CITY COLLEGES of CHICAGO
Richard J. Daley
Education that Works

PROGRAM REVIEW COVER PAGE	
COLLEGE	Richard J. Daley College
DISTRICT NUMBER	508
CONTACT PERSON (NAME, TITLE, CONTACT INFORMATION)	Anne M. Panomitros *Vice President of Academic and Student Affairs* apanomitros@ccc.edu 773-838-7514
FISCAL YEAR REVIEWED:	FY 2018
DIRECTORY OF REVIEWS SUBMITTED	
AREA BEING REVIEWED	*PAGE NUMBERS*
CAREER AND TECHNICAL EDUCATION	Business – Accounting - Page 2
ACADEMIC DISCIPLINES	Physical Sciences ---------- Page 8 Life Sciences ---------- Page 33 CNC Operations BC ---------- ----- Page 53 CNC Machining BC ---------- Page 62 CNC Machining AC ---------- Page 72 Industrial Welding BC ---------- Page 82 Industrial Welding Tech BC ------- Page 90 Quality Assurance BC ---------- Page 98 Welding BC ---------- Page 107
CROSS-DISCIPLINARY INSTRUCTION	Remedial/Developmental English Language Arts ---------- Page 115
STUDENT AND ACADEMIC SUPPORT SERVICES	Financial Aid ---------- Page 127
PRIOR REVIEW SUPPLEMENTAL INFORMATION	
OTHER ATTACHMENTS AS NECESSARY	

Career & Technical Education

COLLEGE NAME:	Richard J. Daley College
FISCAL YEAR IN REVIEW:	2015-2019

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Accounting	**Degree**	**60**	**52.0301**	**BC & AC**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	• Goal 1: Students will demonstrate quantitative literacy by using accounting models to define, represent, and solve mathematical problems. • Goal 2: Students will use critical thinking to analyze financial transactions. • Goal 3: Students will prepare and analyze financial statements. • Goal 4: Students will analyze financial transactions and understand their impact on the firm. • Goal 5: Students will explain fundamental concepts of business law including torts, contracts, warranties, the Sales Article of the Uniform Commercial Code, agency, labor and employment law, and business ethics. • Goal 6: Students will apply basic concepts of micro- and macroeconomics.
To what extent are these objectives being achieved?	All objectives are being achieved, evidenced through course and program formative and summative assessments
Past Program Review Action What action was reported last time the program was reviewed?	The last review indicated a significant dip in enrollment due to District Office efforts to concentrate Business programs at Harold Washington College. Courses were revised at Daley to maintain a Business presence at the College with continued monitoring of enrollment encouraged to determine viability of the program

CTE PROGRAM REVIEW ANALYSIS Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.	
List all pre-requisites for this program (courses, placement scores, etc.).	
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	General Education Requirements 15 BUSINES111 - Introduction To Business 3 BUSINES141 - Business Mathematics 3 BUSINES181 - Financial Accounting 4 BUSINES182 - Managerial Accounting 4 BUSINES204 - Computer Applications Intermediate Accounting 1 BUSINES205 - Intermediate Accounting 3 BUSINES206 - Auditing 3 BUSINES208 - Federal Income Tax 3 BUSINES211 - Business Law I 3 BUSINES214 - The Legal & Social Environment of Business 3 BUSINES241 - Introduction To Finance 3 BUSINES250 - Computerized Accounting Systems 3 CIS120 - Introduction to Computer Applications 3 MATH118 - General Education Math 4 Three Courses from the following: BUSINES203 - Intro Cost Accounting 3 CIS123 - Microcomputer Spreadsheets 3 CIS145 - Database Management 3 CIS158 - Web Development I
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	Data from the Bureau of Labor and Statistics (BLS) suggests that the demand for the Associates Degree in Business related fields such as Accounting continues to grow. The BLS indicates an 11% growth from 2016 to 2026. https://www.bls.gov/emp/tables/education-summary.htm
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Demand has changed because of District consolidation of the program at Harold Washington College. The program was then allowed to continue at Daley but the marketing for the latter was not effective
1.3 What is the district and/or regional need?	Moderate to strong need district wide; many business programs from competitor colleges/universities

1.4 How are students recruited for this program?	Students are recruited through on campus recruitment events, off campus events such as high school fairs and community engagement events. Advertisements on CTA buses and neighborhood newspapers
1.5 Where are students recruited from?	Students are recruited from the surrounding Chicago neighborhoods, feeder high schools
1.6 Did the review of program need result in actions or modifications? Please explain.	No actions or modifications needed at this time
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	Faculty salaries and benefits; departmental expenditures; facilities cost of operation
2.2 How do costs compare to other programs on campus?	Costs for the program are a bit lower because the department is smaller and serves a smaller population
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	Costs of the program are allocated in yearly budget
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	
2.5 Did the review of program cost result in any actions or modifications? Please explain.	No resulting actions or modifications
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	Instructor quality, commitment and qualifications. Student evaluations suggested a high level of satisfaction with overall program and content delivery.
3.2 What are the identified or potential weaknesses of the program?	Program size and growth
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Onsite, hybrid and online courses
3.4 How does this program fit into a career pathway?	

3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	Federal tax preparation training available to those students who may be interested. Allows students to give back to the community in offering free tax preparation. Builds accounting and customer service skills
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	Business 111 Business 269 Offered at John F. Kennedy High School and William Bogan High School in Chicago
3.7 What work-based learning opportunities are available and integrated into the curriculum?	None at this time
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	N/A
3.9 Are industry-recognized credentials offered? If so, please list.	N/A
3.10 Is this an apprenticeship program? If so, please elaborate.	N/A
3.11 If applicable, please list the licensure examination pass rate.	
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	Business program advisory board is currently being formed to assist with program quality and relevance
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	Monthly departmental meetings, Faculty development week for FT faculty; Adjunct orientation at the beginning of each semester, Professional development opportunities for both FT and PT instructors at the beginning of each semester

3.16 What is the status of the current technology and equipment used for this program?	Technology used in instruction is current in all classrooms of this program
3.17 What assessment methods are used to ensure student success?	Formative and summative assessments in line with institutional accreditation standards are being employed to ensure program quality, instructional quality, student preparedness, and student satisfaction
3.18 How satisfied are students with their preparation for employment?	Student satisfaction surveys indicated that the students are satisfied with the program regarding course offerings and co-curricular activities related to the program.
3.19 How is student satisfaction information collected?	By survey (institutional) near midterm By survey (instructor evaluation) at the end of term
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers will be a part of the advisory board and will assist in program design, review, and placement opportunities
3.21 How often does the program advisory committee meet?	The advisory committee is currently in development. Once the formation is complete, the committee will meet once a semester
3.22 How satisfied are employers in the preparation of the program's graduates?	We currently do not have this information.
3.23 How is employer satisfaction information collected?	N/A
3.24 Did the review of program quality result in any actions or modifications? Please explain.	The creation of an advisory board for the Business program and the need to gauge employer satisfaction with Daley graduates. How that satisfaction information is collected will also be determined.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*BUSINESS – ACCOUNTING AAS*				
CIP CODE	*52.0301*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*44*	*46*	*12*	*4*	*3*
NUMBER OF COMPLETERS	*4*	*6*	*2*	*1*	*N/A*

OTHER (PLEASE IDENTIFY)					
How does the data support the program goals? Elaborate.	*DATA INDICATES A SIGNIFICANT DECREASE IN ENROLLMENT DUE TO THE CONCENTRATION OF THE PROGRAM AT ANOTHER CITY COLLEGE. WHEN DALEY COLLEGE WAS ALLOWED TO CONTINUE WITH THE BUSINESS PROGRAM, THE EFFECTS WERE ALREADY BEING FELT. THE PROGRAM HAS STRUGGLED SINCE 2016 TO INCREASE IN ENROLLMENT BECAUSE OF THE LACK OF STRATEGY, PLANNING, AND IMPLEMENTATION OF IDEAS. BUDGET CONSTRAINTS HAVE LIMITED MARKETING OPPORTUNITIES*					
What disaggregated data was reviewed?	*GENDER, ETHNICITY, COURSE SUCCESS RATES*					
Were there gaps in the data? Please explain.	*MALE STUDENTS ARE NOT PERFORMING AS WELL AS FEMALE STUDENTS – HAVE LOWER COURSE SUCCESS RATES*					
What is the college doing to overcome any identifiable gaps?	*CONTINUE TO GROW ENROLLMENT AND BUILD IN ACADEMIC SUPPORT FOR ALL LOWER PERFORMING STUDENTS.*					
Are the students served in this program representative of the total student population? Please explain.	*YES, THE STUDENTS IN THE PROGRAM ARE MAJORITY LATINO, REPRESENTING THE OVERALL POPULATION OF DALEY COLLEGE*					
Are the students served in this program representative of the district population? Please explain.	*YES, THE STUDENTS SERVED IN THE PROGRAM REPRESENT A GROWING LATINO POPULATION IN THE DISTRICT OVERALL*					
REVIEW RESULTS						
Action	☐Continued with Minor Improvements ☐Significantly Modified - will continue with the program but will make significant changes to how the program is marketed internally and externally and forming the new Business Advisory Board will assist with program improvements that meet the needs of our industry partners ☐Placed on Inactive Status ☐Discontinued/Eliminated ☐Other (please specify)					
Summary Rationale Please provide a brief rationale for the chosen action.	We believe, based on interest of high school students and increase in Business student prospects, that the program will grow. The College must, however, continue to invest in program marketing efforts to assist in the growth as well as constituency-building among business industry partners to build solid internship and student post-graduate employment opportunities					
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	• *JULY 2019 – BUSINESS PROGRAM SUMMITT TO INCLUDE FT AND PT EDUCATORS, ADMINISTRATORS, CURRENT STUDENTS, AND ALUMNI OF THE PROGRAM TO DISCUSS THE CURRENT STATE AND NEXT STEPS* • *SEPTEMBER 2019 – FIRST BUSINESS ADVISORY BOARD MEETING*					

Academic Disciplines	
COLLEGE NAME:	Richard J. Daley College
FISCAL YEAR IN REVIEW:	2019
DISCIPLINE AREA:	Physical Sciences
REVIEW SUMMARY Complete this section to review the Academic Discipline as a whole. Use the Course Specific Review portion of this template for each course reviewed in the Discipline.	
Program Objectives What are the objectives/goals of the discipline?	Students can earn an Associates degree and/or take coursework in order to transfer to a 4-year college or university.
To what extent are these objectives being achieved?	Evidence of meeting the objectives can be seen by looking at the AGS in Chemistry, AS and AES degree attainment. In addition, students transfer without receiving a degree. These students can also be tracked to see their success at the transfer institution.
How does this discipline contribute to other fields and the mission of the college?	The department provides high-quality education that can meet the educational or career needs of our diverse student population.
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Hired a Full-time Engineering Instructor
REVIEW ANALYSIS Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. The review will be sent back if any of the below fields are left empty or inadequate information is provided.	
Indicator 1: Need	**Response**

1.1 What mechanisms are in place to determine programmatic needs/changes for AA, AS, AFA, and AES academic programs? How are programmatic needs/changes evaluated by the curriculum review committee and campus academic leadership?	District-wide discipline meetings bring faculty together to foster discussions about the pathways leading to degree attainment. Any programmatic changes must go through the local and district-wide curriculum committee that includes oversight from both faculty and administrative representatives.
1.2 How are students informed or recruited for this program?	Meetings with college advisors, college recruiters, open houses, or faculty members.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this discipline?	Laboratory supplies.
2.2 What steps can be taken to offer curricula more cost-effectively?	Conduct micro-scale experiments where possible. Incorporate experiments that use chemicals which do not need special waste collection.
2.3 Is there a need for additional resources?	There is no need for additional resources.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible-scheduling, accelerated, team teaching, etc.)?	The department offers only face to face courses. Some courses are taught in 12 week or 8 week sessions. One course has been team taught to help train a new faculty member.
3.2 If the college delivers the course in more than one method, does the college compare success rates of each delivery method? If so, how?	Retention and overall grade distribution are compared for 16 week courses compared to the condensed courses.
3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?	Faculty are assessed through student and peer evaluations.

3.4 How does the discipline identify and support at-risk students?	Students are identified by faculty during the early alert campaign. Faculty identify students at risk and attempt to create a mediation plan for improvement. The system then sends this information to both the student and a college advisor. The college advisor follows-up with the student to determine a plan of action. The college offers free tutoring services in the disciplines and faculty hold office hours for student questions.
3.5 To what extent is the discipline integrated with other instructional programs and services?	The discipline has two college advisor liaisons that learn the course sequences and how to identify students for specific tracks. Tutoring is extensively used by students in the discipline.
3.6 What does the discipline or department review when developing or modifying curriculum?	Current trends in education inform curriculum, as well as alignment with our 4-year transfer partners. Courses align with the Illinois Articulation Initiative when applicable.
3.7 When a course has low retention and/or success rates, what is the process to address these issues?	Faculty review course prerequisites to ensure base knowledge is learned. Faculty also review the content of the course to ensure content matches learning outcomes. Finally, faculty work with academic support services to Integrate support services.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.

Student test scores in math are often below college level. This is difficult for students who may be interested in a physical science degree, AS or AES. In order to become successful, the student must reach Calculus 1 to qualify for certain courses in the discipline.

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*
COURSE TITLE	*CHEMISTRY 121*
COURSE DESCRIPTION	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 concentration units. Writing assignments, as appropriate to the discipline, are part of the course.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*385*	*323*	*312*	*303*	*294*
Credit Hours Produced	*1588*	*1316*	*1280*	*1276*	*2650*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*66%*	*69%*	*63%*	*50%*	*51%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*P1 902L*	*P1 902L*	*P1 902L*	*P1 902L*	*P1 902L*
How does the data support the course goals? Elaborate.	*The last few years show a decline in both enrollment and success rate of the course. This data does not support the departments goal for the course.*				
What disaggregated data was reviewed?	*No*				
Were there identifiable gaps in the data? Please explain.	*N/A*				

Academic Course Review Results

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Disaggregate the data to try and draw better conclusions on the change in success rate for the course – completed by May 2020.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*A drop in over 10% success rate is of concern and needs to be investigated.*
Resources Needed	*Disaggregated data from institutional researcher.*
Responsibility Who is responsible for completing or implementing the modifications?	*Institutional researcher to disaggregate the data.* *Department faculty to review data.*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*CHEMISTRY 201*				
COURSE DESCRIPTION	Topics include the periodic table of the elements, atomic structure, basic concepts of quantum theory, bonding, stoichiometry of compounds and reactions, thermochemistry, the gaseous state, basic concepts of the liquid and solid states, solutions, acids, and bases. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*194*	*186*	*128*	*101*	*142*
CREDIT HOURS PRODUCED	*1015*	*955*	*655*	*520*	*725*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*70%*	*71%*	*75%*	*78%*	*73%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*P1 902L CHM911*	*P1 902L CHM911*	*P1 902L CHM911*	*P1 902L CHM911*	*P1 902L CHM911*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*SUCCESS RATE AND ENROLLMENT ARE RELATIVELY STEADY. THIS IS IMPORTANT FOR A FIRST SEMESTER CORE SCIENCE COURSE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*N/A*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*N/A*				
Resources Needed	*N/A*				

Responsibility Who is responsible for completing or implementing the modifications?	*N/A*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*CHEMISTRY 203*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*29*	*31*	*26*	*15*	*5*
CREDIT HOURS PRODUCED	*145*	*155*	*130*	*75*	*25*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*62%*	*81%*	*77%*	*80%*	*60%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*CHM912*	*CHM912*	*CHM912*	*CHM912*	*CHM912*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*SHARP DECLINE IN ENROLLMENT IS OF CONCERN.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*SURVEY CHEM 201 STUDENTS TO SEE IF THERE IS A NEED FOR CHEM 203 AND WHY THEY MIGHT NOT BE TAKING IT AT DALEY – COMPLETE BY MAY 2020.*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*THE ENROLLMENT IN THE COURSE HAS DROPPED IN THE LAST TWO YEARS.*				

