety and health 10-hour course completion card. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{332TECH 410}

\section*{Interior Construction I}

This course will provide the student with the opportunity to practice and master the task required for entry level carpentry positions. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 9 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{332TECH 411}

\section*{Interior Construction II}

This course will provide the student the opportunity to practice and master the installation and the finishing techniques of interior carpentry, which are required for entry level employment as carpentry apprentice. Particular attention will be given to the installation of finish trim, doors, windows, flooring, hardware, ceilings, counters, cabinets and the finishing of woodwork and trim. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 416}

\section*{Exterior Construction I}

This course will present material and methods used in various types of concrete forming for building construction. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 417}

\section*{Exterior Construction II}

This course will focus on rough framing and exterior walls, stairs, porches, decks, roofs and dormers. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 418}

\section*{Exterior Construction III}

This course focus in on installation of banisters, fascia, siding, windows, doors, screens, gutters, downspouts, roofing materials, and other exterior trim. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 419}

\section*{Building Maintenance Math}

Basic principles of math with application relative to building maintenance and repair. Course content include: fractions, decimals, percents, measurements, ratios and proportions. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 420}

\section*{Carpentry Maintenance}

Basic carpentry skills used in building maintenance and repair. Course content includes: tools, safety, materials, doors, windows, walls, ceiling, and interior trim. Writing assignments, as appropriate to the discipline are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 421}

\section*{Electrical Maintenance}

This course covers basic electrical skills used in building maintenance and repair. Course content includes: troubleshooting, testing, repairing, and replacing devices and controls. Use of electric test meters and devices will also be included. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 422}

\section*{Plumbing Maintenance}

Basic plumbing skills used in building maintenance and repair. Course content includes: troubleshooting, repairing, and replacing faulty plumbing and fixtures. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 424}

\section*{Drywall \& Interior Wood Trim}

This course is designed to provide the student with the basic fundamentals of how to install drywall, apply tape and joint compound, sand to a smooth surface, as well as, install wood trim to baseboards, windows, and doors. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 425}

\section*{Window and Door Installation}

This course is designed to provide the student with the knowledge and skills required to install windows and doors. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours

\section*{332TECH 426}

\section*{Intro to Concrete Masonry}

This course provides an overview of concrete masonry trade, which includes the history and safety standards. Writing assignments, as appropriate to the discipline, are part of the course.

\section*{150 minutes per week. 3 credit hours.}

\section*{332TECH 427}

\section*{Masonry Tools \& Equip}

This course is designed to provide the student with an overview of the types of tools and equipment used in the concrete masonry industry. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 428}

\section*{Mortar}

This course is designed to introduce students to mortar applications. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 3 lab hours per week. 3 credit hours.

\section*{332TECH 429}

\section*{Basic Mathematics and Specifications}

This course is designee to teach basic applications of mathematics pertinent to the trade. Emphasis will be placed on actual measurements and calculations, different types of specifications used in the building industry as related to the trade. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 430}

\section*{Masonry Installation Process}

This course is designed to provide students the practical skills required to install masonry units. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{Course Descriptions}

\section*{332TECH 431}

Specifications \& Building Code
This course will enable the student to adhere to established local codes and laws governing construction and rehabilitation of buildings; measure and estimate costs of labor, time and materials; develop written proposals for specific projects. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332 TECH 432}

\section*{Basic Arc Welding}

In this course, the student will concentrate and master basic welding skills and techniques. An overview of the safety rules and procedures will also be provided. Writing assignments, as appropriate to the discipline, are part of the course.
3 lab hours per week. 1 credit hours.

\section*{332TECH 434}

\section*{Introduction to Plumbing}

This course is designed to provide an overview of the plumbing trade which includes the history and safety and sanitation procedures. Writing assignments, as appropriate to the discipline, are part of the course. 150 minutes per week. 3 credit hours.

\section*{332TECH 435}

\section*{Plumbing Tools \& Equipment}

This course is designed to provide the student with an overview of the types of tools and equipment used in the plumbing trades. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 436}

\section*{Plumbing Codes}

This course is designed to introduce students to the regulations of Illinois Department of Public Health. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hours.

\section*{332TECH 437}

\section*{Basic Plumbing Related Mathematics}

This course is designed to teach the basic application of mathematics pertinent to the plumbing industry. Emphasis will be placed on actual measurements and calculations of pipes and other fittings. Writing assignments, as appropriate to the discipline, are part of the course. 50 minutes per week. 1 credit hours.

\section*{332TECH 438}

\section*{Intro to Fire Protection}

This course is designed to provide an overview of the fire protection and sprinkler trade. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{332TECH 439}

\section*{Home Plumbing System}

This course is designed to provide an overview of the plumbing systems within a home. Those systems include: waste, vent and water piping. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{332TECH 441}

\section*{Flooring/Floor Covering}

This course will instruct the student in safety precautions for working with adhesives and mastic; safety operation of equipment, and installation of carpeting/padding, as well as the replacement of damaged tiles. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 442}

\section*{Introduction to Bricklaying}

This course is designed to provide an overview of the bricklaying trade, which includes its history and safety standards. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{332TECH 443}

\section*{Bricklaying Tools \& Equipment}

This course is designed to provide the student with an overview of the tools and equipment used in the bricklaying industry. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 444}

\section*{Bricklaying Installation Process}

This course is designed for students to develop and practice the skills and techniques required in bricklaying, Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{332TECH 448}

\section*{Vocational Physical Training I}

Vocational Physical Training focus on preparing students for the physical challenges that line worker careers require. Students learn the basic of nutrition and how what we eat fuels our bodies. Students will learn proper techniques to stretch warm up and physically train. Emphasis is given to cardiovascular training as well as leg and upper body strength. Instructors work with students to overcome physical challenges and fears for basic pole climbing. Writing assignments, as appropriate to the discipline, are part of the course.
2 lab hours per week. 1 credit hours.

\section*{332TECH 449}

\section*{Professional Development}

This course is designed to provide the student with a basic understanding of the human relations skills necessary to obtain employment and succeed in a quality work environment. This course includes resume development, cover letter writing, job searching skills, networking skills, interviewing techniques, and post-interview skills. Additionally, this course helps students succeed while on the job by exposing students to current workplace trends, team building skills, customer and co-worker relations, attitude and motivation, stress management, and financial management and planning. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 451}

\section*{Plumbing}

This course will enable the student to identify pipe fittings and standard plumbing symbols; install rough plumbing for bath and kitchen fixtures, and install water heating systems. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{332TECH 452}

\section*{Basic Electrical Theory}

This class covers the theories behind basic electricity. The emphasis is on electron theory, magnetism, Ohm's Law, and circuitry. Alternating current concepts such as circuits with resistance, inductive and captive reactive circuits, and power factor correction are covered. Basic math skills are used. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{332TECH 453}

\section*{Overhead Techniques \& Projects I}

This first semester discusses basic electric system layout from generator to electrical user and focuses on practical tasks and working concepts associated with electrical line work. Aerial climbing is introduced and practiced; power line equipment is used. Overhead distribution line design, specifications, and construction are part of this class. In this class, students learn basic rope knots, guying and anchoring techniques, electrical connectors, hand tools, and power tools. Additionally, students learn about single phase underground distribution concepts and metering principles.
Prerequisite: Grade of C or better in Math 107, and English 197, and 332TECH 448 and 332TECH 449. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{332TECH 458}

\section*{Overhead Techniques \& Projects II}

In this second semester class, students learn about and use advanced levels of topics such as aerial climbing, rope knots and splices, electrical connectors, electrical test equipment, as well as hand and power tools. Students also learn basic hydraulic principles. Application and installation of various electrical apparatus in a lab environment is completed by the students. Overhead distribution structures are constructed, protective grounding is introduced and live line work such as rubber gloving and hot stick use (de- energized lines). Underground distribution (UD) equipment is introduced including cable terminating tools and cable locating equipment. Students will install and terminate UD cable, Three-phase concepts such as metering and UD are covered.. The class covers various component pieces of electrical distribution equipment. The class is introduced to current protective devices including automatic throw overs, high voltage fuses, sectionalizers and oil circuit reclosers. Students learn to identify various powerline type switches and are introduced to step-type voltage regulators. Students practice safety concepts common to line workers. Students also identify and read distribution maps. A trencher/cable plow, trucks and other mobile equipment are used by the students. Students must earn a C or better in this course.
Prerequisite: Grade of C or better in 332TECH 452, and 332TECH 453, and 332TECH 462. Writing assignments, as appropriate to the discipline, are part of the course.
3 lecture and 2 lab hours per week. 4 credit hours.