Resources Needed	*OFFICE OF INSTRUCTION FOR HELP SURVEYING STUDENTS.*
Responsibility Who is responsible for completing or implementing the modifications?	*PHYSICAL SCIENCE DEPARTMENT FACULTY. OFFICE OF INSTRUCTION.*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*CHEMISTRY 212*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*0*	*22*	*13*	*0*	*0*
CREDIT HOURS PRODUCED	*0*	*88*	*52*	*0*	*0*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*0*	*64%*	*62%*	*0*	*0*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*SUCCESS RATES ARE LOW FOR THE YEARS THE COURSE WAS OFFERED. COURSE NOT OFFERED EVERY YEAR.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				

ACADEMIC COURSE REVIEW RESULTS	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*DETERMINE IF THERE IS A NEED TO OFFER THE COURSE AND IN WHICH SEMESTER BY SURVEYING STUDENTS – COMPLETE BY MAY 2020.*

Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*THE COURSE HAS ONLY BEEN OFFERED 2 OUT OF THE 5 YEAR REVIEW WINDOW. OF THOSE YEARS, SUCCESS RATES HAVE BEEN LOWER THAN DEPARTMENT WOULD LIKE.*				
Resources Needed	*OFFICE OF INSTRUCTION FOR HELP SURVEYING THE STUDENTS.*				
Responsibility Who is responsible for completing or implementing the modifications?	*PHYSICAL SCIENCE DEPARTMENT FACULTY. OFFICE OF INSTRUCTION.*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*PHYSICAL SCIENCE 101*				
COURSE DESCRIPTION	Introduction to the scientific method, astronomy, geology, oceanography, and meteorology. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*301*	*61*	*105*	*128*	*164*
CREDIT HOURS PRODUCED	*936*	*183*	*321*	*390*	*504*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*67%*	*87%*	*72%*	*74%*	*55%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*P9 900*	P9 900	P9 900	P9 900	*P9 900*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*DATA SHOWS ACTIVE ENROLLMENT BUT LARGE VARIATION IN SUCCESS RATE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a	*REVIEW AND DISAGGREGATE DATA TO DETERMINE VARIATION IN SUCCESS RATE – COMPLETE BY MAY 2020.*				

timeline and/or anticipated dates.					
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*ENROLLMENT HAS BEEN RELATIVELY STEADY FOR THE COURSE CONSIDERING IT COMPETES WITH OTHER GEN ED PHY SCI COURSES. THE SUCCESS RATES HAVE SIGNIFICANTLY VARIED AND SHOULD BE COMPARED TO OTHER GEN ED COURSES.*				
Resources Needed	*INSTITUTIONAL RESEARCHER FOR DATA*				
Responsibility Who is responsible for completing or implementing the modifications?	*PHYSICAL SCIENCE DEPARTMENT FACULTY. INSTITUTIONAL RESEARCHER.*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*PHYSICAL SCIENCE 111*				
COURSE DESCRIPTION	Introduction to the scientific method, astronomy, geology, oceanography, and meteorology. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*11*	*130*	*110*	*105*	*89*
CREDIT HOURS PRODUCED	*44*	*524*	*448*	*424*	*360*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*50%*	*71%*	*77%*	*90%*	*81%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*P1 905L*	*P1 905L*	*P1 905L*	*P1 905L*	*P1 905L*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*DATA SHOWS ACTIVE ENROLLMENT BUT LARGE VARIATION IN SUCCESS RATE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future	*REVIEW AND DISAGGREGATE DATA TO DETERMINE VARIATION IN SUCCESS RATE – COMPLETE BY MAY 2020.*				

based on this review with a timeline and/or anticipated dates.	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*ENROLLMENT HAS BEEN RELATIVELY STEADY FOR THE COURSE CONSIDERING IT COMPETES WITH OTHER GEN ED PHY SCI COURSES. THE SUCCESS RATES HAVE SIGNIFICANTLY VARIED AND SHOULD BE COMPARED TO OTHER GEN ED COURSES.*
Resources Needed	*INSTITUTIONAL RESEARCHER FOR DATA*
Responsibility Who is responsible for completing or implementing the modifications?	*PHYSICAL SCIENCE DEPARTMENT FACULTY. INSTITUTIONAL RESEARCHER.*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*PHYSICS 215*				
COURSE DESCRIPTION	Rigid bodies, fluid statics, friction, moments of inertia, centroids, and virtual work. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*10*	*11*	*14*	*24*	*17*
CREDIT HOURS PRODUCED	*30*	*33*	*42*	*72*	*51*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*50%*	*64%*	*85%*	*79%*	*71%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*EGR942*	*EGR942*	*EGR942*	*EGR942*	*EGR942*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*ENROLLMENT AND SUCCESS RATE HAVE BEEN INCREASING. THIS SUPPORTS THE COURSE GOALS.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*DISAGGREGATED DATA WAS NOT REVIEWED.*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				

ACADEMIC COURSE REVIEW RESULTS	
Intended Action Steps	*NO INTENDED ACTION STEPS ARE IDENTIFIED AT THIS TIME. COURSE SUCCESS RATES ARE IN LINE WITH THIS LEVEL OF*

Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*ENGINEERING COURSEWORK. ENROLLMENT EFFORTS ARE UNDERWAY BY INCREASING AWARENESS OF PROGRAM AND TRANSFER OPPORTUNITIES.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*ENROLLMENT INCREASE IS A DESIRED OUTCOME, AS WELL AS CONTINUED PARTNERSHIP WITH STUDENT SUPPORT SERVICES.*
Resources Needed	*ENROLLMENT MANAGER AND DEPARTMENT COLLABORATION.*
Responsibility Who is responsible for completing or implementing the modifications?	*ENROLLMENT AND FACULTY.*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*PHYSICS 216*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*12*	*7*	*10*	*12*	*13*
CREDIT HOURS PRODUCED	*36*	*21*	*30*	*36*	*39*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*42%*	*42%*	*40%*	*75%*	*23%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*EGR943*	EGR943	EGR943	EGR943	EGR943
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*ENROLLMENT IS STEADY BUT SIGNIFICANT VARIATION IN SUCCESS RATE IS REPORTED OVER THE YEARS.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				

ACADEMIC COURSE REVIEW RESULTS

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*INTEGRATE SUPPORT SERVICES INTO THE COURSE – MAY 2020*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*SUCCESS RATE IS LOW AND INTEGRATING TUTORING AND OTHER SUPPORT SERVICES MIGHT HELP INCREASE THE SUCCESS RATE.*
Resources Needed	*NO ADDITIONAL RESOURCES ARE NEEDED.*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT FACULTY.*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*PHYSICS 217*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*9*	*9*	*12*	*16*	*14*
CREDIT HOURS PRODUCED	*27*	*27*	*36*	*48*	*42*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*78%*	*67%*	*83%*	*75%*	*86%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*EGR945*	*EGR945*	*EGR945*	*EGR945*	*EGR945*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*ENROLLMENT AND SUCCESS RATE HAVE BEEN INCREASING. THIS SUPPORTS THE COURSE GOALS.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				

Were there identifiable gaps in the data? Please explain.	*N/A*

Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*The department is pleased with the course success rates and student outcomes of this course. Enrollment increase is a top priority.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Slight decline in enrollment in the engineering courses has led to enrollment efforts to be a top priority of the department and college.*
Resources Needed	*Enrollment manager (already in place)*
Responsibility Who is responsible for completing or implementing the modifications?	*Enrollment, faculty.*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*				
Course Title	*Physics 221*				
Course Description	Foundations and concepts in Physics, including elementary problems in mechanics wave motion and heat. Writing assignments, as appropriate to the discipline, are part of the course.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*19*	*14*	*18*	*12*	*10*
Credit Hours Produced	*95*	*70*	*90*	*60*	*50*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*79%*	*86%*	*94%*	*58%*	*70%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*P1 900L*	*P1 900L*	*P1 900L*	*P1 900L*	*P1 900L*
How does the data support the course goals? Elaborate.	*Enrollment and success rate have been increasing. This supports the course goals.*				
What disaggregated data was reviewed?	*No*				

Were there identifiable gaps in the data? Please explain.	*N/A*
Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*No further action is determined at this time.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*N/A*
Resources Needed	*N/A*
Responsibility Who is responsible for completing or implementing the modifications?	*N/A*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*				
Course Title	*Physics 222*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*24*	*7*	*18*	*Not offered*	*8*
Credit Hours Produced	*120*	*35*	*90*		*40*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*92%*	*86%*	*94%*		*63%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*P1 900L*	*P1 900L*	*P1 900L*		*P1 900L*
How does the data support the course goals? Elaborate.	*Enrollment and success rate have fluctuated over the 5 year period and does not meet the course goals.*				

What disaggregated data was reviewed?	*None*
Were there identifiable gaps in the data? Please explain.	*N/A*

Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Determine if Physics 222 is a viable course by surveying students in Physics 221 and other allied health courses – May 2020*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Enrollment is based on enrollment in Physics 221 and demand of the non-calculus based courses.*
Resources Needed	*Help with survey from Office of Instruction*
Responsibility Who is responsible for completing or implementing the modifications?	*Department Faculty* *Office of Instruction*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*				
Course Title	*Physics 235*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*43*	*45*	*31*	*35*	*41*
Credit Hours Produced	*225*	*225*	*175*	*190*	*245*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*56%*	*53%*	*54%*	*42%*	*38%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*Phy911*	*Phy911*	*Phy911*	*Phy911*	*Phy911*
How does the data support the course goals? Elaborate.	*Enrollment is steady but success rate has been declining.*				

What disaggregated data was reviewed?	*No*
Were there identifiable gaps in the data? Please explain.	*N/A*

Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Disaggregate the data to look for a trend in decreasing success rate – May 2020.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*A drop in the success rate of over 10% is of concern.*
Resources Needed	*Disaggregated data from Institutional Researcher*
Responsibility Who is responsible for completing or implementing the modifications?	*Institutional researcher to disaggregate the data.* *Department faculty to review data.*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*				
Course Title	*Physics 236*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*39*	*41*	*39*	*38*	*38*
Credit Hours Produced	*200*	*205*	*195*	*195*	*190*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*73%*	*83%*	*74%*	*77%*	*79%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*PHY912*	*PHY912*	*PHY912*	*PHY912*	*PHY912*

How does the data support the course goals? Elaborate.	*Enrollment and success rate have been steady.*
What disaggregated data was reviewed?	*No*
Were there identifiable gaps in the data? Please explain.	*N/A*

Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*No further action is needed at this time.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*N/A*
Resources Needed	*N/A*
Responsibility Who is responsible for completing or implementing the modifications?	*N/A*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*				
Course Title	*Physics 237*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*17*	*21*	*Not Offered*	*5*	*9*
Credit Hours Produced	*85*	*105*		*25*	*45*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*77%*	*71%*		*100%*	*89%*

IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
How does the data support the course goals? Elaborate.	*Enrollment has dropped due to changes in transferability of the course. The data does not support the course goals.*				
What disaggregated data was reviewed?	*None*				
Were there identifiable gaps in the data? Please explain.	*N/A*				
Academic Course Review Results					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Determine the viability of the course. Survey students taking Physics 235 and 236 to see their intent of taking 237 and if it will transfer credits – May 2020.*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*The course only serves a small portion of students. Alternate courses are being developed that might align better with receiving institutions.*				
Resources Needed	*Help with survey from Office of Instruction*				
Responsibility Who is responsible for completing or implementing the modifications?	*Department Faculty* *Office of Instruction*				
Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	*Physical Science*				
Course Title	*Astronomy 201*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*222*	*191*	*116*	*110*	*131*
Credit Hours Produced	*696*	*579*	*351*	*339*	*393*

Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*53%*	*67%*	*74%*	*67%*	*81%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)	*P1 906*	*P1 906*	*P1 906*	*P1 906*	*P1 906*
How does the data support the course goals? Elaborate.	*Success rates have been increasing and therefore meets the course goals.*				
What disaggregated data was reviewed?	*None*				
Were there identifiable gaps in the data? Please explain.	*N/A*				
Academic Course Review Results					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*No action is identified*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*N/A*				
Resources Needed	*N/A*				
Responsibility Who is responsible for completing or implementing the modifications?	*N/A*				
Data Analysis for Academic Disciplines Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
Academic Discipline Area	*Physical Science*				
Course Title	*ENG 111: Intro to the Engineering Profession*				
Course Description	History of engineering profession, 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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*

Number of Students Enrolled	*13*	*29*	*50*	*68*	*71*
Credit Hours Produced	*26*	*58*	*100*	*136*	*150*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*92%*	*62%*	*68%*	*71%*	*45%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
How does the data support the course goals? Elaborate.	*Enrollment has increased and supports the course goals. The decrease in course success rate is year 5 is a concern and does not support course goals.*				
What disaggregated data was reviewed?	*None*				
Were there identifiable gaps in the data? Please explain.	*N/A*				

Academic Course Review Results

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Determine, through desegregated data the reason for decrease in course success rate in year 5. Data to be analyzes by May 2020.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Work with institutional research, office of instruction, and department faculty to analyze data and determine if changes are needed to increase course success rates.*
Resources Needed	*Institutional research, office of instruction, faculty.*
Responsibility Who is responsible for completing or implementing the modifications?	*Department faculty*

Data Analysis for Academic Disciplines

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

Academic Discipline Area	*Physical Science*
Course Title	*ENG 131: Engineering Graphics & Intro to Design*
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*9*	*9*	*25*	*33*	*71*
Credit Hours Produced	*27*	*27*	*75*	*99*	*150*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*89%*	*56%*	*84%*	*70%*	*45%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
How does the data support the course goals? Elaborate.	*Enrollment is increasing and supports the course goals.*				
What disaggregated data was reviewed?	*None*				
Were there identifiable gaps in the data? Please explain.	*N/A*				

Academic Course Review Results

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Determine reason for decline in course success rates for year 5. Data will be desegregated and analyzed by May 2020.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Decrease in course success rate does not support program goals; data will determine future direction of the course, any supports needed or course changes needed.*
Resources Needed	*Institutional researcher, faculty, office of instruction.*
Responsibility Who is responsible for completing or implementing the modifications?	*Department faculty.*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*ENG 190: COMPUTER APPLICATIONS IN ENGINEERING*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*16*	*23*	*9*	*17*	*15*
CREDIT HOURS PRODUCED	*48*	*69*	*27*	*51*	*45*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*69%*	*35%*	*44%*	*53%*	*33%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*SUCCESS RATES HAVE DECREASED AND DO NOT MEET THE COURSE GOALS.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NONE*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*REVIEW COURSE CURRICULUM AND MAKE SURE IT IS RELEVANT – MAY 2020.*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*DETERMINE IF THE COURSE CURRICULUM IS RELEVANT TO THE STUDENTS AND ACCEPTED BY TRANSFER INSTITUTIONS.*				

Resources Needed	*NONE, THIS IS A FUNCTION OF THE DEPARTMENT.*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT FACULTY*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*ENG 215: ELECTRICAL CIRCUIT ANALYSIS*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*NOT OFFERED*	*NOT OFFERED*	*NOT OFFERED*	*10*	*8*
CREDIT HOURS PRODUCED				*50*	*40*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS				*90%*	*88%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*COURSE JUST REACTIVATED AND THE DATA DOES SUPPORT THE COURSE GOALS.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NONE*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				

ACADEMIC COURSE REVIEW RESULTS	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*NO ACTION STEPS NEEDED.*

Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*N/A*
Resources Needed	*N/A*
Responsibility Who is responsible for completing or implementing the modifications?	*N/A*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*PHYSICAL SCIENCE*				
COURSE TITLE	*ENG 250: ENGINEERING PROJECTS*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*NOT OFFERED*	*7*	*NOT OFFERED*	*7*	*7*
CREDIT HOURS PRODUCED		*14*		*14*	*14*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS		*71%*		*100%*	*100%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*DATA DOES SUPPORT COURSE GOALS OF SUCCESS RATE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NONE*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*N/A*				

ACADEMIC COURSE REVIEW RESULTS	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a	*THE COLLEGE AND DEPARTMENT WOULD LIKE TO SEE IMPROVEMENT AND INCREASE IN ENROLLMENT, MARKETING*

timeline and/or anticipated dates.	*AND HIGH SCHOOL OUTREACH INCREASING IN THE 2019/2020 ACADEMIC YEAR.*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*THERE HAS BEEN NO INCREASE IN ENROLLMENT PER THE DATA.*
Resources Needed	*ENROLLMENT MANAGER, COLLEGE RECRUITERS, FACULTY OUTREACH.*
Responsibility Who is responsible for completing or implementing the modifications?	*ENROLLMENT MANAGER.*

Academic Disciplines	
COLLEGE NAME:	Richard J. Daley College
FISCAL YEAR IN REVIEW:	2019
DISCIPLINE AREA:	Life Sciences
REVIEW SUMMARY Complete this section to review the Academic Discipline as a whole. Use the Course Specific Review portion of this template for each course reviewed in the Discipline.	
Program Objectives What are the objectives/goals of the discipline?	• Establish and maintain courses that develop in students a solid foundation of scientific information, as well as problem-solving and decision-making skills These skills will enable students to advance to health-related programs, transfer to baccalaureate programs, and become informed members of the community • Provide a classroom environment for student growth and maturity in the areas of oral and written scientific communication, independent and collaborative learning, and critical thinking • Provide opportunities for students to utilize current technologies in the classroom • Ensure that students gain a deeper appreciation of careers that utilize biology and the importance of biology in everyday life.

To what extent are these objectives being achieved?	• Bio 205 (Pathophysiology) was developed in 2014, was reactivated in 2019, due to specific needs of students who are transferring to baccalaureate programs such nursing, physician assistant programs, and other allied health programs. • Assessments of specific student learning outcomes are performed for certain courses every semester, namely: Bio 121, 226,227, and Micro 233 to determine comprehension and critical thinking skills of students. These are administered usually after mid-term. The results of these assessments are discussed during department meetings. • The department regularly assess the classrooms resources used such as textbooks, lab manuals, and others to ensure that departments objectives are being achieved • Students are encouraged to work in groups, brainstorm problems together to encourage teamwork, problem-solving- and critical-thinking skills. These are especially evident in the laboratory courses where the instructor acts as a facilitator and a guide. • Current, effective and appropriate technologies are used in the classroom to engage students and to make learning easier. These include Smart Board, YouTube, Power Point, online study tools. Google, laptops, mobile devices. • Instructors embed real-life examples in their teaching so the students can connect what they are learning to their daily lives • Providing health-care scenario in courses such as Medical Terminology, Nutrition, Human Sexuality, Human Biology, Human Anatomy and Physiology and Pathophysiology give the students a deeper appreciation of the courses they are taking.
How does this discipline contribute to other fields and the mission of the college?	• The department provides high-quality education for transfer credit, primarily: currently, the department has seven full-time and eleven part-time faculty members. Except one, all full-time instructors have doctoral degrees. All full-time are tenured. All of the part-time, except three, have doctoral degrees. • Our instructors full-time and part-time, are very engaged in promoting collaboration between the disciplines. Dr. Joyce Jones, our part-time instructor, initiated the first KID STEM BOOT CAMP last year which involved the pre-school, tutoring dept, Physical Science, Math Dept, Child Development and Advising dept. • We have an Assessment Committee in the department and we volunteer in the College Assessment Committee • Some of the faculty are members of scholarship committees, for example the Local 1600, that award funds to students • We support, participate, and encourage events to recruit student; to engage students in college life

Prior Review Update Describe any quality improvements or modifications made since the last review period.	• Regular assessments of Biology 121, 226, 227, and Micro 233 are being done. These are administered to all sections every semester. Prior to last review period, we were making assessments only in one course, and that was Biology 121, which was in all sections. Assessment results are discussed during department meetings. We look at the SLOs that were assessed, we discuss which ones our students have deficits; we come up with ways on how we can improve teaching and learning.

REVIEW ANALYSIS Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. The review will be sent back if any of the below fields are left empty or inadequate information is provided.	
Indicator 1: Need	**Response**
1.1 What mechanisms are in place to determine programmatic needs/changes for AA, AS, AFA, and AES academic programs? How are programmatic needs/changes evaluated by the curriculum review committee and campus academic leadership?	• Any curriculum changes/program changes have to go through the Proposed Academic Curriculum Changes (PACC) Process. • The PACC process provides clearly defined development and revision processes for any courses or program offered by any city colleges of Chicago; promotes collaboration among faculty and administration. • The PACC Process assures that new course or programs and revisions to courses or programs support the mission and goals of the college and city colleges of Chicago
1.2 How are students informed or recruited for this program?	• Media • Flyers • Calls • Word-of-mouth • In classrooms • website
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this discipline?	Faculty salaries and benefits; departmental expenditures; facilities cost of operation
2.2 What steps can be taken to offer curricula more cost-effectively?	Streamlined/strategic scheduling using enrollment data and data from student degree audits to determine a more calculated approach to meeting student needs
2.3 Is there a need for additional resources?	Yes – departmental resources
INDICATOR 3: QUALITY	***RESPONSE***

3.1 Are there any alternative delivery methods of this discipline? (e.g. online, flexible-scheduling, accelerated, team teaching, etc.)?	• The department offers a shorter form of scheduling which we call mini-term. Compared to the regular 16 weeks semester, this is a 12-week semester to provide opportunities for students who register late.
3.2 If the college delivers the course in more than one method, does the college compare success rates of each delivery method? If so, how?	This more in depth look at course success rates is part of our larger strategy to assist in moving this department forward
3.3 What assessments does the discipline use to measure full-time and adjunct instructor performance in the classroom?	• Student assessment • Peer assessment
3.4 How does the discipline identify and support at-risk students?	• There are different ways an instructor may identify a student is at-risk and these are embedded and emphasized on the first day of the class; these may be the following: attendance, failure to submit or substandard work; failing exams. Then the instructor contacts the students. At the same time, the instructor fills out the Daley College Remediation Plan and may submit it to Grades First to alert the student's advisor who may also contact the student.
3.5 To what extent is the discipline integrated with other instructional programs and services?	The department fully collaborates with all other academic and support services of the college. Below are just some of the examples: • Our department provides opportunities for students to enhance oral and written communication skills of our students. We have regular Poster Presentations, Power Point presentations, and paper submissions in most Biology classes. • Some of our faculty members regularly participate in Math Awareness Week/Critical Thinking Week (Social Science) as presenters • We invite the tutors and advisors to come to our classes and encourage our students to seek them
3.6 What does the discipline or department review when developing or modifying curriculum?	The department first look at **who will be the clientele;** then we look at the course objectives; the student learning outcomes (are they measurable?); is this course going to be an elective or for a major? is it for a student majoring in science or art; will it be transferable?
3.7 When a course has low retention and/or success rates, what is the process to address these issues?	The department come together and discuss the issue and look for a resolution. If the success rate is good, then we look at what that class is doing well and duplicate that in other classes which have low retention/sucess rates.
LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THIS DISCIPLINE.	

DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 103*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*38*	*25*	*31*	*20*	*33*
CREDIT HOURS PRODUCED	*114*	*75*	*93*	*60*	*99*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*71%*	*76%*	*77%*	*45%*	*72%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE COURSE GOAL IS TO HAVE ALL STUDENTS GETTING C OR BETTER AT THE END OF THE COURSE. THE AVERAGE SUCCESS RATE FOR THE LAST FIVE YEARS FOR THE COURSE IS 68.2%. THE DATA DOES NOT SUPPORT THE COURSE GOALS. THE DEPARTMENT DISCUSS WAYS IN ORDER TO IMPROVE THE SUCCESS RATES AND WILL CONTINUE TO WORK WITH THE ADMINISTRATORS AND OTHER SUPPORT SERVICES OF THE COLLEGE TO IMPROVE THE SUCCESS RATE OF THE COURSE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	*NO*				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future	*INCREASE AVERAGE SUCCESS RATE BY 5% IN THE NEXT TWO YEARS. TO HELP ACHIEVE THIS, WE WILL IMPLEMENT THE FOLLOWING:*				

based on this review with a timeline and/or anticipated dates.	• *INCREASE/IMPROVE THE EARLY IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION* • *IMPROVE THE COLLABORATION BETWEEN TUTORING/ADVISING, ESPECIALLY FOLLOW-UP OF AT-RISK STUDENTS* • *INCREASE ENGAGEMENT IN CLASSROOM: USE REAL-LIFE SCENARIOS IN LECTURES AND HOMEWORK; USE OF COLLABORATIVE ACTIVITIES; ASSIGN MORE HOMEWORK; ASSIGN AN INQUIRY QUESTION BEFORE A SESSION WITH A CREDIT; BEING SENSITIVE TO LEARNING STYLES OF STUDENTS; UTILIZE EFFECTIVE TECHNOLOGY IN THE CLASSROOM* • *STUDENT SURVEY OF INSTRUCTORS TO BE DONE FOR COURSE*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	• *THE DEPARTMENT REALIZES THAT THERE ARE TIMES THAT STUDENTS ARE NOT FULLY UTILIZING THE RESOURCES OF THE COLLEGE NOR ARE THEY COMMUNICATING WITH THEIR INSTRUCTORS.* • *INCREASING ENGAGEMENT IN THE CLASSROOM CAN TAKE MANY WAYS. WHEN INSTRUCTORS UTILIZE VARIOUS WAYS TO ENGAGE THEIR STUDENTS, THESE MAY TRANSLATE TO SUCCESS.* • *BEING ABLE TO GET A FEEDBACK ON ONE'S PERFORMANCE AS AN INSTRUCTOR IS IMPORTANT IN ORDER TO IMPROVE.*
Resources Needed	• *FACULTY, OTHER SUPPORT SERVICES, ADMINISTRATION*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT IN COLLABORATION WITH THE SUPPORT SERVICES OF THE COLLEGE AND THE ADMINISTRATION*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 107*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*137*	*120*	*108*	*134*	*100*

Credit Hours Produced	*414*	*366*	*327*	*408*	*303*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students	*68%*	*69%*	*58%*	*50%*	*71%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)					
How does the data support the course goals? Elaborate.	*The course goal is to have 100% of students getting C or better. The average success rate of the course for the last five years is 63.2%. The data does not support our course goal.*				
What disaggregated data was reviewed?	Gender, Ethnicity, Course success rates				
Were there identifiable gaps in the data? Please explain.	*None*				
Academic Course Review Results					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	• *Increase overall success rate for this course by 5% in the next 2 years* • *Increase the identification of at-risk students for remediation and tutoring* • *Improve engagement in and outside of the classroom: use real-life scenarios (nutrition and diet are very engaging to students); give opportunities for collaborative work; instructor as facilitator; field trips* • *Increased communication with instructors and students* • *Administer regular student surveys on instructor for this course*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	• *Health-scenarios on diet and nutrition; collaborative learning gives opportunities for students to exchange experiences and improve engagement, which may help in increasing success rate.* • *By identifying students who are at risk for not succeeding early and providing remediation plan with them; directing them to support services such as tutoring, engaging and communicating more with their instructors and administering regular surveys on how the instructor is doing in the classroom are ways in which the department think we can improve the success rate.*				

Resources Needed	*COLLABORATION BETWEEN THE DEPARTMENT, THE ADMINISTRATION, AND OTHER SUPPORT SERVICES OF THE COLLEGE (TUTORING, ADVISING, LIBRARY, ETC)*				
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT IN COLLABORATION WITH THE ADMINISTRATION AND OTHER SUPPORT SERVICES*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 114*				
COURSE DESCRIPTION	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. This course is equivalent to the Illinois Articulation Initiatives General Education generic course numbered L1900L. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YE100AR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*294*	*363*	*398*	*380*	*335*
CREDIT HOURS PRODUCED	*1180*	*1452*	*1608*	*1548*	*1356*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*61%*	*76%*	*80%*	*64%*	*56%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)			*L1900L*	*L1900L*	*L1900L*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE OVERALL AVERAGE SUCCESS RATE OF THE COURSE FOR THE LAST FIVE YEARS IS 67.4%, WHICH DOES NOT SUPPORT THE COURSE GOAL OF 100%.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a	• *INCREASE THE OVERALL SUCCESS RATE BY 5% IN THE NEXT 2 YEARS.*				

timeline and/or anticipated dates.	• *INCREASE THE IDENTIFICATION OF AT-RISK STUDENTS AND DIRECT THEM TO TUTORING AND/OR PLAN FOR REMEDIATION WITH INSTRUCTOR/ADVISOR.* • *INCREASED COMMUNICATION BETWEEN INSTRUCTOR AND STUDENTS* • *REGULAR STUDENT SURVEY ON INSTRUCTOR PERFORMANCE FOR THIS COURSE*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*IDENTIFYING AT-RISK STUDENTS AND GIVING THEM REMEDIATION PLANS EARLY MAY DECREASE ATTRITION. SURVEYS ON INSTRUCTOR PERFORMANCE WILL GIVE A CHANCE FOR THE INSTRUCTOR TO IMPROVE ON HIS/HER TEACHING. WHEN STUDENTS ARE ABLE TO COMMUNICATE WELL WITH THEIR INSTRUCTORS AND THEY GET PROMPT FEEDBACKS, THE DEPARTMENT REALIZES THAT IT LEADS TO INCREASED ENGAGEMENT IN THE CLASSROOM.*
Resources Needed	*DEPARTMENT IN COLLABORATION WITH THE ADMINISTRATION AND OTHER SUPPORT SERVICES*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT WITH THE SUPPORT OF THE ADMINISTRATION AND OTHER SUPPORT SERVICES OF THE COLLEGE (TUTORING, ADVISING, LIBRARY)*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 115*				
COURSE DESCRIPTION	Examines practical aspects of selected concepts in biology and their application to technology. Concepts may include heredity, growth, development, health, 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. This course is equivalent to the Illinois Articulation Initiative's General Education generic course numbered L1904L. Writing assignments, as appropriate to the discipline, are part of the course				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*289*	*209*	*188*	*171*	*127*
CREDIT HOURS PRODUCED	*1172*	*836*	*752*	*684*	*520*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE,	*58%*	*58%*	*68%*	*71%*	*74%*

EXCLUDING WITHDRAWALS AND AUDIT STUDENTS					
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*L1904L*	*L1904L*	*L1904L*	*L1904L*	*L1904L*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE OVERALL AVERAGE SUCCESS RATE OF THE COURSE FOR THE LAST FIVE YEARS IS 65.8%, WHICH DOES NOT SUPPORT THE COURSE GOAL OF 100%.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE.*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	• *THE DEPARTMENT'S GOAL IS INCREASE THE OVERALL SUCCESS RATE OF THE COURSE BY 5% IN THE NEXT TWO YEARS (2021).* • *IMPROVE THE IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION AND TUTORING AND/OR CONSULTATION WITH INSTRUCTOR.* • *INCREASE ENGAGEMENT BETWEEN INSTRUCTORS AND STUDENTS INSIDE AND OUTSIDE OF THE CLASSROOM* • *REGULAR STUDENT SURVEY OF INSTRUCTOR PERFORMANCE FOR THIS COURSE*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*BY BEING SENSITIVE TO OUR STUDENTS, IDENTIFYING THEM EARLY AND DIRECTING THEM TO THE PROPER RESOURCES WHERE THEY CAN GET HELP, THE DEPARTMENT HOPES TO REALIZE THE GOAL BY THE END OF TWO YEARS.*				
Resources Needed	*COOPERATION OF FACULTY IN THE DEPARTMENT, THE ADMINISTRATION, AND SUPPORT SERVICES OF THE COLLEGE*				
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT IN COLLABORATION WITH ADMINISTRATION AND OTHER SUPPORT SERVICES*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				

COURSE TITLE	*BIOLOGY 120*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*199*	*165*	*142*	*114*	*142*
CREDIT HOURS PRODUCED	*606*	*498*	*432*	*398*	*435*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*68%*	*87%*	*61%*	*68%*	*57%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE OVERALL AVERAGE SUCCESS RATE OF THE COURSE FOR THE LAST FIVE YEARS IS 68.2%. THE DATA DOES NOT SUPPORT OUR COURSE GOAL OF 100%.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE.*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*THE DEPARTMENT'S GOAL IS INCREASE THE OVERALL SUCCESS RATE OF THE COURSE BY 5% IN THE NEXT 2 YEARS. IN ORDER TO DO THIS, WE ARE GOING TO DO THE FOLLOWING:* • *IMPROVE/INCREASE THE EARLY IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION AND TUTORING* • *IMPROVE ENGAGEMENT IN THE CLASSROOM: IMPROVE COMMUNICATION BETWEEN INSTRUCTORS AND STUDENTS, MORE HOMEWORK, TEACHING AND LEARNING STYLES, CLASSROOM ASSESSMENTS, OTHERS)* • *ADMINISTER REGULAR STUDENT SURVEYS ON INSTRUCTOR PERFORMANCE*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*ENGAGEMENT IN THE CLASSROOM IS IMPORTANT IN ORDER TO IMPROVE SUCCESS RATE. THE DEPARTMENT WILL REGULARLY ADMINISTER INSTRUCTOR SURVEYS SO THE INSTRUCTORS WILL GET FEEDBACK ON HOW THEY ARE DOING.*				