\section*{332TECH 459}

\section*{Construction Safety and Rescue}

This course is intended to provide the student with a basic understanding of safety practices found in the construction industry. The student will be provided specific instruction in Flagging and Cardiopulmonary Resuscitation (CPR). Emphasis will be placed upon those areas in construction that are the most hazardous, using OSHA standards as a guide. Upon completion, students will be issued the OSHA construction safety and health 10 -hour course completion card. The student will be provided with a basic knowledge of bucket truck and pole top rescue requirements and procedures, rescue equipment and the skills to perform a bucket truck and pole top rescue. Emphasis will be placed upon those areas in the electrical line worker profession. Students must earn a C or better in this course to advance.
Prerequisite: Grade of C or better in 332TECH 452, and 332TECH 453 and 332TECH 462. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{332TECH 462}

\section*{Vocational Physical Training II}

Vocational Physical Training focuses on preparing students for the physical challenges that line worker careers require. Students will build upon the skills developed in Vocational Physical Training I. Students will learn how to select foods to provide optimum health and the best sources of energy. Students will learn how to read labels and how to use food to cleanse and maintain overall health. Students will build upon techniques for stretching, warming up and physical training. Student must earn a grade of C or better in course to advance to Vocational Physical Training III.

Prerequisite: Grade of C or better in 332TECH 448. Writing assignments, as appropriate to the discipline, are part of the course.
2 lab hours per week. 1 credit hour.

\section*{332TECH 463}

\section*{Vocational Physical Training III}

Vocational Physical Training focuses on preparing students for the physical challenges that line worker careers require. Students will build upon the skills developed in Vocational Physical Training II. Students will learn how to produce ideal body composition through food intake and how to balance other physical dimensions of self through physical activities. Students will learn advanced techniques to stretch, warm up and physically train. Student must earn a C or better.
Prerequisite: Grade of C or better in 332TECH 462. Writing assignments, as appropriate to the discipline, are part of the course.
2 lab hours per week. 1 credit hour.

\section*{332TECH 464}

\section*{Power Equipment Operation I}

This course provides instruction in preparation for obtaining a commercial driver's license. In addition, the class covers the operation and use of a variety of power equipment commonly used in the electric power industry including the use of bucket trucks, power take-off equipment, trailers, cable pullers and tensioners. Student must earn a grade of \(C\) or better in the course to advance.
Prerequisite: Grade of C or better in Math 107, and English 197, and 332 TECH 448 and 332TECH 449. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 1 lab hour per week. 2.5 credit hours.

\section*{CoUrse Descriptions}

\section*{332TECH 465}

\section*{Painting \& Decorating}

In this course, the students will be provided with instruction in the preparation of surfaces, the selection, mixing, and an application of paints, stains, varnishes, finishes, and wallpaper. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{332TECH 466}

\section*{Introduction to Painting}

The course is designed to provide an overview of the painting and decorating trade, which includes the history of the industry, job ethics, and terminology utilized within the industry. Critical thinking employability skills will also be covered. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 467}

\section*{Introduction to Painting Tools}

The course is designed to provide the student with an overview of the proper use and care of painting tools, equipment, selection, mixing, and application of materials used in painting. Emphasis will also be on safety practices and the storage and disposal of materials. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{332TECH 468}

\section*{Basic Taping}

The course is designed to provide students with instruction in the preparation of surfaces of taping. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{332TECH 469}

\section*{Advanced Plumbing/Pipefitting}

This course offers students the opportunity to increase their skills and knowledge in the plumbing industry. Course material covered will include the art of pipe sizing, print reading, fitting allowance, Code review, thermodynamics/ pipe connections above and below grade. A review of the proper procedure for solving offset problems will also be covered.
Prerequisite: 332 TECH 434 or one year experience in the plumbing industry.
1 lecture and 6 lab hours per week. 3 credit hours.

\section*{332TECH 470}

\section*{Power Equipment Operation II}

This course is a continuation of 332TECH 464 to provide instruction in preparation in obtaining a commercial driver's license. In addition, the class covers the operation and use of a variety of power equipment commonly used in the electric power industry including the use of bucket trucks. Power take-off equipment, trailers, cable pullers, and
tensioners. Student must earn a grade of \(C\) or better in the course to advance. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 107, and English 197, and 332 TECH 448, and 332TECH 449, and 332TECH 464.
2 lecture and 1 lab hour per week. 2.5 credit hours.

\section*{332TECH 471}

\section*{Exterior Repair Remodeling}

This course will instruct the student to remove and replace doors and windows; install exterior hardware; install weatherization, insulation and roofing materials. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 9 lab hours per week. 4 credit hours.

\section*{332TECH 481}

\section*{Interior Repair and Remodeling}

This course will instruct students to make minor plaster repairs; install interior hardware; replace/repair damaged wood flooring, tile and other floor coverings; apply wallpaper, paints, and other coatings. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 9 lab hours per week. 4 credit hours.

\section*{332TECH 491}

\section*{Residential Electrical Wiring}

This course will instruct students in writing of various electrical configurations commonly found in residential systems. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 9 lab hours per week. 4 credit hours.

\section*{332TECH 503}

\section*{Gas Utility Training I}

Gas Utility Training I introduces students to the principles, processes, and sub-systems applicable to the safe construction and operation of natural gas distribution systems, for delivery of natural gas to end-use customers. Classroom and practical room training will ensure that students possess the necessary skills and knowledge to perform duties in an entry-level gas utility worker job classification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 432CMGT 609.
5 lecture hours and 3 lab hours per week. 6 credit hours.

\section*{332TECH 504}

\section*{Gas Utility Training II}

Gas Utility Training II is a continuation of Gas Utility Training I. The course expands upon the principles, processes, and sub-systems applicable to the safe construction and operation of natural gas distribution systems relative to the construction of mains and services, pressure regular and meter installation/removal, excavation damage prevention, lockout/ tagout and shutdown processes, and safe appliance light-up procedures. It includes an introduction to joining methods for various pipe component materials, such as compression fittings for plastic and ferrous materials. Classrooms and hands-on training will ensure that students possess the necessary skills and knowledge to perform duties in a secondary level gas utility worker job classification. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 332TECH 503.
4 lecture hours and 6 lab hours per week. 6 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{332TECH 505}

\section*{Gas Utility Training III}

This course provides students with knowledge of advanced processes for mains, pipe facilities repair, installation, and abandonment. It also provides knowledge of advanced processes for service pipe work. Students also review the fundamentals of appliance light up and venting, and hazards associated with potential leak and ignition sources inside and outside of a structure. Classroom and hands-on training will ensure that students possess the necessary skills and knowledge to perform advanced duties associated with work on distribution piping systems by higher level gas utility worker job classifications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 332TECH 504
2 lecture hours and 3 lab hours per week. 3 credit hours.

\section*{332TECH 506}

\section*{Gas Utility Training IV}

This course provides students with knowledge of advanced processes for gas service activation and other end-use activities. This course also provides students with additional safety related details for carrying out certain activities covered in Gas Utility Training III. Theory of operation of Class 1 and Class 2 pressure regulators is also covered. Students will learn the principles of operation and diagnosis of operational problems and applicable NFGC code requirements on the broad scope of enduse appliances. Excavation and trenching safety is covered in detail. Classroom and hands-on training will ensure that students possess the necessary skills and knowledge to perform advanced duties associated with work on gas service activation and end-use appliances and systems by higher level gas utility worker job classifications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 332TECH 505.
3 lecture and 3 lab hours per week. 4 credit hours.

\section*{332TECH 509}

\section*{Introduction to Basic Arc Welding}

Various welding theories and processes; including classification and characteristics of welding rods, electrical terms, polarity principles; welding equipment and accessories, are taught. Students develop fundamental skills for performing operations with mild steel plates. Health hazards, safety rules/regulations and OSHA are discussed. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 12 lab hours per week. 6 credit hours.

\section*{332TECH 510}

\section*{Blueprint, Layout \& Fabrication}

Detail interpretation of welding prints and fabrication, fabrication procedures as well as interpreting basic elements of a drawing or sketch. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 515}

\section*{Related Mathematics I}

This course is deigned to provide to the student those mathematical tools most often needed to solve trade related problems. The instruction includes a review of whole numbers, fractions, decimals, powers, roots, ratios proportions and percentages. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332TECH 516}

\section*{Related Mathematics II}

Continuation of Related Mathematics I. Topics include elementary algebraic operations, geometry, and an introduction into trigonometry. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332TECH 518}

\section*{Manufacturing Materials \& Processes}

Introduction to manufacturing materials, methods and processes for drafting and design technicians; basic cold and hot working processes used to join, form weld, shape and cut materials to specification. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture hour per week. 1 credit hour.