	INSTRUCTORS IMPROVING THE IDENTIFICATION OF AT-RISK STUDENTS AND GIVING REMEDIATION PLAN MAY IMPROVE SUCCESS RATE.
Resources Needed	*DEPARTMENT COLLABORATION WITH ADMINISTRATION AND OTHER SUPPORT SERVICES*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT IN COLLABORATION WITH ADMIN AND OTHER SUPPORT SERVICES*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 121*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*579*	*527*	*508*	*515*	*500*
CREDIT HOURS PRODUCED	*3070*	*2825*	*2790*	*2695*	*2650*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*57%*	*50%*	*45%*	*57%*	*50%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)	*BIO910*	*BIO910*	*BIO910*	*BIO910*	*BIO910*
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE OVERALL SUCCESS RATE OF THE COURSE FOR THE PAST FIVE YEARS IS 51.8% COMPARED TO THE COURSE GOAL OF 100%. THE DATA DOES NOT SUPPORT THE COURSE GOAL.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE.*				

ACADEMIC COURSE REVIEW RESULTS

Intended Action Steps Please detail action steps to be completed in the future based on this review with a	*INCREASE THE OVERALL SUCCESS RATE BY 3% IN THE NEXT YEARS. IN ORDER TO ACCOMPLISH THIS, WE WILL DO THE FOLLOWING:*

timeline and/or anticipated dates.	• *IMPROVE THE EARLY IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION AND TUTORING* • *INCREASE ENGAGEMENT IN THE CLASSROOM: COLLABORATIVE LEARNING, CLASSROOM ASSESSMENTS, MORE HOMEWORK BEFORE CLASS, LEARNING STYLES, INCREASED COMMUNICATION BETWEEN INSTRUCTOR AND STUDENTS)* • *IMPROVE TEAMWORK BETWEEN TUTORING/ADVISING AND INSTRUCTORS* • *ADMINISTER STUDENT SURVEYS ON INSTRUCTOR PERFORMANCE*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*INSTRUCTORS TEACHING THIS COURSE MUST EARLY ON BE VERY SENSITIVE AND AWARE OF AT-RISK OF STUDENTS AND REMEDIATE THEM. IF THEY MUST BE DIRECTED TO THE TUTORING SERVICES, THEN THE INSTRUCTOR MAY NEED TO BE COMMUNICATING CLOSELY WITH THE TUTORING SERVICES AS WELL AS THE STUDENT ADVISOR. SOMETIMES, THE STUDENT MAY HAVE OTHER ISSUES THAT HE OR SHE MAY BE DEALING WITH, WHICH COULD BE AFFECTING THE ACADEMICS.*
Resources Needed	*DEPARTMENT IN COLLABORATION WITH THE ADMINISTRATION AND OTHER SUPPORT SERVICES (TUTORING, ADVISING, LIBRARY, WELLNESS CENTER)*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT IN COLLABORATION WITH ADMIN AND OTHER SUPPORT SERVICES*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 122*				
COURSE DESCRIPTION	Continuation of Biology 121. Organismal biology, ecology, and evolution. 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. Biology majors intending on transferring to a four-year institution must complete both Biology 121 and 122 with a grade of C or better.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*NOT OFFERED*	*13*	*11*	*16*	*24*

Credit Hours Produced		*65*	*55*	*80*	*120*
Success Rate (% C or better) at the end of the course, excluding Withdrawals and Audit students		*77%*	*73%*	*94%*	*89%*
IAI Status (list code) or Form 13 Status (list signature dates and institutions)		*BIO1910*	*BIO910*	*BIO910*	*BIO910*
How does the data support the course goals? Elaborate.	*The overall success rate of the course is 83.25%. The course goal is 100%. It does not meet the course goal.*				
What disaggregated data was reviewed?	Gender, Ethnicity, Course success rates				
Were there identifiable gaps in the data? Please explain.	*Yes. The course may have been cancelled due to low enrollment in some previous years, but traditionally, we offer it every other semester.*				
Academic Course Review Results					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Increase the overall success rate of the course by 5% in the next 2 years.* • *Improve on the early identification of at-risk students for remediation and tutoring* • *Increased engagement in the classroom through various means: being sensitive to the learning styles of students; giving homework prior to class meetings; collaborative learning; increased communication between instructor and students* • *Improve communication between tutoring/advising and instructors regarding at-risk students* • *Administer student surveys on instructor performance*				
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Increasing engagement in the classroom in various ways; enhancing the communication between the tutoring department/advising dept and instructor regarding students that were directed, meaning following up on these students to make sure that they are really going for remediation may lead to improved success rate in the course.*				

Resources Needed	*COLLABORATION BETWEEN THE DEPARTMENT AND SUPPORTIVE SERVICES, ADMIN*				
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT WITH THE HELP OF THE ADMIN AND OTHER SUPPORT SERVICES*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 205*				
COURSE DESCRIPTION	This course introduces the students to pathophysiology, which is the systematic study of the functional changes in cells, tissues, and organs altered by disease and/or injury. Students will also be introduced to the molecular and cellular basis of disease. Background in Anatomy and Physiology (Biology 226 and 227) is highly recommended for this course. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*18*	*NOT OFFERED*	*NOT OFFERED*	*NOT OFFERED*	*9*
CREDIT HOURS PRODUCED	*54*				*27*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*89%*				*89%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE AVERAGE SUCCESS RATE OF THE COURSE FOR THE YEARS THAT IT WAS OFFERED IS 89% COMPARED TO THE COURSE GOAL OF 100%.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*THE COURSE WAS NOT OFFERED FOR SEVERAL YEARS BECAUSE OF LOW ENROLLMENT. THE NURSING PROGRAMS OF THE CITY COLLEGE BECAME CENTRALIZED. HOWEVER, DUE TO CLAMOR FROM STUDENTS, PURSUING PHARMACY, PHYSICIAN ASSISTANT, AND NURSING DEGREES, THE COURSE WAS OFFERED AGAIN.*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future	*DEPARTMENT GOAL IS TO IMPROVE THE SUCCESS RATE BY 5% IN THE NEXT 2 YEARS.*				

based on this review with a timeline and/or anticipated dates.	• *IMPROVE THE EARLY IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION AND TUTORING.* • *IMPROVE ENGAGEMENT IN CLASSROOM: INCREASE HOMEWORK IN THE COURSE; SENSITIVITY TO LEARNING STYLES; INCREASED COMMUNICATION BETWEEN INSTRUCTOR AND STUDENTS* • *ADMINISTER INSTRUCTOR SURVEYS*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*EARLY IDENTIFICATION AND REMEDIATION; IMPROVING ENGAGEMENT IN THE CLASSROOM IN VARIOUS WAYS AND GIVING FEEDBACK TO THE INSTRUCTOR ON HIS/HER PERFORMANCE MAY HELP IMPROVE SUCCESS RATE.*
Resources Needed	*COLLABORATION BETWEEN THE DEPARTMENT, ADMIN, SUPPORT SERVICES*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT WITH HELP FROM ADMIN, AND SUPPORT SERVICES*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 226*				
COURSE DESCRIPTION	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				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*288*	*286*	*262*	*219*	*234*
CREDIT HOURS PRODUCED	*1192*	*1192*	*1084*	*932*	*988*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*79%*	*74%*	*75%*	*70%*	*70%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					

How does the data support the course goals? Elaborate.	*The overall success rate of the course for the last five years is 73.6% compared to the course goal of 100%. The data does not support the course goal.*
What disaggregated data was reviewed?	Gender, Ethnicity, Course success rates
Were there identifiable gaps in the data? Please explain.	*None.*
Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*Improve the overall success rate by 5% in the next 2 years by implementing the following:* • *Enhancing the early identification of at-risk students for remediation and tutoring* • *Improve the collaboration between tutoring/advising and instructors and follow-up of students directed to these support services.* • *Improve engagement in the classroom: increase homework given; use real-life scenarios in the classroom to engage students; collaborative learning in the lab; instructor as facilitator; sensitive to student learning styles; improve communication between instructor and students; use effective technologies in the classroom; administer assessments* • *Administer student surveys on instructor performance*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Using health-care/real-life scenario during lectures, or as part of homework before a lecture, connects the classroom to their everyday lives.* *The use of effective technology in or out(homework) of the classroom by the instructor may help a lot in engaging the students.* *Identifying at-risk students early and remediating them as soon as possible is important.*
Resources Needed	*Continued collaboration with admin and other support services*

Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT WITH THE HELP OF ADMIN AND OTHER SUPPORT SERVICES*				
DATA ANALYSIS FOR ACADEMIC DISCIPLINES Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.					
ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*				
COURSE TITLE	*BIOLOGY 227*				
COURSE DESCRIPTION	Continuation of Biology 226. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*177*	*182*	*138*	*129*	*131*
CREDIT HOURS PRODUCED	*736*	*748*	*552*	*540*	*544*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*78%*	*86%*	*91%*	*85%*	*79%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					
HOW DOES THE DATA SUPPORT THE COURSE GOALS? ELABORATE.	*THE OVERALL SUCCESS RATE OF THE COURSE FOR THE LAST FIVE YEARS IS 83.8% COMPARED TO THE GOAL OF THE COURSE WHICH IS 100%. THE DATA DOES NOT SUPPORT THE GOAL OF THE COURSE.*				
WHAT DISAGGREGATED DATA WAS REVIEWED?	Gender, Ethnicity, Course success rates				
WERE THERE IDENTIFIABLE GAPS IN THE DATA? PLEASE EXPLAIN.	*NONE.*				
ACADEMIC COURSE REVIEW RESULTS					
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*THE GOAL OF THE DEPARTMENT IS TO INCREASE THE SUCCESS RATE BY 5% IN THE NEXT 2 YEARS* • *IMPROVE ON THE EARLY IDENTIFICATION OF AT-RISK STUDENTS FOR REMEDIATION AND TUTORING* • *ENHANCE THE COLLABORATION BETWEEN TUTORING AND ADVISING* • *IMPROVE ENGAGEMENT IN THE CLASSROOM: USE OF REAL-LIFE/HEALTH-CARE SCENARIOS IN*				

	LECTURE/HOMEWORK; USE OF EFFECTIVE TECHNOLOGY; COLLABORATIVE LEARNING; INCREASED HOMEWORK; CLASSROOM ASSESSMENTS; INSTRUCTOR SENSITIVITY TO DIFFERENT LEARNING STYLES OF STUDENTS; INCREASED COMMUNICATION BETWEEN INSTRUCTOR AND STUDENTS • *ADMINISTER REGULAR STUDENT SURVEYS ON INSTRUCTOR PERFORMANCE*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*BY CONNECTING WHAT THEY ARE LEARNING TO THEIR EVERYDAY LIVES OR TO THINGS THAT THEY ARE INTERESTED IN SUCH AS HEALTH AND DISEASES INCREASES INTEREST OR ENGAGEMENT IN STUDENTS.* *FOLLOWING UP ON STUDENTS DIRECTED TO SUPPORT SERVICES TELLS THE STUDENTS THAT WE MEAN WELL AND WE CARE FOR THEM. THIS IS WHY CLOSE COLLABORATION/COMMUNICATION BETWEEN THE SUPPORT SERVICES IS IMPORTANT*
Resources Needed	*COLLABORATION BETWEEN THE DEPARTMENT, ADMIN, AND SUPPORT SERVICES*
Responsibility Who is responsible for completing or implementing the modifications?	*DEPARTMENT WITH THE HELP OF ADMIN AND SUPPORT SERVICES*

DATA ANALYSIS FOR ACADEMIC DISCIPLINES

Please complete for **each course** reviewed in the Academic Discipline. Provide the most recent 5 year longitudinal data available.

ACADEMIC DISCIPLINE AREA	*LIFE SCIENCES*
COURSE TITLE	*MICROBIOLOGY 233*
COURSE DESCRIPTION	Morphology, physiology, classification 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 eight credit hours will be counted towards graduation.

	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*174*	*159*	*136*	*141*	*139*
CREDIT HOURS PRODUCED	*708*	*640*	*544*	*564*	*564*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*75%*	*86%*	*95%*	*94%*	*92%*
IAI STATUS (LIST CODE) OR FORM 13 STATUS (LIST SIGNATURE DATES AND INSTITUTIONS)					

How does the data support the course goals? Elaborate.	*The overall success rate of the course for the last five years is 88.4% compared to the course goal which is 100%. The data does not support the course goal.*
What disaggregated data was reviewed?	Gender, Ethnicity, Course success rates
Were there identifiable gaps in the data? Please explain.	*None*
Academic Course Review Results	
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	*The departments intends to increase the success rate of the course by 5% in the next 2 years:* • *Improve the early identification of at-risk students for remediation and tutoring* • *Enhance the collaboration/communication between tutoring/advising* • *Improve engagement in the course: use of effective technology; collaborative learning; real-life scenario (viruses, bacteria, etc, they affect us in many ways, good and bad); sensitivity to learning styles of students; improved communication between instructor and students* • *Administer student surveys on instructor performance*
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	*Real-life scenarios engage students and provide a fertile ground for collaborative learning and provides opportunity for the instructor to become a facilitator and improve communication with the students. Increased engagement may lead to improve success rate. Early identification of at-risk students and directing them to support services and following up on them regularly are important in contributing to the success rate.*
Resources Needed	*Collaboration between the department, admin, and support services*
Responsibility Who is responsible for completing or implementing the modifications?	*Department with the help of admin and support services*

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2017 - 2021**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
CNC Operations	**BC**	**6**	**000422**	**N/A**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0422)** Manufacturing Tech TC1 (0340) 111 Machining Processes I **OR**.....3 112 Machining Processes II.....3 140 CNC Fundamentals.....3 **Total Program Credit Hours 6 Credit Hours**

Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-2041	CNC Machining	11	18	13	HS or Equivalent
51-4011	CNC Machining	50	18	12	HS or Equivalent
51-4012	CNC Machining	14	27	18	HS or Equivalent
51-4031	CNC Machining	41	15	9	HS or Equivalent
51-4032	CNC Machining	4	14	10	HS or Equivalent
51-4033	CNC Machining	40	16	12	HS or Equivalent
51-4034	CNC Machining	13	19	13	HS or Equivalent
51-4035	CNC Machining	4	19	13	HS or Equivalent
51-4041	CNC Machining	304	18	11	HS or Equivalent
51-4081	CNC Machining	30	19	11	HS or Equivalent
51-4111	CNC Machining	9	26	16	HS or Equivalent
51-4194	CNC Machining	2	19	14	HS or Equivalent
51-4199	CNC Machining	4	17	9	HS or Equivalent

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees. ***Historical Analysis and Future Outlook*** **SOC** | **SOC Description** | **Change % 2011 - 2016** | **Change % 2016 - 2021** 51-2041 | CNC Machining | -6% | -12% 51-4011 | CNC Machining | 1% | -2% 51-4012 | CNC Machining | 1% | -4% 51-4031 | CNC Machining | -11% | -18% 51-4032 | CNC Machining | -12% | -18% 51-4033 | CNC Machining | -11% | -18% 51-4034 | CNC Machining | -12% | -17% 51-4035 | CNC Machining | -11% | -15% 51-4041 | CNC Machining | 1% | -4% 51-4081 | CNC Machining | -5% | -13% 51-4111 | CNC Machining | -10% | -22% 51-4194 | CNC Machining | -10% | -16% 51-4199 | CNC Machining | -10% | -1%
1.3 What is the district and/or regional need?	Chicago resides within Cook County, which represents the ;argest percentage of jobs in Illinois (43% as of Q4 2015) (source: www.bls.gov/regions) . Therefore, please refer to the response above (question 12) for indication of regional as well as local needs.
1.4 How are students recruited for this program?	Daley's Recruitment Team has several ongoing recruitment initiatives particularly geared toward Advanced Manufacturing. In the last several months, we have provided tours at MTEC for twelve local high schools, exposing our new facility to an estimated 475 students, including 150 who attended MTEC's Spring Open House in May. Bogan HS, Kennedy HS and Hubbard HS recently participated in Maker Space workshops; three students who participated in the Maker Space workshops registered for the Advanced Manufacturing program, with more anticipated to complete testing and eventual enrollment in the program. The enrollment team has also assisted students with on and off site pre-registration workshops, reaching approximately 200 students recently. A total of ten New Student Orientations have been completed since in the past few months, totaling 175 attendees, and 110 enrolled for Summer or Fall terms as of May 29, 2019.