\section*{332TECH 520}

\section*{Arc Welding}

This course provides continued development of the basic skills for performing operations with mild steel plates. Student progress in welding from flat to vertical, down to horizontal, and to vertical up positions. Writing assignments, as appropriate to the discipline, are part of the course. 2 lecture and 6 lab hours per week. 4 credit hours.

\section*{332TECH 526}

\section*{Welding Mathematics I}

This course gives a student a review of basic mathematics as it pertains to layout and blueprint reading. The course covers decimals, fractions, and converting whole inches to millimeters. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 530}

\section*{Advanced Welding}

This course covers the more advanced and job oriented Metal Inert Gas (M.I.G. or wire welding) and Tungsten Inert Gas (T.I.G. welding) processes used in the welding and fabrication industry of today. The welding processes are: Metal Inert Gas (M.I.G.) Welding and Tungsten Inert Gas (T.I.G.) Welding. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 6 lab hours per week. 4 credit hours.

\section*{332TECH 577}

\section*{Communication Skills I}

Course covers technical report writing using correct grammar and spelling as well as recommended methods for collecting and organizing materials consistent with established practices.
150 minutes per week. 3 credit hours.

\section*{332TECH 581 \\ Concrete Framing}

This course will acquaint the student with industry terminology, the tools used in the trade, and safety procedures. Instruction and demonstration will introduce the student to the application of footings, foundation walls, and slab, and stair construction. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 3 lab hours per week. 2 credit hours.

\section*{Course Descriptions}

\section*{332TECH 582}

\section*{Residential Carpentry}

Training consists of an orientation into the field of carpentry, industry terminology, and the discipline and the uses of tools of the trade. Students will receive hands-on training in the recognition and application of the materials used in residential structures. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 3 lab hours per week. 2 credit hours.

\section*{332TECH 583}

\section*{Basic Hand Tools}

This course is designed to introduce students to the operation and safe use of various types of hand tools. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 715}

\section*{Intro to Hand and Power Tools}

This course will enable the student to identify, maintain, and illustrate proper handling and care of the various hand and power tools. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 3-6 lab hours per week. 1-3 credit hours.

\section*{332TECH 761}

\section*{Machine Shop Math}

This course provides the student with the necessary mathematical foundation for problem solving, review of the basic principles of arithmetic, decimal, fractions, and metrics. It also provides training in the use of algebra, geometry and trigonometry as applied to the solution of practical machine shop problems. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes. 3 credit hours.

\section*{332TECH 764}

\section*{Machine Shop Technology}

Students will study the nomenclature of hand tools, engine lathe, grinders, drill press, bandsaws and the use and care of precision measuring instruments. This course provides students with manual, semi-automatic, automatic, numerical and computerized numerical control training in the safe operation of engine and turret lathes, vertical and horizontal milling machine with the proper use of cutting, fluids, basic metallurgy, gears and gear cutting, feed and speeds. The use of the dividing head and rotary table are also emphasized. Writing assignments, as appropriate to the discipline, are part of the course.
200 minutes per week. 4 credit hours.

\section*{332TECH 767}

\section*{Blueprint Reading I}

Principles and practices involved in the interpretation of blueprints of varied complexity related to actual trade projects. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{332TECH 768}

\section*{Blueprint Reading II}

Continuation of Blueprint Reading I. This course will further develop the student's ability to interpret drawings of intermediate and advanced complexity related to actual trade projects. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{[THR ART] THEATER ART (099)}

\section*{THEATER ART 129}

\section*{Introduction to Theater History}

Introduction to theater history from its origins to the present, including theatrical styles and literature. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 130}

\section*{Stagecraft}

Introduces safety procedures and basic techniques of scenery and property construction, tool use, scene painting, and backstage organization. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{THEATER ART 131}

\section*{Introduction to Theater}

Introduction to basic acting, survey of the theater plant and literature, makeup and technical aspects together with terminology of theater. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 132}

\section*{Theater Production, Direction and Management}

Production and direction of plays; experience in play selection, theater organization, scheduling, audience analysis, box office and record keeping, and publicity. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{THEATER ART 133}

\section*{Acting I}

Acting techniques, stressing exercises, improvisations, prepared and general acting situations; theories of method and technical methods explained and presented; survey of acting styles. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 134}

\section*{Theater in the Modern World}

Survey of styles and literature of modern theater from
20th century to present; includes musicals, dance, plays and educational, professional and off-Broadway trends. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 135}

\section*{Theater and Special Projects}

Special project permitting independent research and or study, including writing of a play or design and execution of a costume or a special and unusual unit of scenery. Writing assignments, as appropriate to the discipline, are part of the course.
50 minutes per week. 1 credit hour.

\section*{COURSE DESCRIPTIONS}

\section*{THEATER ART 136}

\section*{Make-Up Stage Screen and TV}

Practical class in makeup and related arts, showing technique for using false hair, wigs, beards and other makeup specialties as well as general makeup of all kinds for stage, screen and television. Writing assignments, as appropriate to the discipline, are part of the course.
100 minutes per week. 2 credit hours.

\section*{THEATER ART 137}

\section*{Stage Lighting}

Comprehensive study of theory and technique of lighting for the theater; use of all instruments and dimming controls, and work on sound in theater. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{THEATER ART 138}

\section*{Topics in Theatre}

Special survey course, introducing employment opportunities and procedures in theatre. Writing assignments, as appropriate to the discipline, are part of the course. Course runs in a rotation of 3 topics. Allowed Repeatable Course: Courses may be repeated for a total of 3 credit hours.
50-150 minutes per week. 1-3 credit hours.

\section*{THEATER ART 140}

\section*{Sound for Theatre}

Comprehensive study of theory and technique of sound and engineering; use of all instruments, amplification, and recording equipment. Writing assignments as appropriate to discipline, are part of the course.
Prerequisite: Grade of C or better in Math 118.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 141}

\section*{Costumes and Wardrobe}

Introduces some theory of costume design, focusing on safety procedures and basic techniques of costume and accessory construction, tool use, fitting use, fitting and draping, and costume shop organization through projects in cutting, stitching, and finishing costumes for production. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{THEATER ART 143}

\section*{Acting Workshop}

Practical workshop in performance styles, stage techniques, timing, scene study, and improvisations; students will cooperate in classproduced one-act plays. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{THEATER ART 144}

\section*{Practice in Modern Theater}

Workshop in production of modern plays; readers' theater methods will be used in total concept of modern theater production; less emphasis on detail than in Theater Art 143. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 2 lab hours per week. 2 credit hours.

\section*{THEATER ART 225}

\section*{Independent Internship Assignment}

A course of planned and supervised training that allows the application of theory to actual practice, preparing a student for working independently toward specific career objectives. It takes place at a regular theatre
related worksite and instructions/supervision is provided by an employee at the worksite. Students may receive regular pay scale if allowed and if available. Course includes on-campus one-hour weekly seminar. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated twelve credit hours will be counted toward graduation.
Prerequisite: Consent of Department Chairperson.
1-2 lecture and 10-20 lab hours per week. 1-6 credit hours.

\section*{THEATER ART 230}

\section*{Stage Management}

Practice in stage management; focus on scenes and plays as a stage manager, operation of special sound effects and recording equipment and construction of a complete sound track for a play. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Theater Art 131, or Consent of Department Chairperson
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{THEATER ART 232}

\section*{Theater Workshop}

Participation in production of one-act and full length plays w ith the class, operated as a theater company; all phases of theater including touring theater, acting, directing, and other areas of theater as a full company experience. Writing assignments, as appropriate to the discipline, are part the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{THEATER ART 233}

\section*{Theater Design}

Scene design, including preparation of plans, scale models, and ground plans; history of design; project: full design for a play currently produced in the theater. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 235}

\section*{Acting II}

A continuation of Acting I with an emphasis on an intensive approach to acting exercises, improvisation, and scene study. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Theater Art 133. 150 minutes per week. 3 credit hours.