1.5 Where are students recruited from?	Over the past seven years, the recruitment team has built and maintained a high level of communication with our network of college and career coaches, college counselors at both private and public institutions, and the CPS network team in building partnerships with our local feeder high schools. These relationships have allowed the Daley team to have high visibility and ongoing contact with students, teachers and parents at events throughout the district. Such events include classroom presentations, application workshops, parent presentations, parent advisory meetings, and coordinating financial aid and advising workshops for students entering Daley College. Further, we also recruit from local employers by offering classes at schedules convenient for working adults with either am or pm start times.
1.6 Did the review of program need result in actions or modifications? Please explain.	New recruiting strategies as outlined above are being implemented. Also, new courses are being developed to allow this certificate to stack into an AC and subsequently an AAS.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	**Credit Unit Cost Calc** / **FY 2017** Salaries $ 216,238 Benefits $ 19,978 Services $ 12,767 Supplies and Equipment $ 8,720 Budget total $ 257,703
2.2 How do costs compare to other programs on campus?	Budget total $ 257,703 Credits 1038 Cost per Creidt Hour $ 248 Daley Average $161 CCC Average $268
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	This program is mainly supported by tuition and fees. Perkins also provides substantial support for supplemental purposes such as new equipment and replacement equipment and does not affect the sustainability of the program.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Courses are delivered in a traditional lecture and lab format in these classes. We have begun to offer accelerated mini sections of classes to allow students to complete two classes in one semester during successive 8 week mini sessions which has had good initial success. We wil continue to try innovative scheduling methods of delivery.
3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.

3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage, programming an inspection machine, or operating a CNC lathe or Mill.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is required in the form of NIMS (National Institute for Metalworking Standards) accreditation for this program. We follow American Society for Quality Standards and NIMS standards and teach students to these standards and utilize the NIMS certificates as part of our CNC program as a method to standardize and ensure quality in this program. Students are offered to opportunity to achieve NIMS credentials as part of the program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we offer NIMS credentials for students as part of this program.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	**Professional Development**	**FT/PT**	**Program Faculty Attendance**
	Zeiss SEM Training	Both	4
	NC3 Metrology Training	Both	2
	NC3 Termination Training	PT	1
	NC3 Torque Training	FT	1
	DC Grant Writing Workshop	FT	1
	Fanuc Training for CNC	PT	1
	Talents in teaching Workshop	PT	2
	Zeiss CMM Training	Both	3
	Hiden Gas Analyzer Training	FT	2
	Tensile Tesster Training	FT	1
	SME Heat Treating Workshop	FT	1
	Hexagon Metrolgy CMM Training	FT	1
	Miller Welding Instructor Training	FT	2
	Master CAM Certification Workshop	Both	4
	IPG Laser Training	Both	3
	Greenlee NC3 Workshop	FT	1
	AWS Certified Welding Instrution Workshop	FT	1
	Major Scientific Training	FT	1
3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.		
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as a Employer Satisfaction survey as described in sections 3.18 and section 3.22.		
3.18 How satisfied are students with their preparation for employment?	We are planning to develop a Graduate Follow up survey to determine student satisfaction with preparation of employment. The plan is to develop and implement this survey for the graduates from each spring semester beginning in the spring of 2020. The plan is for this survey to be administered to completers prior to their leaving campus at the end of the spring semester each year.		
3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.		

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*CNC OPERATIONS*				
CIP CODE	*000422*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*11*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*0*	*0*	*38*	*22*	*8*
TOTAL ENROLLMENT IN CLASSES	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now				

	having been recently implemented allow renewed effort and focus on recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Implement Employer satisfaction survey 2. Implement graduate satisfaction survey 3. Complete course revisions underway 4. Continue renewed recruitment activities

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2017 - 2021**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Computer Numerical Control Machining	**BC**	**16**	**000724**	**0422**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0724)** Manufacturing Tech TC1 (0340) 111 Machining Processes I..... 3 112 Machining Processes II..... 3 123 CNC Milling Operations and Programming.....3 137 CNC Turning Operations and Programming..... 3 140 CNC Fundamentals ..... 3 Interdisciplinary Studies (0104) 102 Career Development and Decision Making..... 1 **Total Program Credit Hours 16 Credit Hours**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***

1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-2041	CNC Machining	11	18	13	HS or Equivalent
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51-4033	CNC Machining	40	16	12	HS or Equivalent
51-4034	CNC Machining	13	19	13	HS or Equivalent
51-4035	CNC Machining	4	19	13	HS or Equivalent
51-4041	CNC Machining	304	18	11	HS or Equivalent
51-4081	CNC Machining	30	19	11	HS or Equivalent
51-4111	CNC Machining	9	26	16	HS or Equivalent
51-4194	CNC Machining	2	19	14	HS or Equivalent
51-4199	CNC Machining	#N/A	#N/A	#N/A	HS or Equivalent

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees. ***Historical Analysis and Future Outlook*** **SOC** | **SOC Description** | **Change % 2011 - 2016** | **Change % 2016 - 2021** 51-2041 | CNC Machining | -6% | -12% 51-4011 | CNC Machining | 1% | -2% 51-4012 | CNC Machining | 1% | -4% 51-4031 | CNC Machining | -11% | -18% 51-4032 | CNC Machining | -12% | -18% 51-4033 | CNC Machining | -11% | -18% 51-4034 | CNC Machining | -12% | -17% 51-4035 | CNC Machining | -11% | -15% 51-4041 | CNC Machining | 1% | -4% 51-4081 | CNC Machining | -5% | -13% 51-4111 | CNC Machining | -10% | -22% 51-4194 | CNC Machining | -10% | -16% 51-4199 | CNC Machining | #N/A | #N/A
1.3 What is the district and/or regional need?	Chicago resides within Cook County, which represents the ;argest percentage of jobs in Illinois (43% as of Q4 2015) (source: www.bls.gov/regions) . Therefore, please refer to the response above (question 12) for indication of regional as well as local needs.
1.4 How are students recruited for this program?	Daley's Recruitment Team has several ongoing recruitment initiatives particularly geared toward Advanced Manufacturing. In the last several months, we have provided tours at MTEC for twelve local high schools, exposing our new facility to an estimated 475 students, including 150 who attended MTEC's Spring Open House in May. Bogan HS, Kennedy HS and Hubbard HS recently participated in Maker Space workshops; three students who participated in the Maker Space workshops registered for the Advanced Manufacturing program, with more anticipated to complete testing and eventual enrollment in the program. The enrollment team has also assisted students with on and off site pre-registration workshops, reaching approximately 200 students recently. A total of ten New Student Orientations have been completed since in the past few months, totaling 175 attendees, and 110 enrolled for Summer or Fall terms as of May 29, 2019.

1.5 Where are students recruited from?	Over the past seven years, the recruitment team has built and maintained a high level of communication with our network of college and career coaches, college counselors at both private and public institutions, and the CPS network team in building partnerships with our local feeder high schools. These relationships have allowed the Daley team to have high visibility and ongoing contact with students, teachers and parents at events throughout the district. Such events include classroom presentations, application workshops, parent presentations, parent advisory meetings, and coordinating financial aid and advising workshops for students entering Daley College. Further, we also recruit from local employers by offering classes at schedules convenient for working adults with either am or pm start times.
1.6 Did the review of program need result in actions or modifications? Please explain.	New recruiting strategies as outlined above are being implemented. Also, new courses are being developed to allow this certificate to stack into an AC and subsequently an AAS.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***
2.1 What are the costs associated with this program?	**Credit Unit Cost Calc** / **FY 2017** Salaries $ 216,238 Benefits $ 19,978 Services $ 12,767 Supplies and Equipment $ 8,720 Budget total $ 257,703
2.2 How do costs compare to other programs on campus?	Budget total $ 257,703 Credits 1038 Cost per Creidt Hour $ 248 Daley Average $161 CCC Average $268
2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	This program is mainly supported by tuition and fees. Perkins also provides substantial support for supplemental purposes such as new equipment and replacement equipment and does not affect the sustainability of the program.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Courses are delivered in a traditional lecture and lab format in these classes. We have begun to offer accelerated mini sections of classes to allow students to complete two classes in one semester during successive 8 week mini sessions which has had good initial success. We wil continue to try innovative scheduling methods of delivery.
3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.

3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage, programming an inspection machine, or operating a CNC lathe or Mill.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is required in the form of NIMS (National Institute for Metalworking Standards) accreditation for this program. We follow American Society for Quality Standards and NIMS standards and teach students to these standards and utilize the NIMS certificates as part of our CNC program as a method to standardize and ensure quality in this program. Students are offered to opportunity to achieve NIMS credentials as part of the program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we offer NIMS credentials for students as part of this program.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	

Professional Development	FT/PT	Program Faculty Attendance
Zeiss SEM Training	Both	4
NC3 Metrology Training	Both	2
NC3 Termination Training	PT	1
NC3 Torque Training	FT	1
DC Grant Writing Workshop	FT	1
Fanuc Training for CNC	PT	1
Talents in teaching Workshop	PT	2
Zeiss CMM Training	Both	3
Hiden Gas Analyzer Training	FT	2
Tensile Tesster Training	FT	1
SME Heat Treating Workshop	FT	1
Hexagon Metrolgy CMM Training	FT	1
Miller Welding Instructor Training	FT	2
Master CAM Certification Workshop	Both	4
IPG Laser Training	Both	3
Greenlee NC3 Workshop	FT	1
AWS Certified Welding Instrution Workshop	FT	1
Major Scientific Training	FT	1

3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as a Employer Satisfaction survey as described in sections 3.18 and section 3.22.
3.18 How satisfied are students with their preparation for employment?	We are planning to develop a Graduate Follow up survey to determine student satisfaction with preparation of employment. The plan is to develop and implement this survey for the graduates from each spring semester beginning in the spring of 2020. The plan is for this survey to be administered to completers prior to their leaving campus at the end of the spring semester each year.
3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*CNC MACHINING*				
CIP CODE	*000724*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*2*	*4*	*0*	*0*	*0*
OTHER (PLEASE IDENTIFY)	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now having been recently implemented allow renewed effort and focus on				

	recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. *IMPLEMENT EMPLOYER SATISFACTION SURVEY* 2. *IMPLEMENT GRADUATE SATISFACTION SURVEY* 3. *COMPLETE COURSE REVISIONS UNDERWAY* 4. *CONTINUE RENEWED RECRUITMENT ACTIVITIES*

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2019**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Computer Numerical Control Machining	**AC**	**37**	**000725**	**0422, 0724**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

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List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Advanced Certificate (0725)** English (0035) 101 Composition I..... 3 Mathematics (0045) 125 Introductory Statistics..... 4 Manufacturing Tech TC1 (0340) 111 Machining Processes I..... 3 112 Machining Processes II..... 3 123 CNC Milling Operations and Programming .....3 137 CNC Turning Operations and Programming .....3 138 Introduction to SolidWorks .....3 139 Print Requirements: Quality Assurance .....3 140 CNC Fundamentals..... 3 143 Advanced Metrology .....3 144 Wire Electrical Discharge Machining.....3 207 Introduction to MASTERCAM .....3 **Total Program Credit Hours 37 Credit Hours**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***

1.1 How strong is the occupational demand for the program?

With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

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1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees. ***Historical Analysis and Future Outlook*** **SOC** | **SOC Description** | **Change % 2011 - 2016** | **Change % 2016 - 2021** 51-2041 | CNC Machining | -6% | -12% 51-4011 | CNC Machining | 1% | -2% 51-4012 | CNC Machining | 1% | -4% 51-4031 | CNC Machining | -11% | -18% 51-4032 | CNC Machining | -12% | -18% 51-4033 | CNC Machining | -11% | -18% 51-4034 | CNC Machining | -12% | -17% 51-4035 | CNC Machining | -11% | -15% 51-4041 | CNC Machining | 1% | -4% 51-4081 | CNC Machining | -5% | -13% 51-4111 | CNC Machining | -10% | -22% 51-4194 | CNC Machining | -10% | -16% 51-4199 | CNC Machining | -10% | -1%
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2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***

3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
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3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.
3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.

3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage, programming an inspection machine, or operating a CNC lathe or Mill.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is required in the form of NIMS (National Institute for Metalworking Standards) accreditation for this program. We follow American Society for Quality Standards and NIMS standards and teach students to these standards and utilize the NIMS certificates as part of our CNC program as a method to standardize and ensure quality in this program. Students are offered to opportunity to achieve NIMS credentials as part of the program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we offer NIMS credentials for students as part of this program.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.

3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	**Professional Development**	**FT/PT**	**Program Faculty Attendance**
	Zeiss SEM Training	Both	4
	NC3 Metrology Training	Both	2
	NC3 Termination Training	PT	1
	NC3 Torque Training	FT	1
	DC Grant Writing Workshop	FT	1
	Fanuc Training for CNC	PT	1
	Talents in teaching Workshop	PT	2
	Zeiss CMM Training	Both	3
	Hiden Gas Analyzer Training	FT	2
	Tensile Tesster Training	FT	1
	SME Heat Treating Workshop	FT	1
	Hexagon Metrolgy CMM Training	FT	1
	Miller Welding Instructor Training	FT	2
	Master CAM Certification Workshop	Both	4
	IPG Laser Training	Both	3
	Greenlee NC3 Workshop	FT	1
	AWS Certified Welding Instrution Workshop	FT	1
	Major Scientific Training	FT	1
3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.		
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as a Employer Satisfaction survey as described in sections 3.18 and section 3.22.		
3.18 How satisfied are students with their preparation for employment?	We are planning to develop a Graduate Follow up survey to determine student satisfaction with preparation of employment. The plan is to develop and implement this survey for the graduates from each spring semester beginning in the spring of 2020. The plan is for this survey to be administered to completers prior to their leaving campus at the end of the spring semester each year.		
3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.		