\section*{THEATER ART 236}

\section*{Voice and Movement}

The study of using voice and movement to interpret and perform works of literature, such as essays, letters, novels, poetry, and short stories, with an emphasis on communicating that interpretation to an audience. Writing assignments, as appropriate to discipline, are part of the course. Prerequisite: Grade of C or better in Theater Art 133, or Theater Art 134. 150 minutes per week. 3 credit hours.

\section*{THEATER ART 237}

\section*{Theatre Production and Management}

Production and management of plays and theatres; survey of theatre and production organization, scheduling audience analysis, box office operation, record keeping and publicity. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Math 118 or higher, and Theatre Art 230, or Consent of Department Chairperson.
3 lecture and 2 lab hours per week. 4 credit hours.

\title{
Course Descriptions
}

\section*{THEATER ART 240}

\section*{Play Production}

A literary exploration of the relationships between dramatic text and the play in performance, with special emphasis on basic terminology and methodology. Representative plays are studied in their genre, historical, and social contexts. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 242}

\section*{Improvisational Theater Workshop}

Theory and practice of improvisational acting techniques; development of scripting in the moment, development of character and styles; designing and performing an improvisational show. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{THEATER ART 252}

\section*{Children's Theater Workshop}

Focus on production of a play for children. The class will operate as a theater company and students will work in all phases of theater including acting, directing, stage managing, and producing as a full company experience. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{[330TRNS] LOGISTIC/TRANSPORTATION/ DISTRIBUTION}

\section*{330TRNS 150}

\section*{Intro to Transportation/Admin.}

Provides an overview of basic principles and processes for transportationrelated functions in both the public and private sectors; covers state and federal regulations; provides a historical look at transportation in the U.S. and the impact it has on the economy; characteristics of different modules of transportation will be discussed. Review of support functions for transportation management. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330TRNS 152}

\section*{Introduction to Business Logistics}

An introduction to the interrelated activities involved with the imbound, in process and outbound movement and storage of goods as well as the related information from the manufacturer to the consumer. Special emphasis placed on how the functional areas of logistics such as customer service, transportation, inventory control, warehousing, and packaging impact supply channel decision-making. Introduction and analysis of the logistics concept to include a brief history of logistics, the management of transportation, inventory, packaging, warehousing, materials handling, order processing, facility location and customer service. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330TRNS 154}

\section*{Traffic Management Customer Service}

An introduction to general customer service roles and functions, which include: import/export, vendor management inventory, order management, deduction management, credit, pricing and promotions, and delivery and tracking. Covers the fundamentals of finish goods movements from the point of production to the receipt by the customer; includes transportation, warehousing, inventory deployment, and physical distribution. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330TRNS 156}

\section*{Warehousing and Distribution}

Overview of warehouse equipment, procedures, facility layout, the role of the warehouse and logistic and business. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330TRNS 150.
150 minutes per week. 3 credit hours.

\section*{330TRNS 158}

\section*{Purchasing}

Overview of purchasing responsibilities, process, and procedures, supplier selection and administration. Sourcing strategies and identifying new suppliers. Negotiation techniques. Purchasing's influence on profitability and cost reduction techniques. How to write purchase orders and contracts. Supplier quality assurance. Role of purchasing in the logistics process and organization. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330TRNS 200}

\section*{Export/Import Management}

A study of import/export shipping procedures, including customs clearance, bonded shipping, import financing, and letters of credit, diversion, customer regulations, insurance, import duties and trade restrictions; selection of transportation mode, including covers raw materials, components, and finished goods. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330TRNS 150.
150 minutes per week. 3 credit hours.

\section*{330TRNS 202}

\section*{Labor \& Bus Law/Legal Compliance}

An overview of the National Labor Relations Act and various governmental agencies that oversee the operations of business in America. Covers the fundamental responsibilities of the employer in the workplace, as they relate to rules and regulations set forth by OSHA, DOT, and the FAA, as well as other agencies that govern business in one way or another. Covers state and federal regulations governing employee rights, collective bargaining units, and labor practices. Writing assignments, as appropriate to the discipline, are part of the course.
150 minutes per week. 3 credit hours.

\section*{330TRNS 204}

\section*{Global Logistics Management}

Survey of the impact of the emerging global market place on today's business environment. Concepts, theories, and evolving practices of global supply chains with today's marketplace. Topics include international terms of sale, impact of e-commerce on global strategies, international transportation carriers, documentation issues, global thirdparty providers, global sourcing, and ethical considerations. Emphasis on how logistics functions as a tool for the integration of international operations. Case studies of companies involved in global logistics practices will be utilized in conjunction with other source materials. Special emphasis on identifying, analyzing, and solving complex business problems situations. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in 330TRNS 152.
150 minutes per week. 3 credit hours.

\section*{COURSE DESCRIPTIONS}

\section*{330TRNS 206}

\section*{E-Commerce Technology}

The purpose of this course is to provide the student with an understanding of the role of electronic commerce (e-commerce) and its impact on supply chain management decision-making. This course is designed to provide the student with a historical perspective of the evolution of e-commerce and how that has affected the supply chain in different organizations. The course will also provide the student with an understanding of some of the latest techniques utilized by leading companies in synchronizing and managing their extended supply chains. The course will examine the emerging role of electronic commerce (e-Commerce) and its impact on logistics and supply chain organizations. Topics include a history of e-commerce, business to business (B2B) models, business to consumer (B2C) models, as well as the evolving paradigm shift e-Commerce is creating for warehousing and transportation strategies and the way we conduct business. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 123 and Math 118 and 330TRNS 158.

150 minutes per week. 3 credit hours.

\section*{330TRNS 208}

\section*{Supply Chain Optimization/Info. Systems}

Understand tool supply chain cost. Material flow from suppliers. Warehousing and distribution costs and optimization. Performance measurements for the supply chain. Customer relationship management. Strategic alliances in the supply chain. Relationships with other parts of the organization. Sales and operations planning. An overview and analysis of the various information management technology tools used across the supply chain. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in (330TRNS 150, 156, 158 and 200). 150 minutes per week. 3 credit hours.

\section*{330TRNS 210}

\section*{Inventory Control}

Fundamental principles of inventory control. Inventory classification - raw materials, work-in-process, and finished goods. Using the 80/20 rule and ABC classifications. Importance of inventory record accuracy. Inventory turnover and other inventory measurements. Principles of Material Requirements Planning and MRP II. Inventory control systems. Internal and external lead time and cumulative lead time. Excess and obsolete inventory. Role of inventory control in the logistics process and organization. Physical inventories and cycle counting. Scheduling techniques. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in CIS 123.
150 minutes per week. 3 credit hours.

\section*{330TRNS 212}

\section*{Supervisor Work-based Learning}

Learning is designed to provide an opportunity to perform in a supplychain/warehousing setting. Students are placed in a college-approved employment situation for 200 hours during a semester. The students may work full or part- time to complete this requirement. Writing assignments, as appropriate to the discipline, are part of the course.
25 lab hours per week. 5 credit hours.

\section*{[VIS COM] VISUAL COMMUNICATIONS (009)}

\section*{VISUAL COMMUNICATIONS 101}

\section*{Intro to Visual Communication}

Introduction to the history and industry of visual communication. Basic design principles and practical application of visual communication design in illustration, typography, photography and publication. Writing assignments, as appropriate to the discipline, are part of the course. 1 lecture and 4 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 102}

\section*{Website Design I}

Basic procedures in preparing website design and production; Includes web code techniques, color theory, typography, composing style sheets and photo layout. Writing assignments, as appropriate to the discipline, are part of the course.
1 lecture and 4 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 103 \\ Commercial Photography}

This course is designed to familiarize the student with the basic procedures of digital image capture of products and people. This course explores the use of digital cameras as related to visual communication. Also included are the basic commercial photography techniques in lighting, editing and effects. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 110 Production Printing}

A study of the digital prepress and print production procedures for commercial printing; includes planning and problem solving in layout and design, desktop publishing, digital imaging, proofing and digital print work. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 114}

\section*{Stripping I}

Basic instruction and practice in stripping of line film, halftone film, and platemaking. Screen tints, color blocking, butting and overlapping; contacting, step and repeat procedures, proofing, preparation and folding dummies, outlining, and master marks; handling and use of paper, plastic, photo- direct, direct image, and pre-sensitized plates; masking, ruling, screen work, and image construction. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 122 \\ Graphic Software}

This course is designed to familiarize the student with hardware and software used in the visual communications industry. Software includes Adobe Illustrator, Photoshop, Indesign and other computer graphic software used for page layout design. Emphasis is also placed on the study and use of computer hardware equipment such as: Monitors, keyboards, scanners, printers and digital cameras. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation. 150 minutes per week. 3 credit hours.