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*CNC MACHINING*				
CIP CODE	*000725*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*0*	*1*	*0*	*0*	*0*
TOTAL ENROLLMENT IN CLASSES	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now				

	having been recently implemented allow renewed effort and focus on recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Implement Employer satisfaction survey 2. Implement graduate satisfaction survey 3. Complete course revisions underway 4. Continue renewed recruitment activities

Career & Technical Education

College Name:	**Richard J. Daley College**
Fiscal Year in Review:	**2019**

Program Identification Information

Program Title	*Degree or Cert*	*Total Credit Hours*	*6-Digit CIP Code*	*List All certificate programs that are stackable within the parent degree*
Industrial Welding	**BC**	**6**	**000423**	**N/A**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE Program Review Analysis

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96
Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0423)** Manufacturing Tech TC1 (0340) 151 Introduction to Welding .....3 152 Intermediate Welding.....3 **Total Program Credit Hours 6 Credit Hours**

Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees.
1.3 What is the district and/or regional need?	Chicago resides within Cook County, which represents the ;argest percentage of jobs in Illinois (43% as of Q4 2015) (source: www.bls.gov/regions) . Therefore, please refer to the response above (question 12) for indication of regional as well as local needs.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-4122	Welding	14	16	11	HS or Equivalent

Historical Analysis and Future Outlook

SOC	SOC Description	Change % 2011 - 2016	Change % 2016 - 2021
51-4122	Welding	-7%	-16%

<table>
<tr><td>1.4 How are students recruited for this program?</td><td>Daley's Recruitment Team has several ongoing recruitment initiatives particularly geared toward Advanced Manufacturing. In the last several months, we have provided tours at MTEC for twelve local high schools, exposing our new facility to an estimated 475 students, including 150 who attended MTEC's Spring Open House in May. Bogan HS, Kennedy HS and Hubbard HS recently participated in Maker Space workshops; three students who participated in the Maker Space workshops registered for the Advanced Manufacturing program, with more anticipated to complete testing and eventual enrollment in the program. The enrollment team has also assisted students with on and off site pre-registration workshops, reaching approximately 200 students recently. A total of ten New Student Orientations have been completed since in the past few months, totaling 175 attendees, and 110 enrolled for Summer or Fall terms as of May 29, 2019.</td></tr>
<tr><td>1.5 Where are students recruited from?</td><td>Over the past seven years, the recruitment team has built and maintained a high level of communication with our network of college and career coaches, college counselors at both private and public institutions, and the CPS network team in building partnerships with our local feeder high schools. These relationships have allowed the Daley team to have high visibility and ongoing contact with students, teachers and parents at events throughout the district. Such events include classroom presentations, application workshops, parent presentations, parent advisory meetings, and coordinating financial aid and advising workshops for students entering Daley College. Further, we also recruit from local employers by offering classes at schedules convenient for working adults with either am or pm start times.</td></tr>
<tr><td>1.6 Did the review of program need result in actions or modifications? Please explain.</td><td>New recruiting strategies as outlined above are being implemented. Also, new courses are being developed to allow this certificate to stack into an AC and subsequently an AAS.</td></tr>
<tr><td>INDICATOR 2:
COST EFFECTIVENESS</td><td>RESPONSE</td></tr>
<tr><td>2.1 What are the costs associated with this program?</td><td>
<table>
<tr><th>Credit Unit Cost Calc</th><th>FY 2017</th></tr>
<tr><td>Salaries</td><td>$ 216,238</td></tr>
<tr><td>Benefits</td><td>$ 19,978</td></tr>
<tr><td>Services</td><td>$ 12,767</td></tr>
<tr><td>Supplies and Equipment</td><td>$ 8,720</td></tr>
<tr><td>Budget total</td><td>$ 257,703</td></tr>
</table>
</td></tr>
<tr><td>2.2 How do costs compare to other programs on campus?</td><td>
<table>
<tr><td>Budget total</td><td>$ 257,703</td></tr>
<tr><td>Credits</td><td>1038</td></tr>
<tr><td>Cost per Creidt Hour</td><td>$ 248</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Daley Average</td><td>$161</td></tr>
<tr><td>CCC Average</td><td>$268</td></tr>
</table>
</td></tr>
</table>

2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	This program is mainly supported by tuition and fees. Perkins also provides substantial support for supplemental purposes such as new equipment and replacement equipment and does not affect the sustainability of the program.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Courses are delivered in a traditional lecture and lab format in these classes. We have begun to offer accelerated mini sections of classes to allow students to complete two classes in one semester during successive 8 week mini sessions which has had good initial success. We wil continue to try innovative scheduling methods of delivery.
3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.

3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. We follow American Welding Society standards and teach AWS standards and qualify students to perform to AWS weld standards as a method to standardize and ensure quality in this program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we work to qualify students to AWS standards for certain welds so that they can be subsequently certified if required by their employer.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.

3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	

Professional Development	FT/PT	Program Faculty Attendance
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Master CAM Certification Workshop	Both	4
IPG Laser Training	Both	3
Greenlee NC3 Workshop	FT	1
AWS Certified Welding Instrution Workshop	FT	1
Major Scientific Training	FT	1

3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.
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3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
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DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*INDUSTRIAL WELDING*				
CIP CODE	*000423*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*0*	*0*	*62*	*26*	*14*
OTHER (PLEASE IDENTIFY)	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now having been recently implemented allow renewed effort and focus on				

	recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. *IMPLEMENT EMPLOYER SATISFACTION SURVEY* 2. *IMPLEMENT GRADUATE SATISFACTION SURVEY* 3. *COMPLETE COURSE REVISIONS UNDERWAY* 4. *CONTINUE RENEWED RECRUITMENT ACTIVITIES*

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2019**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Welding – Industrial Technology	**BC**	**13**	**000827**	**N/A**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0827)** Short-Term Trade/Industrial/Trans (0504) 131 Machine Shop Mathematics I.....2 132 Introduction to Welding Principles.....3 133 Intermediate Welding .....3 134 Blueprint Reading for Welders .....2 135 Advanced Welding .....3 **Total Program Credit Hours 13 Credit Hours**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-4122	Welding	14	16	11	HS or Equivalent

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees.

Historical Analysis and Future Outlook

SOC	SOC Description	Change % 2011 - 2016	Change % 2016 - 2021
51-4122	Welding	-7%	-16%

1.3 What is the district and/or regional need?	Chicago resides within Cook County, which represents the ;argest percentage of jobs in Illinois (43% as of Q4 2015) (source: www.bls.gov/regions) . Therefore, please refer to the response above (question 12) for indication of regional as well as local needs.

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2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	This program is mainly supported by tuition and fees. Perkins also provides substantial support for supplemental purposes such as new equipment and replacement equipment and does not affect the sustainability of the program.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Courses are delivered in a traditional lecture and lab format in these classes. We have begun to offer accelerated mini sections of classes to allow students to complete two classes in one semester during successive 8 week mini sessions which has had good initial success. We wil continue to try innovative scheduling methods of delivery.
3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.

3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. We follow American Welding Society standards and teach AWS standards and qualify students to perform to AWS weld standards as a method to standardize and ensure quality in this program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we work to qualify students to AWS standards for certain welds so that they can be subsequently certified if required by their employer.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.

3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	

Professional Development	FT/PT	Program Faculty Attendance
Zeiss SEM Training	Both	4
NC3 Metrology Training	Both	2
NC3 Termination Training	PT	1
NC3 Torque Training	FT	1
DC Grant Writing Workshop	FT	1
Fanuc Training for CNC	PT	1
Talents in teaching Workshop	PT	2
Zeiss CMM Training	Both	3
Hiden Gas Analyzer Training	FT	2
Tensile Tesster Training	FT	1
SME Heat Treating Workshop	FT	1
Hexagon Metrolgy CMM Training	FT	1
Miller Welding Instructor Training	FT	2
Master CAM Certification Workshop	Both	4
IPG Laser Training	Both	3
Greenlee NC3 Workshop	FT	1
AWS Certified Welding Instrution Workshop	FT	1
Major Scientific Training	FT	1

3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as a Employer Satisfaction survey as described in sections 3.18 and section 3.22.
3.18 How satisfied are students with their preparation for employment?	We are planning to develop a Graduate Follow up survey to determine student satisfaction with preparation of employment. The plan is to develop and implement this survey for the graduates from each spring semester beginning in the spring of 2020. The plan is for this survey to be administered to completers prior to their leaving campus at the end of the spring semester each year.
3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*WELDING – INDUSTRIAL TECHNOLOGY*				
CIP CODE	*000827*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*0*	*0*	*0*	*0*	*0*
TOTAL ENROLLMENT IN CLASSES	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now				

	having been recently implemented allow renewed effort and focus on recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community,
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. *IMPLEMENT EMPLOYER SATISFACTION SURVEY* 2. *IMPLEMENT GRADUATE SATISFACTION SURVEY* 3. *COMPLETE COURSE REVISIONS UNDERWAY* 4. *CONTINUE RENEWED RECRUITMENT ACTIVITIES*

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2019**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Quality Assurance	**BC**	**16**	**000729**	**N/A**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Quality assurance professionals use precision measurement and statistical tools to verify that products and services meet blueprint requirements and expectations. This certificate program provides foundational skills for quality assurance in manufacturing such as print reading, geometric dimensioning and tolerancing, and statistical process control.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0729)** Mathematics (0045) 125 Introductory Statistics.....4 Manufacturing Tech TC1 (0340) 104 Statistical Process Control (SPC).....3 139 Print Requirements: Quality Assurance .....3 142 Geometric Dimensioning and Tolerancing .....3 143 Advanced Metrology .....3 **Total Program Credit Hours 16 Credit Hours**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**

INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-9061	Quality Assurance	205	16	9	High School Diploma

<table>
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3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
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3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing were students that attain positions in this field inspect, test, sort, sample, or weigh nonagricultural raw materials or processed, machined, fabricated, or assembled parts or products for defects, wear, and deviations from specifications.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.
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3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. We follow American Society for Quality Standards and NIMS standards and teach students to these standards and utilize the NIMS certificates as part of our CNC program as a method to standardize and ensure quality in this program as the NIMS credentials also test for entry quality assurance skills.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we offer NIMS credentials for students as part of this program.

3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certification Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.
3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	

Professional Development	FT/PT	Program Faculty Attendance
Zeiss SEM Training	Both	4
NC3 Metrology Training	Both	2
NC3 Termination Training	PT	1
NC3 Torque Training	FT	1
DC Grant Writing Workshop	FT	1
Fanuc Training for CNC	PT	1
Talents in teaching Workshop	PT	2
Zeiss CMM Training	Both	3
Hiden Gas Analyzer Training	FT	2
Tensile Tesster Training	FT	1
SME Heat Treating Workshop	FT	1
Hexagon Metrolgy CMM Training	FT	1
Miller Welding Instructor Training	FT	2
Master CAM Certification Workshop	Both	4
IPG Laser Training	Both	3
Greenlee NC3 Workshop	FT	1
AWS Certified Welding Instrution Workshop	FT	1
Major Scientific Training	FT	1

3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as an Employer Satisfaction survey as described in sections 3.18 and section 3.22.
3.18 How satisfied are students with their preparation for employment?	We are planning to develop a Graduate Follow up survey to determine student satisfaction with preparation of employment. The plan is to develop and implement this survey for the graduates from each spring semester beginning in the spring of 2020. The plan is for this survey to be administered to completers prior to their leaving campus at the end of the spring semester each year.
3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.
3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.

3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*QUALITY ASSURANCE*				
CIP CODE	*000729*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*5*	*6*	*3*	*4*	*3*
TOTAL ENROLLMENT IN CLASSES	*201*	*256*	*163*	*130*	*203*

How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now having been recently implemented allow renewed effort and focus on recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.

Are the students served in this program representative of the total student population? Please explain.	

	FY 18 - 19		
	African American	Hispanic	White
Daley College	20.2%	60.8%	16.1%
Advanced Manufacturing	38.0%	50.0%	10.0%
CCC District	31.1%	44.5%	14.4%
Chicago	32.4%	28.9%	31.7%

Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. Implement Employer satisfaction survey 2. Implement graduate satisfaction survey 3. Complete course revisions underway 4. Continue renewed recruitment activities

Career & Technical Education

COLLEGE NAME:	**Richard J. Daley College**
FISCAL YEAR IN REVIEW:	**2019**

PROGRAM IDENTIFICATION INFORMATION

PROGRAM TITLE	*DEGREE OR CERT*	*TOTAL CREDIT HOURS*	*6-DIGIT CIP CODE*	*LIST ALL CERTIFICATE PROGRAMS THAT ARE STACKABLE WITHIN THE PARENT DEGREE*
Welding	**BC**	**16**	**000765**	**0423**

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential.

Program Objectives What are the overarching objectives/goals of the program?	Students in this program will study manufacturing materials and processes, including basic metallurgy and electricity, as well as print reading and fundamental quality assurance concepts.
To what extent are these objectives being achieved?	Students demonstrate their success in achieving these objectives through practical hands on demonstration of skills.
Past Program Review Action What action was reported last time the program was reviewed?	No actions found in prior reviews.

CTE PROGRAM REVIEW ANALYSIS

Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.

List all pre-requisites for this program (courses, placement scores, etc.).	Eligibility for Math 99 and English 96

Please list or attach all required courses (including titles) for completion of this program including institution required courses (e.g. student success, first year, general education requirements, etc.).	**Basic Certificate (0765)** Manufacturing Tech TC1 (0340) 139 Print Requirements: Quality Assurance ..... 3 141 Manufacturing Materials and Processes..... 3 151 Introduction to Welding ..... 3 152 Intermediate Welding..... 3 191 Industrial Electricity.....4 **Total Program Credit Hours 16 Credit Hours**
Provide a rational for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	**N/A**
INDICATOR 1: NEED	***RESPONSE***
1.1 How strong is the occupational demand for the program?	With the increased retirements of the baby boomer generation, the skills gap in manufacturing is widening. Though headlines capture the fact that industry is offshoring and moving out of high wage rate areas reducing the overall job pool the actual quantity of openings and available jobs continue to grow due to the pace of retirements out pacing the rate of reduction in manufacturing jobs. With this, the job market is very strong and the need for skilled personnel in all areas of manufacturing is a current number one priority for manufacturers. It is expected that there are 2 unfilled jobs for every placement in advanced manufacturing.

SOC	SOC Description	Annual Openings	Hourly Earnings ($ MED)	Hourly Earnings ($ PCT 10)	Entry Level Education
51-4122	Welding	14	16	11	HS or Equivalent

1.2 How has demand changed in the past five years and what is the outlook for the next five years?	The rate of decrease in total jobs in the industry has decreased and the increased rate of open jobs due to increased retirements have produced an environment with more job openings and more opportunities for skilled employees.

Historical Analysis and Future Outlook

SOC	SOC Description	Change % 2011 - 2016	Change % 2016 - 2021
51-4122	Welding	-7%	-16%

1.3 What is the district and/or regional need?	Chicago resides within Cook County, which represents the ;argest percentage of jobs in Illinois (43% as of Q4 2015) (source: www.bls.gov/regions) . Therefore, please refer to the response above (question 12) for indication of regional as well as local needs.

<table>
<tr><td>1.4 How are students recruited for this program?</td><td>Daley's Recruitment Team has several ongoing recruitment initiatives particularly geared toward Advanced Manufacturing. In the last several months, we have provided tours at MTEC for twelve local high schools, exposing our new facility to an estimated 475 students, including 150 who attended MTEC's Spring Open House in May. Bogan HS, Kennedy HS and Hubbard HS recently participated in Maker Space workshops; three students who participated in the Maker Space workshops registered for the Advanced Manufacturing program, with more anticipated to complete testing and eventual enrollment in the program. The enrollment team has also assisted students with on and off site pre-registration workshops, reaching approximately 200 students recently. A total of ten New Student Orientations have been completed since in the past few months, totaling 175 attendees, and 110 enrolled for Summer or Fall terms as of May 29, 2019.</td></tr>
<tr><td>1.5 Where are students recruited from?</td><td>Over the past seven years, the recruitment team has built and maintained a high level of communication with our network of college and career coaches, college counselors at both private and public institutions, and the CPS network team in building partnerships with our local feeder high schools. These relationships have allowed the Daley team to have high visibility and ongoing contact with students, teachers and parents at events throughout the district. Such events include classroom presentations, application workshops, parent presentations, parent advisory meetings, and coordinating financial aid and advising workshops for students entering Daley College. Further, we also recruit from local employers by offering classes at schedules convenient for working adults with either am or pm start times.</td></tr>
<tr><td>1.6 Did the review of program need result in actions or modifications? Please explain.</td><td>New recruiting strategies as outlined above are being implemented. Also, new courses are being developed to allow this certificate to stack into an AC and subsequently an AAS.</td></tr>
<tr><td>INDICATOR 2:
COST EFFECTIVENESS</td><td>RESPONSE</td></tr>
<tr><td>2.1 What are the costs associated with this program?</td><td>
<table>
<tr><th>Credit Unit Cost Calc</th><th>FY 2017</th></tr>
<tr><td>Salaries</td><td>$ 216,238</td></tr>
<tr><td>Benefits</td><td>$ 19,978</td></tr>
<tr><td>Services</td><td>$ 12,767</td></tr>
<tr><td>Supplies and Equipment</td><td>$ 8,720</td></tr>
<tr><td>Budget total</td><td>$ 257,703</td></tr>
</table>
</td></tr>
<tr><td>2.2 How do costs compare to other programs on campus?</td><td>
<table>
<tr><td>Budget total</td><td>$ 257,703</td></tr>
<tr><td>Credits</td><td>1038</td></tr>
<tr><td>Cost per Creidt Hour</td><td>$ 248</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Daley Average</td><td>$161</td></tr>
<tr><td>CCC Average</td><td>$268</td></tr>
</table>
</td></tr>
</table>

2.3 How is the college paying for this program and its costs (e.g. grants, etc.)?	This program is mainly supported by tuition and fees. Perkins also provides substantial support for supplemental purposes such as new equipment and replacement equipment and does not affect the sustainability of the program.
2.4 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	N/A
2.5 Did the review of program cost result in any actions or modifications? Please explain.	The new pursuit of grant funding is being developed into a new capability for our organization to provide the ability to maintain our high level of program curriculum and educational capacity with up to date equipment and instruction.
INDICATOR 3: QUALITY	***RESPONSE***
3.1 What are the program's strengths?	We have a new Manufacturing Technology and Engineering Center that now provides state of the art advanced manufacturing and engineering facilities and equipment that allows us to renew curriculum and hands on training to reflect current technology as well as to provide an exciting environment to help build interest and enrollment in this program. The facility and equipment is the result of industry partner and advisory board input during the life of the project to ensure that current industry needs are fulfilled by the new capabilities. With this we are developing new courses to expand offerings in the various manufacturing technologies.
3.2 What are the identified or potential weaknesses of the program?	Recruiting and marketing efforts have been recently upgraded and approaches re-designed and it is too early to determine effectiveness. The new facility and equipment are an asset with recruiting and we have markedly increased interest and excitement and are waiting to see how these new efforts result in increased enrollment.
3.3 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching etc.)?	Courses are delivered in a traditional lecture and lab format in these classes. We have begun to offer accelerated mini sections of classes to allow students to complete two classes in one semester during successive 8 week mini sessions which has had good initial success. We wil continue to try innovative scheduling methods of delivery.
3.4 How does this program fit into a career pathway?	This basic certificate can lead to entry level positions in manufacturing positions such as welding, Soldering, and Brazing Machine Setter, Operator, and Tender, in these positions an employee would set up, operate, or tend welding, soldering, or brazing machines or robots that weld, braze, solder, or heat treat metal products, components, or assemblies. Includes workers who operate laser cutters or laser-beam machines.
3.5 What innovations have been implemented or brought to this program that other colleges would want to learn about?	New training equipment that includes modern controls and sensor technology has been implemented in our new lab facility to provide foundational skills and building blocks to train students on. These technologies include automation and manual technologies and include hands on skill demonstration to improve the training experience. Equipment manufacturing partners and training equipment partners were consulted with in addition to employer partners to develop this equipment configuration.