\title{
Course Descriptions
}

\section*{VISUAL COMMUNICATIONS 132}

\section*{Publication Design}

This course is designed to familiarize the student with page layout principles, info graphics and software used in the visual communication industry. Emphasis is placed on the study and hands on operation of graphic computer systems, scanners and laser printers. Writing assignments, as appropriate to the discipline, are part of the course.
Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 134}

\section*{Logo Identity Design}

This course is designed to familiarize the student with drawing and illustration software programs used in the visual communication industry. Emphasis is placed on hands on practice with vector computer software programs. Students will develop identity design techniques in computer illustration, symbols and logo identity design systems for organizations, businesses and institutions. Training on the laser printers and image setters is included. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 201}

\section*{Design Management}

The study of design management practices in the visual communication industry: Sales, marketing, strategic planning, graphic production, job cost, services, studio layouts, purchasing, inventory control, staff positions/management and proposal writing. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 202}

\section*{Web Design II}

This course is designed to provide the student with an advanced study of website design and production; Includes web code techniques, color theory, typography and composing style sheets and photo layout. It will also explore animation on the web using current web publishing software applications. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Visual Communications 102, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 206}

\section*{Digital Image Capture II}

Use of digital photography as related to graphic communications processes. Emphasis on advanced operation and setup of digital camera equipment and utilization of a digital studio for completion of projects. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Grade of C or better in Visual Communications 224, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 212}

\section*{Motion Graphics I}

Basic study of electronic publishing and animated motion graphics systems. Instruction of the use of Macintosh computer Adobe Flash motion graphic software will be studied. Emphasis is placed on image composition and motion interaction for hard and floppy disks. Typesetting and image design with action and java script program codes will be studied. Writing assignments, as appropriate to the discipline, are part of the course.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 214}

\section*{Electronic Stripping and Platemaking II}

Advanced instruction and practice in image assembly utilizing electronic stripping software, electronic stripping software, including the creation of electronic impositions, templates, and platemaking, and master marks; handling and use of dummies, color proofing, platemaking, and master marks, and handling of RIP and CTP systems. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 224}

\section*{Digital Typography}

This course is designed to familiarize the student with the computer hardware and software applications used in the visual communication industry. Emphasis is placed on the study of typography font design, specification, effects and copy fitting. Also, the historical developments of typography from ancient to modern times will be studied. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 228}

\section*{Digital Image Creation/Manipulation II}

An advanced level course used to further explore image editing and retouching applications as related to graphic communications and the printing industry. Emphasis on creating projects for output to print and the web. Use tools for advanced electronic image creation and manipulation. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated six credit hours will be counted towards graduation.
Prerequisite: Grade of C or better in Visual Communications 224, or Consent of Department Chairperson.
2 lecture and 2 lab hours per week. 3 credit hours.

\section*{VISUAL COMMUNICATIONS 232}

\section*{Advanced Electronic Publishing}

Page layout software application used in the graphics industry for desktop and electronic publishing, pre-press, and image setting. Emphasis on creating projects for output to print and the web, including the handling of RIP ad CTP systems. Writing assignments, as appropriate to the discipline, are part of the course. Allowed Repeatable Course: Not more than an accumulated 9 credit hours will be counted towards graduation. 2 lecture and 2 lab hours per week. 3 credit hours.

\section*{[ZOOLOGY] ZOOLOGY (029)}

\section*{ZOOLOGY 211}

\section*{General Zoology}

Fundamental principles of animal morphology, physiology, genetics, and ecology. Writing assignments, as appropriate to the discipline, are part of the course.
Prerequisite: Eligibility for English 101, or grade of C or better in English 100, or Consent of Department Chairperson.
2 lecture and 4 lab hours per week. 4 credit hours.

\section*{Course Descriptions}
(®)
↔
©

A
A+ Certified Computer Technician
Continuing Education, 138
program locations, 8, 27
vocational education in, 156
Academic Calendar, 16-17
Academic Policies, 19-20
Academic Support Services, 18
Accelerating Opportunity Program, 153
Accounting
course requirements, 74
program locations, 9, 13, 14, 25
Addictions Studies
course requirements, 111
program locations, 9, 13, 27
Administration
course requirements, 73-76
program locations, 25
Admissions
Biotechnology, 84
Dental Hygiene, 85
Electrical Construction Technology, 63
Emergency Medical Technology (EMT), 86-87
international students, 20
Mortuary Science, 89
Nephrology/Renal Technology, 92
Nursing, 93
Obstetrics and Gynecologic Technology, 95
Occupational Therapy Assistant, 95-96
Pharmacy Technology, 97
Phlebotomy, 97
Physician Assistant, 98-100
Placement examinations, 20
Process Technology, 130
Radiography, 101
Respiratory Care, 102
Sterile Processing Technology, 103
Surgical Technology, 104
Adult Education, 143-157
Adult Basic Education, 144-149, 155
Adult Secondary Education (ASE), 150-151, 153
Campuses offering, 144
Career Bridge classes, 155-156
English as a Second Language (ESL), 153-154, 155
GED (General Educational Development), 150-153, 155
grading, 19
Healthcare Bridge, 155-156
Manufacturing Preparation, 156
program locations, 12, 14
Spanish Adult Basic Education, 147-149
Spanish GED, 151-152
Vocational Adult Education, 156
Workforce Preparation, 154-156
Adult Secondary Education (ASE), 150-151, 153
Advising, 18, 19
African American Studies
course descriptions, 165
General Education courses, 33

Agricultural Biotechnology
course requirements, 132
program locations, 28
Agriculture, Food \& Natural Resources
course requirements, 54-55
program locations, 24
Air Conditioning
course descriptions, 165-166
course requirements, 57,58
program locations, 9, 24
Alcohol Use Policy, 4
Alternative High Schools, 11, 12
Anthropology
course descriptions, 166
General Education courses, 33
Arabic
course descriptions, 166
Architectural CAD
course requirements, 58
program locations, 24
Architectural Drafting course requirements, 58
program locations, 14, 24
Architecture
course descriptions, 166-168
Architecture and Construction
program locations, 24
Art
course descriptions, 168-170
General Education courses, 33
Arts, A/V Technology \& Communications
course requirements, 66-72
program locations, 25
Arturo Velasquez Institute of Daley College, 6, 8
Associate in Applied Science degrees (A.A.S.) and

\section*{certificates}
course requirements, 52
Associate in Arts (A.A.)
course requirements, 41
focus areas, 40
Illinois Articulation Initiative, 31, 40
program locations, 24
world language requirement, 20, 40
Associate in Arts in Teaching program locations, 24
Associate in Engineering Science (A.E.S.)
course requirements, 45
program locations, 24
Associate in Fine Arts (A.F.A.)
course requirements, 47
program locations, 24
Associate in General Studies
course requirements, 50 program locations, 24
Associate in Science (A.S.)
course requirements, 43
focus areas, 42
Illinois Articulation Initiative, 31, 42
program locations, 24
Associate of Arts in Teaching course requirements, 48

\section*{Astronomy}
course descriptions, 170
General Education courses, 33
Audio/Video/Internet Production
course requirements, 68-69

\section*{Auto Body}
program locations, 29
Automotive Technology and Maintenance
course descriptions, 170-173
course requirements, 134-135
program locations, 9, 12, 29
A/V Technology
course requirements, 66-72
program locations, 25

\section*{B}

Baccalaureate Transfer Programs
General Education courses, 30-48
Illinois Articulation Initiative, 31
program locations, 24
Baking and Pastry Arts
course descriptions, 173-175
course requirements, 106-107, 109
program locations, 9, 26
Basic Nursing Assistant (BNA)
Continuing Education, 141
program locations, 8, 9, 10, 11, 12, 14, 26
Bilingual Teacher Aide
course requirements, 78
Biology
course descriptions, 175-177, 251
General Education courses, 33, 38
Biotechnology
admission requirements, 84
course requirements, 84, 132
program locations, 12, 26, 28
Board of Trustees, 3
Books, Rental, 21