3.6 Are there dual credit opportunities? If so please list offerings and the associated high schools.	We are currently working with a Chicago Public School High Schools on CNC Machining programs at Austin Tech. and Bowen HS. We are working with Prosser HS to develop a welding lab and CAD dual credit training space on their campus. The Prosser facilities are being constructed over the summer of 2019 and expect to develop the program for the following term. We are working other local schools such as Bowen and Hubbard to take advantage of their close proximity to our campus and new facilities to implement dual credit programs.
3.7 What work-based learning opportunities are available and integrated into the curriculum?	Each student has practical hands on training with industrial grade equipment as part of the lab experience. In the labs in addition to demonstration of proper technique and knowledge of equipment, students frequently perform projects and design and build items for use in our facilities. Examples include building the new welding tables that will be used on our new welding lab and this past winter performing weld repair on the college snow plow to repair damage.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, NATEF).	Industry accreditation is not required for this program. We follow American Welding Society standards and teach AWS standards and qualify students to perform to AWS weld standards as a method to standardize and ensure quality in this program.
3.9 Are industry-recognized credentials offered? If so, please list.	As stated above, we work to qualify students to AWS standards for certain welds so that they can be subsequently certified if required by their employer.
3.10 Is this an apprenticeship program? If so, please elaborate.	We have an apprenticeship opportunity available with a local rapid transit seating manufacturer. Students take classes 2 days per week and work part time to complement the training in each setting. We currently have one cohort progressing and are working on a second cohort to begin this program in Fall of 19. We are working with other manufacturers to develop apprenticeships. We applied for and obtained a grant to develop apprenticeship navigator infrastructure for these programs as a pilot project.
3.11 If applicable, please list the licensure examination pass rate.	N/A
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	Southern Illinois University agreement for their IMAE program Illinois Institute of Technology for their Applied Engineering program Governors State for their Industrial Management Program We have a transfer office that offers assistance with transferring to many other institutions.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	We have formed several new partnerships including: American Gear Manufacturing Association to establish a National Gear manufacturing Training Center on Campus, National Coalition of Certificaiton Centers to bring new training curriculum to our programs, Lincoln Electric to bring state of the art equipment to this program, Calumet Area Industrial Commission to bring the Promise Grant tuition, Books and Supplies scholarships to this program. Among others.

3.14 What is the faculty to student ratio for courses in this program? Please provide a range and average.	Class sizes are limited to 15 students and the range is 4 to 15 and the average is 7.6 over the past 5 years.
3.15 What professional development or training is offered to adjunct and full time faculty that may increase the quality of this program?	

Professional Development	FT/PT	Program Faculty Attendance
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Talents in teaching Workshop	PT	2
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Miller Welding Instructor Training	FT	2
Master CAM Certification Workshop	Both	4
IPG Laser Training	Both	3
Greenlee NC3 Workshop	FT	1
AWS Certified Welding Instrution Workshop	FT	1
Major Scientific Training	FT	1

3.16 What is the status of the current technology and equipment used for this program?	The facilities and equipment for this program are in a new $45MM, 50K Sq. Ft building, with $5MM of new advanced manufacturing equipment to support this program as well as the other programs in our engineering and advanced manufacturing pathways. This new equipment allows training on state of the art equipment in a exciting new facility and allows us to expand offerings to meet industry partner needs.
3.17 What assessment methods are used to ensure student success?	Course evaluation surveys are completed by students in courses taught by adjunct professors, Embedded techniques include hands on performance of skills such as demonstration of production of a specific part to a blueprint utilizing the process being taught. We are in the process of implementing a Graduate Completion survey as well as a Employer Satisfaction survey as described in sections 3.18 and section 3.22.
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3.19 How is student satisfaction information collected?	The plan for the graduate Follow up survey is outlined in 3/18 above.

3.20 How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)	Employers have been engaged in numerous ways in this program including through advisory boards, new facility layout reviews for the new building, equipment selection decisions for the new facility, curriculum reviews for course revisions and new course development, presentation of career options to classes, participation in career exploration expo events, designing work study opportunities, suggestions for new curriculum, recruitment assistance and being open for tours and exposure of students to their processes and equipment to generate interest in persistence with pursuing completion.
3.21 How often does the program advisory committee meet?	The advisory committee meets twice per year. Once in the Spring semester and once in the Fall semester. We share our advisory committee with Wilbur Wright College who also is in our CCC district and offers a CNC BC and AC program. We have had approximate 40 attendees at our recent advisory board meetings.
3.22 How satisfied are employers in the preparation of the program's graduates?	We will be conducting employer surveys in the fall of 2019 to quantitatively determine employer satisfaction. Feedback has been good and interest high in pursuing program graduates to local firms that perform these manufacturing functions.
3.23 How is employer satisfaction information collected?	We will be surveying employers in the Fall 2019 semester and will pursue this survey electronically and in person at the fall advisory board meeting. The plan is to take this survey once per year going forward.
3.24 Did the review of program quality result in any actions or modifications? Please explain.	Review of the program resulted in the construction and equipping of the new MTEC facility. Also, we are revising and expanding course offerings to reflect current industry demands and inputs with the intention of being aspirational and allowing students to pursue careers in engineering and advanced manufacturing beyond their initial interests due to the nature of the new environment and diverse technologies offered.

DATA ANALYSIS FOR CTE PROGRAM REVIEW

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5 year longitudinal data available.

CTE PROGRAM	*WELDING*				
CIP CODE	*000765*				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*163*	*181*	*137*	*127*	*131*
NUMBER OF COMPLETERS	*5*	*17*	*11*	*7*	*1*
OTHER (PLEASE IDENTIFY)	*201*	*256*	*163*	*130*	*203*
How does the data support the program goals? Elaborate.	The main goal of this CTE program is to prepare students for employment in their field of study. The program has seen declining enrollment and efforts over the past 3 years to improve the program have been significant and now having been recently implemented allow renewed effort and focus on				

	recruiting and enrollment to attract students to the exciting world of advanced manufacturing with our new facilities, equipment and planned curriculum. The plan is to reverse the declining enrollment and provide a new source of competitive advantage for advanced manufacturing and engineering in the region through this newly and substantially revised program.
What disaggregated data was reviewed?	Demographic data was reviewed against the population of the college and the district.
Were there gaps in the data? Please explain.	There were no gaps in the data observed.
What is the college doing to overcome any identifiable gaps?	The college is working on an equity plan to ensure all students have supports needed to meet their goals. Tutoring programs, early alert systems, instructor awareness, and additional creative supports such as a food pantry have been provided and are continuing to be developed.
Are the students served in this program representative of the total student population? Please explain.	<table><tr><td></td><td>FY 18 - 19</td><td></td><td></td></tr><tr><td></td><td>African American</td><td>Hispanic</td><td>White</td></tr><tr><td>Daley College</td><td>20.2%</td><td>60.8%</td><td>16.1%</td></tr><tr><td>Advanced Manufacturing</td><td>38.0%</td><td>50.0%</td><td>10.0%</td></tr><tr><td>CCC District</td><td>31.1%</td><td>44.5%</td><td>14.4%</td></tr><tr><td>Chicago</td><td>32.4%</td><td>28.9%</td><td>31.7%</td></tr></table>
Are the students served in this program representative of the district population? Please explain.	See the data above. The Advanced Manufacturing program has a higher percentage African American than the city, district and college. Also the Advanced Manufacturing program has a higher percentage of Hispanic students than the district and the city. Richard J. Daley is a Hispanic serving institution which reflects the surrounding community.
REVIEW RESULTS	
Action	☒ Continued with Minor Improvements ☐ Significantly Modified ☐ Placed on Inactive Status ☐Discontinued/Eliminated ☐ Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	There is great student interest in this CTE pathway and there is great employer interest in this pathway. We have a brand new facility and extensive new equipment to perform great training activities for our students, community members and employers. We have seen good initial results in our progress on improving the program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	1. *IMPLEMENT EMPLOYER SATISFACTION SURVEY* 2. *IMPLEMENT GRADUATE SATISFACTION SURVEY* 3. *COMPLETE COURSE REVISIONS UNDERWAY* 4. *CONTINUE RENEWED RECRUITMENT ACTIVITIES*

Remedial English Language Arts (Reading and Communication Skills)	
COLLEGE NAME:	Richard J. Daley College
FISCAL YEAR IN REVIEW:	2019
REVIEW SUMMARY	
Program Objectives What are the objectives or goals of the program/discipline?	• Recognize the inherent connection between reading and writing. • Critically read a variety of texts and use these readings to inform their writing. • Build confidence as successful college-level readers able to utilize a number of strategies that help them comprehend, interpret, analyze, and evaluate challenging college texts. • Compose well-developed essays with a clear thesis statement supported with relevant, specific evidence while employing a recursive revision process. • Acquire meta-cognitive (self-reflective) skills to recognize individual strengths and challenges in reading and writing. • Construct coherent and grammatically correct prose in edited Standard American English. • Negotiate a variety of student support services and technologies. • Recognize how learning outcomes like critical thinking enrich daily life and empower students outside of the classroom.
To what extent are these objectives or goals being achieved?	Due to the many changes in the remedial English program at Daley College, it is difficult to fully determine the extent of objectives and goals being achieved, however, trends indicate that course success rate is remaining flat, yet success in English 101 is improving and student retained an moving to higher level gen ed classes is successful. This trend indicates objectives are being achieved.

How does this program contribute to other fields and the mission of the college?	As an open-access institution committed to serving a diverse, urban community, it is imperative that all students are not only accurately placed with the use of multiple measures into appropriate classes, but also get the resources and classes that they need to be successful in college. At CCC, English faculty have designed the RTW, Read to Write, an English placement exam that incorporates reading, writing, self-placement, and personal questions and that has been aligned with the CCC English course sequence. (The course sequence currently includes: FSL, ARC, English 101/097, English 101, and English 102.) Students who place below college-level English in this sequence, therefore, need a course(s) where they can improve their reading and writing skills, which are necessary to achieve college-level proficiency and academic literacy in order to start the program of their choosing and to reach their long-term academic or career goals. ARC, our revamped developmental English program, and FSL, our pre-credit program, provide this foundation and facilitate a successful transition to college-level courses. Without these DE courses that meet students' needs, many of our first-generation, minority, at-risk students would be placed into courses for which they are unprepared and would be set up for failure. This would not support the mission of a true open-access public institution
Prior Review Update Describe any quality improvements or modifications made since the last review period.	Daley College's remedial education program was previously called Developmental Education Initiative (DEI) that was intended to assist students needing remediation to prepare for college-level coursework by requiring mandatory supplemental instruction and socialization. The reading and communication skills courses in DEI were English 098, English 100, Reading 099, and Reading 125. This program was discontinued in the 2017-2018 academic year with a new district English course sequence.

REVIEW ANALYSIS	
Complete the following fields and provide concise information where applicable. Please do not insert data sets but summarize the data to completely answer the questions. Review will be sent back if any of the below fields are left empty or inadequate information is provided.	
Indicator 1: Need	**Response**

1.1 Detail how the offerings are sufficient and aligned to meet the needs of students across all programs served and supportive academic programs.	Daley Students, particularly those who place into DE, are primarily first-generation, minority, and low-income. As an open-access public institution, we are responsible for meeting our students where they are and providing them with the resources and programs that they need to meet their academic goals. This means having a course sequence that leads to and supports access and success in English 101, a core course for all Pathways. As about 1/3 of our students test directly into English 101, we need appropriate DE programming for the other half who are not yet college ready. Research shows that the co-requisite model primarily meets the needs of those students who test at the high end of the placement band and who are not minorities; therefore, it is imperative that we offer robust, differentiated programs for those who would otherwise be left behind if all DE courses were replaced with a complete co-requisite model. We are actively doing this with our revamped DE program. With our new course ARC we offer an accelerated, integrated Reading and English, one-term, six-credit hour DE course for those students who need it. ARC students are retained and transitioning into English 101 at significantly higher rates than our previous DE program. They are also performing well, which bodes well for furthered long-term academic success and college completion. FSL students are retained and transitioning into English 96 (ARC) at significantly higher rates than our previous DE program, and ARC instructors are mentioning that they arrive better prepared than students who place in directly. In most cases, they are also performing well, which bodes well for further long-term academic success and college completion. However, It is premature to draw conclusions based on data since the course is so new.
INDICATOR 2: COST EFFECTIVENESS	***RESPONSE***

2.1 What are the costs associated with this program?	Beyond staffing the courses with faculty, the additional funds necessary for the FSL and ARC Program concern the on-going professional development (PD) and use of faculty cohorts. Currently, more than 70% of ARTC and 100% of FSL sections are typically taught by adjunct faculty. The required PD and joint ARC/FSL cohorts are essential to the maintenance of aligned standards within the English Department and to the integrity of the program. The average budget has been roughly $7500/academic year for FS and $9000/academic year.
2.2 How is the college paying for this program and its costs (e.g. grants, etc.)?	The college pays for this program out of operational funds.
2.3 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? If so, please elaborate.	N/A
2.4 Based upon this review, what steps are being taken to offer curricula more cost-effectively?	With the revamped developmental program, the number of DE courses taught was reduced from four to one, and the number of DE sections offered has been halved – cutting the cost for faculty. FS is currently taught entirely by part time faculty (70% of ARC courses are taught by adjunct faculty), although full time faculty can teach it for load, and the new course requires a master's degree, whereas the old course required only a BA. The course is also limited to two semesters, which has made it cost effective. In addition, FSL shares resources with the ARC library, allowing instructors to provide level-appropriate texts through library loan, thereby saving students out-of-pocket costs.
2.5 Are there needs for additional resources? If so, what are they?	N/A
INDICATOR 3: QUALITY	***RESPONSE***
3.1 How is the college working with high schools to reduce remedial needs?	Daley College has a robust Early College Program that works to integrate students into college credit classes through dual credit or dual enrollment courses. The College has fostered and continues to foster great relationships with Chicago Public Schools and Chicago Catholic Schools to garner interest and support.