\section*{Botany}
course descriptions, 177
General Education courses, 33
Bricklayer
course requirements, 58
program locations, 24
Building Energy Technologies
course requirements, 59
program locations, 24
Business
course descriptions, 178-185
course requirements, 70, 73-76
General Education courses, 38
program locations, 25
Business Administration
course requirements, 75
program locations, 13, 25
Business and Commercial Technology course requirements, 185-186
\(\square\)
CAD Technology
course descriptions, 187
course requirements, 58-60, 64
program locations, 24
Cake Decorating and Baking
course requirements, 107
program locations, 26
campus information, 7-14
Career Bridge classes, 155-156
Carpentry
course requirements, 62
program locations, 9
Center for Distance Learning, 22, 159
Certified Nursing Assistant (CNA) program locations, 8
Chemical Laboratory Technology
course requirements, 132
program locations, 28
Chemistry
course descriptions, 187-188
General Education courses, 33, 38
Child Care, School Age
course requirements, 81
Child Development lab centers, 159
Child Development
course descriptions, 188-191
course requirements, 78-81
program locations, 8, 9, 10, 11, 12, 13, 25
Chinese
course descriptions, 191-192
citizenship classes, 153, 154
City Colleges of Chicago
District Office, 6
history of, 5
mission statement, 2
Commercial Driver Training
Continuing Education, 138
program locations, 29
Commercial Passenger Driver
Continuing Education, 139
program locations, 29
Commercial Truck Driver License (CDL)
program locations, 11
Communication Media
course descriptions, 192
General Education courses, 32
Communications
course descriptions, 192
course requirements, 61, 66-72, 71-72
program locations, 9, 25
Communications Technology
admissions requirements, 61
course requirements, 61
program locations, 24
Community College District No. 508
trustees and officers, 3

\section*{INDEX}

\section*{Community Health Care Worker}
course requirements, 112
program locations, 27
Comparative Religion
course descriptions, 193
General Education courses, 37

\section*{Compliance Statement, 4}

Computer Aided Design. See CAD Technology
Computer Information Systems
course descriptions, 193-196
course requirements, 118
General Education courses, 38
program locations, 14, 27

\section*{Computer Literacy}

Continuing Education, 138
program locations, 27
Computer Numerical Control
Continuing Education, 138
course requirements, 128
program locations, 8, 14, 28
Computer Science
computer literacy, 138, 145, 146, 154
program locations, 8
Computer Security and Forensic Investigation
course descriptions, 196-198
course requirements, 119
program locations, 27
Concrete Masonry
course requirements, 61
program locations, 24
Constitution test, 146, 149, 151, 152
Construction Carpentry
course requirements, 62
program locations, 24
Construction Management
course descriptions, 198-199
course requirements, 62
program locations, 24
Construction Technology
program locations, 9
Continuing Education
grading, 19
program locations, 14
programs of study, 137-142
Academic Calendar, 16-17
Cooperative Work Experience
course requirements, 199-200
Corrections
course requirements, 123-126
program locations, 28
Cosmetology
Course Descriptions, 200
course requirements, 113
program locations, 12, 27
course descriptions, 161-305
African-American Studies, 165
Air Conditioning, 165-166
Anthropology, 166
Arabic, 166
Architecture, 166-168
Art, 168-170

Astronomy, 170
Automotive Technology, 170-173
Baking and Pastry Arts, 173-175
Biology, 175-177
Botany, 177
Business, 178-185
Business and Commercial Technology, 185-186
CAD Technology, 187
Chemistry, 187-188
Child Development, 188-191
Chinese, 191-192
Communication Media, 192
Communications, 192
Comparative Religion, 193
Computer Information Systems, 193-196
Computer Security and Forensic Investigation, 196-198
Construction Management, 198-199
Cooperative Work Experience, 199-200
Cosmetology, 200
Criminal Justice, 201-202
Culinary, 202-204
Dental Hygiene, 204-207
Department Prefix Codes, 162-164
Dietetic Technician, 207
Digital Multimedia, 207-208
Economics, 208
Education, 208-210
Electrical Worker, 234-236
Electronics, 210
Emergency Medical Technology (EMT), 210-211
Engineering, 211-212
Engineering \& Industrial, 212-214
English, 214-216
Entrepreneurship, 216-217
Environmental Studies, 217
Environmental Technology, 217-221
ESL (English as a Second Language), 221-223
ESL Integrated, 221-222
ESL Reading, 222
ESL Speech, 222
ESL Writing, 222-223
Fine Arts, 223
Fire Science Technology, 22, 223-225
Food Service Administration, 225
French, 225
Geography, 225-226
Geology, 226
Health, 226-227
Health Science, 227
Health Technology, 227-228
History, 228-230
Horticulture, 231
Hospitality, 231-232
Human Development \& Family Services, 232-233
Humanities, 233-234
IBEW, 234-236
Integrated Communication, 192
Inter-Disciplinary Studies, 236
Italian, 236-237
Japanese, 237
Latin, 237

Library and Information Science, 238
Library Technology, 238
Linguistics, 238
Literature, 238-242
Logistics/Transportation/Distribution, 303-304
Manufacturing, 242-244
Mathematics, 244-247
Media Communications, 247-250
Mental Health, 250-251
Microbiology, 251
Mortuary Science, 251-253
Music, 253-257
Networking Technologies, 257-258
Nursing, 258-260
Occupational Therapy Assistant, 260-262
Oceanography, 262
Ophthalmic Technology, 262-264
Pharmacology, 264
Pharmacy Technology, 264-265
Phi Theta Kappa, 265
Philosophy, 265-266
Phlebotomy, 266
Physical Education, 266-269
Physical Science, 269-270
Physician Assistant, 270-272
Physics, 272-273
Polish, 273-274
Political Science, 274-275
Process Technology, 275-276
Psychiatric Rehabilitation, 276-277
Psychology, 277-278
Public Service, 278-279
Radiography, 279-280
Reading, 281
Renal Technology/Nephrology, 281-282
Respiratory Therapy, 282-284
Social Science, 284-286
Social Service, 286-290
Sociology, 290-291
Spanish, 291-292
Speech, 292-293
Surgical Technology, 294-295
Technology, 295-301
Theater Art, 301-303
Visual Communications, 304-305
Zoology, 305
Credit for Life Experiences, 18
Credit for Prior Learning, 18
Criminal Justice
course descriptions, 201-202
course requirements, 123-124
General Education courses, 38
program locations, 8, 14, 28
CTA U-Pass, 18
Culinary Arts
course descriptions, 202-204
course requirements, 106-109
program locations, 9, 26


Daley College
campus information, 8
General Education courses, 33-39
location, 6
Dawson Technical Institute of Kennedy-King College, 6, 9
Defensive Driving
Continuing Education, 139
program locations, 29
Dental Assistant
Continuing Education, 139
program locations, 26
Dental Hygiene
admission requirements, 85
course descriptions, 204-207
course requirements, 85
program locations, 9
Dialysis Technician. See Renal Technology
Dietetic Technician
course description, 207
Digital Multimedia
course descriptions, 207-208
course requirements, 67-68
General Education courses, 38
program locations, 25
Disability Access Centers, 18
Disabled Students. See Students With Disabilities
Disclaimer, 4
Discrimination Complaint Procedures, 4
Driver Training. See Specific Types Of Driving
Drug And Alcohol Use Policy, 4

\section*{E}

Economics
course descriptions, 208
General Education courses, 33
Education
course descriptions, 208-210
course requirements, 78-82
program locations, 25
EKG Technician
Continuing Education, 139
program locations, 26
Electrical Construction Technology
admissions requirements, 63
course requirements, 63
program locations, 24
Electrical Line Worker (Overhead)
course requirements, 64
program locations, 24
Electrical Worker
course descriptions, 234-236
Electronics
course descriptions, 210
General Education courses, 38
Elementary Education
course requirements, 78-79

Emergency 911 Dispatch
Continuing Education, 139
Emergency Management
course requirements, 124-125
program locations, 14, 28
Emergency Medical Technology (EMT)
admission requirements, 86-87
Continuing Education, 139
course descriptions, 210-211
course requirements, 86-87
program locations, 10, 11, 26
Emergency Preparedness
course requirements, 125
program locations, 28
EMT. See Emergency Medical Technology (EMT)
Engineering
Associate in Engineering Science (A.E.S.), 45
course descriptions, 211-212
General Education courses, 38
Engineering \& Industrial
course descriptions, 212-214
General Education courses, 38
English
course descriptions, 214-216
General Education courses, 33, 38
English as a Second Language. See ESL (English as a Second
Language)
Entrepreneurship
course descriptions, 216-217
Environmental GIS
course requirements, 119
program locations, 27
Environmental Studies
course descriptions, 217
Environmental Technology
course descriptions, 217-221
course requirements, 54
General Education courses, 33
program locations, 14, 24
Equal Opportunity Policy, 4
ESL (English as a Second Language)
Adult Education, 153-154
course descriptions, 221-223
Workforce Preparation, 155