3.2 Are there any alternative delivery methods of this program? (online, flexible-scheduling, team-teaching, accelerated, etc.)?	Remedial courses are offered in 8, 12, 14, and 16 week formats. Daley College only offers remedial courses in traditional classroom settings.
3.3 What innovation has been implemented or brought to this program?	N/A
3.4 To what extent is the program integrated with other instructional programs and services?	Student supports are integrated into the FSL and ARC program. Embedded advising is recommended for every class (though rarely available), and advisors visit each FSL class three times per term (Twice a term for ARC) to aid in the navigation of the college's supports, registration, course requirements, Pathways, and transfer options. Instructors are able to assign regular appointments to the Writing Center for additional targeted support. Additionally, instructors are able to request peer embedded tutors for their classes to facilitate more one-on-one assistance, and they are able to assign regular appointments to the Writing Center for additional targeted support The class format (meeting 6 hours/week) and smaller class size (now 20) also make individual student conferencing a viable support option.
3.5 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?	For the first time in CCC history, the English Discipline agreed to a common English course sequence, allowing students to move seamlessly from one college to another if necessary. Additionally, the FSL and ARC program now has dedicated FSL and ARC Coordinators at each Chicago City College, who meet on a regular basis to collaborate on training, PD, materials, assessments, best practices and issues. This level of collaboration or "partnership" within a large urban institution is unusual and allows for an on-going dialogue that fosters constant reflection and growth, both within individual departments and across the district.

3.6 How well are completers of remedial/developmental courses doing in related college-level courses?	Based on student grades and student satisfaction surveys of post-remedial courses, the students who move on from remedial courses are averaging a grade of C or better in their college-level courses. The remedial program and academic support services associated with the program empower the student with confidence and the knowledge to be successful in all other classes. The academic supports that assist the students continue to be utilized by the same students in their other courses.
3.7 What is the college doing to develop and implement co-requisite or pathway models to ensure students placing into development education finish the sequence within one academic year?	A co-requisite course is part of the English Composition Course Sequence (English 101/097) across the district. Two sections are currently being piloted during the spring 2019 semester and five sections are on the fall 2019 schedule.
3.8 Provide a description of the remedial/developmental sequence. Colleges may attach a graphic representation.	Students may place into FSL or FSL/ESL via the Read to Write (R2W) placement tool used by CCC. At the end of the term, based on a department exit exam and a portfolio of work, students may be retained or advanced to English 96 (ARC). In rare instances, students may be recommended to "jump" to English 101/97. Anecdotally, few students survive a jump from FSL directly into English 101, so we do not recommend it. That said, if the cohort believes the student is capable of doing the work of English 101, and the instructor can vouch that the student has demonstrated the requisite study habits, a student would not be held back. A student who begins in FSL would most likely spend at least one year (two semesters) at the developmental level, and perhaps longer.

3.9 What professional development or training is offered to instructors and/or staff to ensure quality programming?	PD is a key component of the ARC Program. In accordance with our IAI approval, all faculty must participate in an initial 10-hour training that covers guiding principles, best practices, pedagogy for integrated reading and writing instruction, and curriculum/materials review. Additionally, all faculty take part in 7 hours of various on-going PD sessions including a cohort that meets 2 to 3 times per semester to share materials and concerns and to evaluate final FSL (and ARC) portfolios.

LIST ANY BARRIERS ENCOUNTERED WHILE IMPLEMENTING THE PROGRAM.

While implementing FSL there have been several explicit barriers. For one, tutors in the writing center are sometimes caught off-guard by the high degree of need of some FSL students. Likewise, FSL students have need of reading support and we have few trained tutors who can provide instructional support that would most benefit our under-prepared students. FSL students need access to qualified Reading Specialists, reading diagnostics, and reading instruction.

A second barrier has been the lack of institutional support for FSL. Because FSL is new and not previously housed under English, yet FSL is a course that begins a sequence of English courses, it is often forgotten and it is unclear whose budget line the course offering is covered by. Additionally, and for whatever reason, FSL instructors are frequently left out of college-wide or department announcements and thus are excluded from College and department activities that would benefit them and their students.

Another big challenge we must address is some kind of redirection for students who have taken and failed FSL – perhaps once and especially twice. How can we best support these students and provide them meaningful alternative opportunities? This is a tough question indeed, and one that frequently gets postponed, leaving students to spin their wheels or drop out. The new design states that FSL can only be repeated once, or a second time at the discretion of the FSL Coordinator and in conjunction with input from the instructor. But where do students go if they cannot proceed into coursework that requires English 101 eligibility? We need vocational alternatives.

DATA ANALYSIS FOR ENGLISH LANGUAGE ARTS

Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

COURSE TITLE	*ENGLISH 100*				
COURSE DESCRIPTION	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.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*485*	*473*	*422*	*404*	*NOT OFFERED*

Credit Hours Produced	*1518*	*1461*	*1317*	*1257*	
Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students	*64%*	*66%*	*64%*	*62%*	

Review Results	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	Year 4 was the last time our previous remedial program was offered. It has now been combined to ARC 96.
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	No longer relevant.

Data Analysis for English Language Arts

Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

Course Title	*Foundational Studies Writing 93*				
Course Description	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.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*65*	*42*	*39*	*21*	*57*
Credit Hours Produced	*201*	*132*	*120*	*63*	*402*
Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students	*64%*	*50%*	*65%*	*57%*	*48%*

Review Results	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	Year 5 is the first year that FS Writing encompassed both writing and reading in the newly phased foundational studies program. Data shows a slight decrease in course success rate which could be due to new curriculum and need for more faculty training.

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Evaluate faculty and student needs in academic years 19/20 and provide more PD for faculty delivering FS course.

DATA ANALYSIS FOR ENGLISH LANGUAGE ARTS Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	*ENGLISH 98*				
COURSE DESCRIPTION	Elements of reading, writing and speaking basic English. Writing assignments, as appropriate to the discipline, the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*387*	*319*	*267*	*229*	*NOT OFFERED*
CREDIT HOURS PRODUCED	*1218*	*990*	*843*	*726*	
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS	*61%*	*61%*	*59%*	*54%*	

REVIEW RESULTS	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	This remedial English class was discontinued due to the revision of remedial English in the district. This course was replaced with ARC, or English 96
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	N/A- course no longer offered.

DATA ANALYSIS FOR ENGLISH LANGUAGE ARTS Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.					
COURSE TITLE	*ENGLISH 97*				
COURSE DESCRIPTION	This course provides additional support to English 101 students, emphasizing critical thinking, reading, and writing appropriate to academic literacy. Writing assignments, as appropriate to the discipline, are part of the course.				
	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*NOT OFFERED*	*NOT OFFERED*	*NOT OFFERED*	*NOT OFFERED*	*239*

Credit Hours Produced					*732*
Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students					*63%*

Review Results	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	This is a pilot phase and findings are TBD.
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Will continue to monitor results of English 97.

Data Analysis for English Language Arts

Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

Course Title	*Foundational Studies Reading*				
Course Description	Foundational Studies – Reading is designed to help students increase reading skills for use in college level course content areas. Responses to reading in the form of short answer and extended response as appropriate to the discipline are part of the course.				
	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
Number of Students Enrolled	*78*	*88*	*62*	*20*	*Not Offered*
Credit Hours Produced	*240*	*267*	*201*	*60*	
Success Rate (% C or better) at the end of the course, Excluding Withdrawals and Audit students	*60%*	*70%*	*46%*	*90%*	

Review Results	
Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	**This course is no longer offered.**

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	**N/A**

DATA ANALYSIS FOR ENGLISH LANGUAGE ARTS

Please complete for each course reviewed as part of the Remedial English Language Arts, Cross-Disciplinary Review. Provide the most recent 5 year longitudinal data available.

COURSE TITLE	*ENGLISH 96 – ALIGNED READING AND COMPOSITION*
COURSE DESCRIPTION	ARC is an integrated reading and writing course designed to increase students' critical thinking, reading, and writing abilities and to promote their academic literacy for long-term success. To meet these ends, this course provides a structured, rigorous learning environment that nurtures student engagement through a shared, sustained classroom experience, and it fosters collaboration in a curriculum that respects students' individuality and humanity and that prepares them to meet college-level expectations. It also encourages students to invest in a network of support services and resources to enhance long-term academic and professional success. There will be extensive reading and analysis of college-level texts, frequent essay-writing, relevant discussion, and collaborative work. The course immediately precedes the General Education Communication sequence of English 101 and 102. Writing assignments, as appropriate to the discipline, are part of the course.

	YEAR 1	*YEAR 2*	*YEAR 3*	*YEAR 4*	*YEAR 5*
NUMBER OF STUDENTS ENROLLED	*N/A*	*N/A*	*N/A*	*49*	*394*
CREDIT HOURS PRODUCED	*N/A*	*N/A*	*N/A*	*294*	*2520*
SUCCESS RATE (% C OR BETTER) AT THE END OF THE COURSE, EXCLUDING WITHDRAWALS AND AUDIT STUDENTS				*57%*	*55%*

REVIEW RESULTS

Rationale Provide a brief summary of the review findings and a rationale for any future modifications.	English 96 was created beginning Fall 2017, replacing the previous developmental education courses including English 98, 99, 100. It is difficult to draw any sound statistical conclusions as during the period of ARC's implementation there were other major changes both in the department and administratively. Upon next program review, clean data and sound analysis will determine findings and any need for modifications.

Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Daley will continue to collect both qualitative and quantitative data for analysis in order to better implement the ARC program. Currently, data is being carefully watched and collected to determine the strengths and needs for improvement of the ARC program.

Student and Academic Support Services

The ICCB Program Review requires each college to submit a statement of the review of student and academic support services that the college completed during the year. A completed and comprehensive review will likely be between **4 – 8 pages in length**.

COLLEGE NAME:	Richard J. Daley College
FISCAL YEAR IN REVIEW:	2019
REVIEW AREA:	*FINANCIAL AID*

Program Summary Please provide a brief summary of the function of the program.	The Financial Aid Office at Richard J. Daley College provides a comprehensive range of student financial aid services. Financial Aid staff provide access to financial resources to students and their families and the cost of education, thus eliminating the economic barrier to obtaining a degree. Daley's staff serves the needs of students seeking to use Financial Aid. Daley College participates in the Title IV Federal Financial Aid program (Federal Pell Grant, Federal Work Study, Federal Supplemental Educational Opportunity Grants and Federal Direct Loans) and state issued grants (Monetary Award Program). Students are encouraged to complete the FAFSA application as soon as it becomes available online, and turn in any additional documentation directly to the Financial Aid Office at their home campus. Financial Aid Advisors perform on-the-spot verification, and inform students if any corrections will be made to their application. The Financial Aid office offers workshops to assist students through various processes. Students can attend FAFSA Friday Workshops for help to complete their FAFSA. Financial Aid Offices also host Satisfactory Academic Progress (SAP) Workshops to inform students of the SAP process, appeal basics, and how an appeal can be submitted in order to regain eligibility. As of the 2018-19 academic year, City Colleges of Chicago Financial Aid Offices operate on PeopleSoft CS9, an Oracle software product. Transitioning to CS9 has allowed for a much more accurate systematic approach to processing students' Financial Aid. **<u>Mission Statement</u>** The mission of the Financial Aid Office is to increase opportunities for student access to higher education by helping students and their families seek, attain,

and make the best use of all available financial resources.

Through financial literacy and guidance from the staff of the Financial Aid Office, we support incoming students in making a successful transition to college. Moreover, we contribute to the schools retention efforts by providing on-going assistance to our continuing students to help make their academic endeavors attainable while complying with Federal, State, and Institutional regulations and guidelines.

Vision Statement:

The Financial Aid Office will be a beacon of change by providing a faster, friendlier, and easier experience while we strive to create a culture of care through communicating an ongoing commitment to our students.

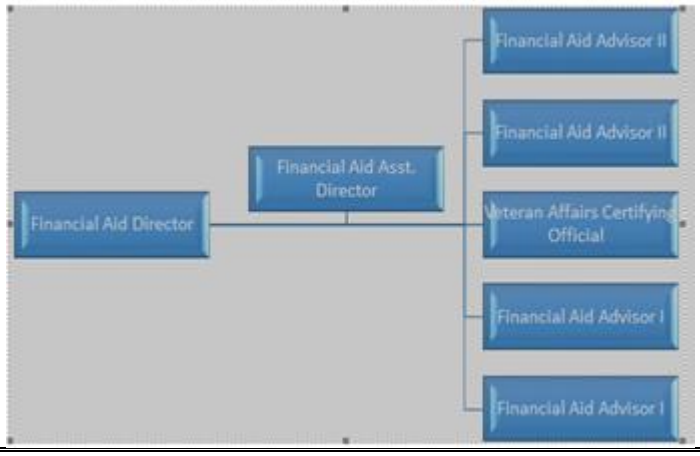
Operational Outcomes

1. Provide courteous and efficient service and support to students, parents, faculty and other administrative staff to foster institutional effectiveness.
2. Assist students in meeting their educational goals through effective utilization of scholarships and all other available financial assistance
3. Encourage and promote valuable work experiences through the Federal Work Study program that will be beneficial to the student, school, and the community.
4. Advance the schools recruitment and retention efforts through participation in a variety of service activities involving students, families, faculty, staff, and members of the community.

Co-Curricular Student Learning Outcomes (Co-SLO)

1. Through multiple forms of communication with the Financial Aid Office, students and their families will understand that financial aid provides access and resources for students to attend college.
2. Through information provided by the Financial Aid Office along with various printed, electronic and social media communications, students and families will understand the types, sources and amounts of financial aid available, the applications required and deadline dates
3. By the end of the first semester, students will understand their award letter and will be able to calculate the amount of tuition and fees versus the amount of financial aid received.
4. Through participation in the Federal Work Study program students will develop job skills such as regular attendance, advance notification of absence, appropriate dress attire, punctuality, accountability and valuable professional work experience.
5. By the time, a student leaves the institution; the student will understand and accept their responsibility as a student loan borrower to repay student loan debt.

Organizational Chart



	In 2017-18, 66% of Daley Students received Title V funding (NCES). Title VI Participation Federal Pell Grant- $6,710,284 William D. Ford Federal Direct Loan Program (Subsidized)- $255,673 Direct Loan (unsubsidized)- $104,521 Federal Supplemental Educational Opportunity Grant - $131,562 Federal Work Study- $82,358 Default Rate- Direct Loan 2015: 22% 2014: 14.6% 2013: 9.8%
Prior Review Update Describe any quality improvements or modifications made since the last review period.	In the last five years, several improvements have been made including: • Implementing PeopleSoft CS9 software for financial aid • Auto Packaging Federal Student loans discontinued • Implemented a student refund partner which expanded the student option to receive financial aid refunds through direct deposit, debit card, or paper check. • Electronic financial aid document submission
What are the identified or potential weaknesses of the program?	Potential weaknesses of Daley's financial aid program include: • Lengthy verification process- students need more access to resources such as computers and scanners to improve the process. • Course withdrawal rates and poor academic performance which results in student losing access to financial aid. • Default rates- students often accept loans without determining if they are needed or considering alternatives. In-person loan counseling is needed to assist students in making informed decisions. • Staffing changes

What are the program's strengths?	The program strengths include: • Increased number of SAP and FAFSA- hosting events and workshops promote early completion of financial aid requirements. • CS9/PeopleSoft improvements • Checklist completion through linked email messaging and on-demand financial aid advising so students can submit verification documents in person, and receive verification on the spot.
Rationale Detail all major findings resulting from the current review.	Overall, the department found that students would benefit from early intervention and SAP workshops, and that students continue to incur loan dept that is unnecessary. The US Department of Education conducted a program review at Richard J. Daley College (Daley) on December 10, 2018. The focus of the review was to determine Daley's compliance with specific regulations pertaining to Federal Student Aid under Title IV, and Daley's compliance with written arrangements to provide educational programs and eligible programs. The findings indicate that Daley's consortium agreement is adequate, that the PRR electronic application was no longer needed for certain consortium programs. Further, certain enrollment reporting error in the NSLDS has been corrected. Daley was instructed to cease awarding title IV funding to consortium programs, and to return liability funds determined through the program review from 2012-2018.
Intended Action Steps Please detail action steps to be completed in the future based on this review with a timeline and/or anticipated dates.	Action Items: 1. Improve verification process by partnering with Pro-Ed to assist with verification process. 2. Decrease the number of students who lose financial aid eligibility due to failure to meet SAP. a. Provide education to students through ECMC/i-grad modules to promote financial literacy b. Partner with faculty and academic advisors to provide SAP counseling with early alert.