\section*{F}

Factory Automation
course requirements, 128-129
program locations, 28
FAFSA (Free Application for Federal Student Aid), 19
Family Child Care Business
Continuing Education, 139
program locations, 25
federal loan program, 19
Federal Pell Grant, 19
Federal Supplemental Opportunity Grant (FSEOG), 19
Federal Work Study, 19
Fees and Charges, 21-22
Finance
course requirements, 73-76

Financial Aid, 18-19
Fine Arts
Associate in Arts (A.F.A.), 47
course descriptions, 223
General Education courses, 33

\section*{Fire Protection}
course requirements, 65
program locations, 9, 24
Fire Science and Technology
course descriptions, 223-225
course requirements, 125
program locations, 28
Food, Agriculture \& Natural Resources
course requirements, 54-55
Food Service Administration
course description, 225
Food Service Sanitation
Continuing Education, 140
course requirements, 108
program locations, 13, 26
Foreign Language Requirement, 19
Fork Lift Operation and Safety
Continuing Education, 140
program locations, 29
Foundational Studies, 18, 160
French
course descriptions, 225
General Education courses, 34
French Pastry School, 9

\section*{G}

Gas Utility Worker
course requirements, 64
program locations, 24
Gateway Transition Program, 153
GED (General Educational Development), 150-153, 155
General Business
course requirements, 75
General Education Core Curriculum, 31
Geography
course descriptions, 225-226
Geology
course descriptions, 226
General Education courses, 34
Gerontology
course requirements, 113-114
program locations, 27
Grading Policies, 19
Graduation Campus, 19
Graduation Requirements, 19
Grants, 19

\section*{H}

Harold Washington College
campus information, 13
Disability Access Center, 18
General Education courses, 33-39
location, 6

Harrassment Complaint Procedures, 4
Harry S Truman College. See Truman College
Health
course descriptions, 226-227
Health Science
course descriptions, 227
course requirements, 83-104
program locations, 26
Health Technology
course descriptions, 227-228
Healthcare Bridge courses, 155-156
Heating and Air Conditioning
course requirements, 58
History
course descriptions, 228-230
General Education courses, 34
History of City Colleges of Chicago, 5
HIVISTI Prevention Education
program locations, 27
Homeland Security
course requirements, 126
program locations, 28
Homemaker/Home Health Aide
Continuing Education, 140
program locations, 27
Horticulture
Continuing Education, 140
course descriptions, 231
course requirements, 55
program locations, 24
Hospitality
course descriptions, 231-232
course requirements, 106-109
program locations, 13, 26
Hospitality and Culinary
program locations, 26
Human Development \& Family Services
course descriptions, 232-233
course requirements, 114
program locations, 27
Human Diversity Requirement, 20, 32
Human Services
course requirements, 111-116
program locations, 27
Humanities
course descriptions, 233-234
General Education courses, 34
Humboldt Park Vocational Educational Center
of Wright College, 6, 14

\section*{I}

IBEW
course descriptions, 234-236
ICCB codes, 162-164
Illinois Articulation Initiative, 31-39
Incident Command
course requirements, 126
program locations, 28

Industrial Maintenance
course requirements, 129
program locations, 14, 28
Infant Toddler Care course requirements, 80
Information Processing course requirements, 119 program locations, 14, 27
Information Technology course requirements, 117-121 program locations, 27
Integrated Communication course descriptions, 192
Interactive Media Design course requirements, 70
Inter-Disciplinary Studies course descriptions, 236
International Brotherhood of Electrical Workers, 234-236
International Students, 20
I-Pathways, 153
Italian
course descriptions, 236-237
General Education courses, 34
T
Japanese
course descriptions, 237
General Education courses, 34

\section*{K}

Kennedy-King College
campus information, 9
Disability Access Center, 18
General Education courses, 33-39
location, 6

\section*{L}

Lakeview Learning Center of Truman College, 6, 12
Latin, course descriptions, 237
Law
course requirements, 123-126
program locations, 28
Library and Information Science course description, 238
Library Technical Assistant course requirements, 75-76
program locations, 25
Library Technology
course descriptions, 238
Limousine Driving program locations, 29
Limousine Restricted Chauffeur Training Continuing Education, 140
Linguistics
course descriptions, 238

\footnotetext{
Literacy
Adult Basic Education, 144-145
ESL (English as a Second Language), 153
Spanish Adult Basic Education, 147-148

\section*{Literature}
course descriptions, 238-242
General Education courses, 35
Loans, Student, 19
Logistics/Transportation/Distribution
course descriptions, 303-304
course requirements, 134-136

\section*{M}

Malcolm X College
campus information, 10
Disability Access Center, 18
General Education courses, 33-39
location, 6
Management
course descriptions, 76
course requirements, 73-76
program locations, 13, 25
Management/Marketing
course requirements, 76
program locations, 14, 25
Manufacturing
Continuing Education, 140
course descriptions, 242-244
course requirements, 128-130
program locations, 28
Manufacturing and Logistics Institute, 8
Manufacturing Preparation Courses, 156
Manufacturing Technology Maintenance Mechanic
course requirements, 129-130
program locations, 28
MAP Grant, 19
Map Of City Colleges Locations, 6
Marketing
course requirements, 69, 76
program locations, 13, 14, 25
Masonry
course requirements, 61
program locations, 9, 24
Mathematics
course descriptions, 244-247
General Education courses, 35, 38
Mechanical Technology CAD
course requirements, 64
program locations, 24
Media Communications
course descriptions, 247-250
course requirements, 67-68, 68, 71-72
General Education courses, 39
program locations, 9, 25
Media Sales and Marketing
course requirements, 69
Medical Assistant
course requirements, 88
program locations, 26
}

Medical Billing and Coding
Continuing Education, 140
program locations, 11, 26
Mental Health
course descriptions, 250-251
program locations, 9
Microbiology
course descriptions, 251
Middle Colleges, 11, 12 mission statement, 2
Mortuary Science admission requirements, 89 course descriptions, 251-253
course requirements, 88-91
program locations, 10, 26
Music
course descriptions, 253-257
General Education courses, 35
Music Business
course requirements, 70
program locations, 25
Music Technology
course requirements, 70
program locations, 25


Natural Resources, Food \& Agriculture
course requirements, 54-55
Nephrology
admission requirements, 92
course descriptions, 281-282
course requirements, 92
program locations, 10, 26
Networking Systems and Technology
course descriptions, 257-258
course requirements, 120-121
program locations, 12, 27
Nursing
admission requirements, 93
course descriptions, 258-260
course requirements, 93-95
program locations, \(8,9,10,11,12,14,26\)
Nursing Assistant
Continuing Education, 141
program locations, 26
Nursing Home Administration course requirements, 115 program locations, 27

Obstetrics and Gynecologic Technology admission requirements, 95
course requirements, 95
program locations, 26

Occupational Therapy
admission requirements, 95-96
course descriptions, 260-262
course requirements, 96
program locations, 14
Oceanography
course description, 262
General Education courses, 35
Olive-Harvey College
campus information, 11
Disability Access Center, 18
General Education courses, 33-39
location, 6
Online Courses
Center for Distance Learning, 22, 159
GED (General Educational Development), 153
Ophthalmic Technology
course descriptions, 262-264
course requirements, 96-97
program locations, 26
Overhead Electrical Line Worker
course descriptions, 64
program locations, 9

\section*{P}

Painting (Construction)
course requirements, 63
program locations, 9
Paralegal
Continuing Education, 141
course requirements, 126
program locations, 14, 28
Paramedic
admission requirements, 86-87
course requirements, 86-87
program locations, 10
Parrot Cage Restaurant, 9
Pastry and Baking
course requirements, 106-107
program locations, 9, 26
Pell Grants, 19
Personal Trainer preparation
Continuing Education, 141
program locations, 26

\section*{Pharmacology}
course descriptions, 264
Pharmacy Technician
Continuing Education, 141
program locations, 26
Pharmacy Technology
admission requirements, 97
course descriptions, 264-265
course requirements, 97
program locations, 8, 10, 11, 26
Phi Theta Kappa
course descriptions, 265
Philosophy
course descriptions, 265-266
General Education courses, 36, 39

\section*{Phlebotomy}
admission requirements, 97
Continuing Education, 141
course descriptions, 266
course requirements, 97
program locations, 10, 26
Physical Education
course descriptions, 266-269
Physical Science
course descriptions, 269-270
General Education courses, 36
Physician Assistant
admission requirements, 98-100
course descriptions, 270-272
course requirements, 98-100
program locations, 10
Physics
course descriptions, 272-273
General Education courses, 36, 39
placement examinations, 20
Plumbing
course requirements, 65
program locations, 9, 24
Polish
course descriptions, 273-274
General Education courses, 36
Political Science
course descriptions, 274-275
General Education courses, 36
Practical Nursing
course requirements, 94
program locations, 14
Precision Sheet Metal Technician
Continuing Education, 142
program locations, 28
Pre-School Education
course requirements, 79-80
privacy of educational records, 4
Process Technology
course descriptions, 275-276
course requirements, 130
program locations, 28
Programs of Study, 23-160
Adult Education, 144-157
Agriculture, Food \& Natural Resources, 53-55
Architecture and Construction, 56-65
Arts, A/V Technology \& Communications, 66-72
Associate in Applied Science degrees (A.A.S.) and certificates, 51-52
Associate in General Studies, 49-50
Baccalaureate Transfer, 30-48
Business, Management, Administration \& Finance, 73-76
Center for Distance Learning, 159
Communications, 66-72
Continuing Education, 137-142
Education and Training, 77-82
Foundational Studies, 160
Health Science, 83-104
Hospitality and Culinary, 105-109
Human Services, 110-116
Information Technology, 117-121

Law, Public Safety, Corrections, and Security, 122-126
Manufacturing, 127-130
Plans By Cluster, 23-29
Science, Technology, Engineering \& Mathematics, 131-132
Transportation Distribution and Logistics, 133-136
A/V Technology, 66-72
Workforce Institute, 160
PSSA Codes, 162-165
Psychiatric Rehabilitation
course descriptions, 276-277
course requirements, 115
program locations, 27
Psychology
course descriptions, 277-278
General Education courses, 36, 39
Public Aid Recipients
tuition waivers, 22
Public Chauffeur Training
program locations, 11, 13
Public Passenger Vehicle Training
course requirements, 136
program locations, 29
Public Safety
course requirements, 123-126
program locations, 28
Public Service
course descriptions, 278-279
Q
Quality Assurance
course requirements, 130
program locations, 28

\section*{R}

Radio Production and Broadcasting
course requirements, 69
Radiography
admission requirements, 101
course descriptions, 279-280
course requirements, 101
program locations, 10, 14, 26
Radiological Technology
program locations, 10, 14
Reading
course descriptions, 281
Real Estate
program locations, 8, 11, 12
Real Estate Broker Pre-Licensure
Continuing Education, 142
program locations, 25
Refunds, 22
Registration, Academic Calendar, 17
Religion. See Comparative Religion
Renal Dialysis Technology
course requirements, 102
program locations, 26

\section*{Renal Technology}
admission requirements, 92
course descriptions, 281-282
course requirements, 92
program locations, 10, 26
Residency Requirements, 20, 21, 22
Respiratory Therapy
admission requirements, 102
course descriptions, 282-284
course requirements, 102-103
program locations, 10, 26
Richard J. Daley College. See Daley College

\section*{S}

Scholarships, 19
School Age Child Care
course requirements, 81
Science, Technology, Engineering \& Mathematics program locations, 28
Security
course requirements, 123-126
program locations, 28

\section*{Senior Citizens}
tuition waivers, 22
SEOG (Supplemental Opportunity Grant), 19
Sexual Harassment Complaint Procedures, 4
Sikia Restaurant, 9
Smoke-Free Workplace Policy, 4
Social Science
course descriptions, 284-286
General Education courses, 37

\section*{Social Service}
course descriptions, 286-290
Social Work
course requirements, 115-116
program locations, 13, 27
Sociology
course descriptions, 290-291
General Education courses, 37
South Chicago Learning Center of Olive-Harvey College, 6, 11
Spanish
course descriptions, 291-292
General Education courses, 37
Spanish Adult Education, 147-149, 151-152
Speech
course descriptions, 292-293
General Education courses, 37, 39
State of Illinois Monetary Aware Program Grant, 19
Sterile Processing Technology
admissions requirements, 103
course requirements, 103
program locations, 10, 26
Student Activities, 20
Student Employment, 19
Student Government Association, 20-21
Student Services, 15-22
academic calendar, 16-17
academic policies, 19
academic support, 18
fees and charges, 21-22
financial aid, 18-19
residency, 21
students activities, 20
textbook rental, 21
veterans, 21
withdrawals and refunds, 22
Students with Disabilities, 18
Supplemental Educational Opportunity Grant (SEOG), 19
Supply Chain Management
Continuing Education, 142
course requirements, 136
program locations, 11, 29
Surgical Technology
admission requirements, 104
course descriptions, 294-295
course requirements, 104
program locations, 10, 26


Taxi Driver Training
course requirements, 136
program locations, 11, 29
Teaching, Associate of Arts in Teaching degree, 48
Teaching, Leadership \& Support Professionals
course requirements, 81-82
program locations, 25
Technology
course descriptions, 295-301
Textbook Rental, 21
Theater Arts
course descriptions, 301-303
General Education courses, 37, 39
TOEFL, 20
transcripts, 21
Transportation, Distribution, and Logistics
course requirements, 134-136
program locations, 29
Truck Driving program locations, 11
Truman College
campus information, 12
Disability Access Center, 18
General Education courses, 33-39
location, 6
Truman Technical Center, 12
Tuition And Fees, 21-22
Tutoring, 18
TW Courses, 22

\section*{U}

Unarmed Security Guard
Continuing Education, 142
program locations, 28
U-Pass (CTA), 18

\section*{V}

Velasquez Institute of Daley College, 6, 8
Veteran Services, 21
Visual Media Communications
course descriptions, 304-305
course requirements, 71-72
program locations, 9, 25
Vocational Adult Education, 156

\section*{W}

Washburne Culinary Institute, 9
Washington College. See Harold Washington College
Web Design
Continuing Education, 142
course requirements, 72
program locations, 27
Web Development
course requirements, 121
program locations, 27
Welding
Continuing Education, 142
course requirements, 65
program locations, 24
Wellness Centers, 18
West Side Learning Center Of Malcolm X College, 6
West Side Technical Institute, 8
Whistle-Blower Protection, 4
Wilbur Wright College. See Wright College
Withdrawals And Refunds, 22
WKKC Radio, 9
Work Study, 19
Workforce Institute, 160
Workforce Preparation courses, 155
World Language Requirement, 20, 40
Wright College
campus information, 14
Disability Access Center, 18
General Education courses, 33-39
location, 6
WYCC Television, 9, 22

\section*{Z}

Zoology course descriptions, 305 General Education courses, 37

\section*{EDUCATION THAT} WITHOUT ALL OF THE DEET


\title{
City Colleges of Chicago www.CCC.EDU | (773) COLLEGE
}

Richard J. Daley College
7500 S. Pulaski Rd. | Chicago, IL 60es2

\section*{Kennedy-King College}

6301 S. Halsted St. | Chicago, IL. 60521

\section*{Malcolm X College}

1900 W. Van Buren St. |Chicago, IL. 60512

\section*{Olive-Harvey College}

10001 S. Woodlawn Ave. | Chicago, IL 60628

Harry S Truman College 1145 W. Wilson Ave. | Chicago, IL 60640

Harold Washington College 30 E. Lake St. |Chicago, IL. 60601

Wilbur Wright College
4300 N. Narragansett Ave. | Chicago, IL. 60634
```


[^0]:    * Some courses may not be offered every semester. Thus, students should select their courses with consultation from a college Academic Advisor or Department Chairperson at the CCC College from where the student will take courses. Students should obtain the course schedule each academic term or semester which can be downloaded from the CCC website at http:// www.ccc.edu.

[^1]:    Note: This program is exempt from the A.A.S. model shown on page 52 , since it was approved by ICCB prior to the development of this model effective with the 2012-2014 CCC Academic Catalog. This exemption includes the State of Illinois Human Diversity requirement.

[^2]:    *Students may opt to test out of CSFI 101-General Technology Essentials if they have extensive computer and networking education/experience.
    **Upon completion of the core courses, students may pursue either or both tracks.

[^3]:    Note: Also, see Emergency Management A.A.S. 355 degree.

