

## Astronomy 201 Assessment Report – Fall 2014

Coordinator: Justin Lowry

### Assessment:

The exit exam was given to 167 students across six sections of Astronomy 201 (taught by three different instructors). Prior to taking the exam, students were informed that passing required a score of 50% (25 of 50 questions correctly answered).

### Results:

Average score: 70.6%

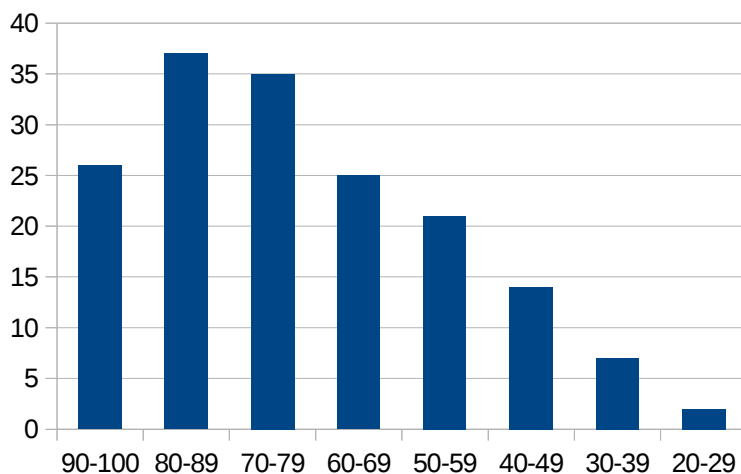
Range of scores: 22% – 100%

Number of students who passed: 144 (86.2%)

Number of students who failed: 23 (13.8%)

Histogram showing number of students who scored in different percent ranges:

Number of students per score range (All classes)



### Conclusions:

The percentage of students who failed doubled from the previous semester. Also, the average score dropped by about three percentage points from Spring 2014. The exit exam given this semester is largely similar to the previous semester's exam. Most of the decline can be seen coming from one class.

## Physical Science 101/111 Assessment Report – Fall 2014

Coordinator: Justin Lowry

### Assessment:

The exit exam was given to 210 students across nine sections of Physical Science 101/111 (taught by six different instructors). Prior to taking the exam, students were informed that passing required a score of 53% (16 of 30 questions correctly answered).

### Results:

Average score: 74.1%

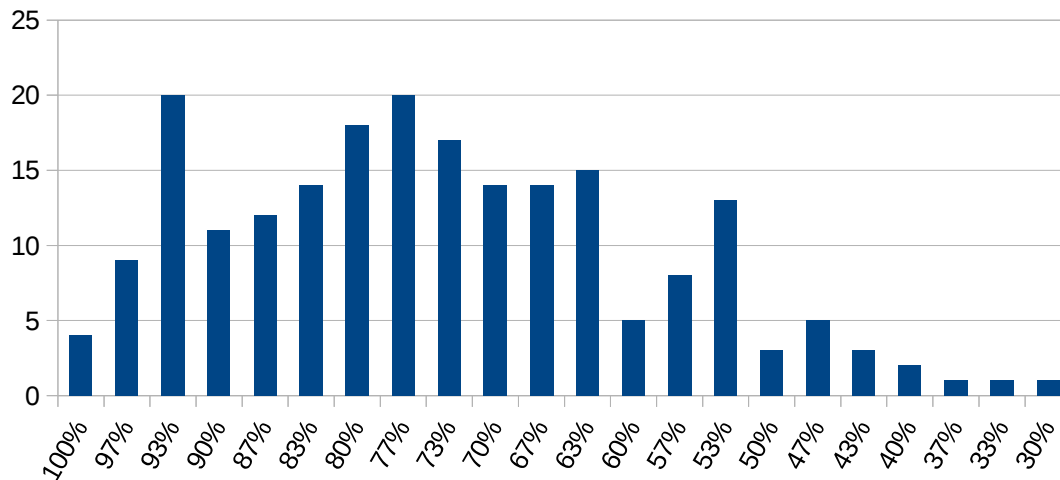
Range of scores: 30% – 100%

Number of students who passed: 194 (92.4%)

Number of students who failed: 16 (7.6%)

Histogram showing number of students who scored in different percent ranges:

Number of students per score (All classes)



### Conclusions:

The average score and the percentage of students passing are consistent with previous semesters. We are still working to improve the exit exam itself concerning its relation to the course SLOs.

# Physical Science Department

## Student Learning Assessment

Course: Chemistry 201 (General Chemistry I)

Semester: Spring 2015

Course Coordinator: Dr. Maria Valentino

Number of Students: 220

### Exit Exam Analysis

#### Assessment Instrument Description

The First Term General Chemistry Exam (2009 version) consisted of 70 multiple-choice questions prepared by the American Chemical Society (ACS). The majority (about 60/70) of the ACS examination questions are linked to the Student Learning Outcomes for the course. The test was timed, where students were allowed 120 minutes, set by the American Chemical Society. The Physical Science Department established that students must have correctly answered a minimum of 27 of the 70 questions (i.e. 39%) to pass the exam, as well as the course. If a student failed the exit exam but was otherwise passing the class (D or better), the student was eligible to take a multiple-choice departmental appeals exam. Any student that failed the appeals exam received a failing grade in Chemistry 201. The national average was provided by the ACS and is based on the scores of 744 students in 9 schools.

#### Overview of Results

Range of Scores Possible: 0 – 70 (0% - 100%)

Range of Scores Achieved: 8 – 69 (11% - 99%)

Average Score: 34/70 (48%)

Number of students passing (27/70 or greater): 161/220 (73.2%)

Number of students failing (less than 27/70): 59/220 (26.8%)

The national average score for this test: 40/70 (57%)

Number of students achieving the National Average score and above: 62/220 (28.2%)

Number of students not achieving the National Average Score: 158/220 (71.8%)

Analysis of Exit Exam and ACS data for Chemistry 201

Semester	Number of students	Exit Exam average (%) Pass = 43%	% passing	ACS average (%) Nat'l average = 57%	% of students above national average
Spring 2010	208	56	80.8	49	27
Summer 2010	54	68	92.6	58	54
Fall 2010	186	58	79.6	51	32
Spring 2011	199	61	87.9	53	41
Summer 2011	55	62	87.3	57	55
Fall 2011	221	53	69.7	48	29
Spring 2012	210	55	73.8	46	25
Summer 2012	76	67	94.7	55	47
Fall 2012	211	63	86.7	55	47
	Number of students	Exam average (%) Pass = 27/70 (39%)	% passing		% of students above national average of 57%
Spring 2013	213	50	76.1%		30
Summer 2013	64	51	87.5		37.5
Fall 2013	263	53	84.4		37.3
Spring 2014	224	48	69.2		28.6
Summer 2014	67	56	94.0		44.8
Fall 2014	217	51	79.7		32.3
Spring 2015	220	48	73.2		28.2

# Physical Science Department

## Student Learning Assessment

Course: Chemistry 201 (General Chemistry I)

Semester: Summer 2015

Course Coordinator: Dr. Maria Valentino

Number of Students: 64

### Exit Exam Analysis

#### Assessment Instrument Description

The First Term General Chemistry Exam (2009 version) consisted of 70 multiple-choice questions prepared by the American Chemical Society (ACS). The majority (about 60/70) of the ACS examination questions are linked to the Student Learning Outcomes for the course. The test was timed, where students were allowed 120 minutes, set by the American Chemical Society. The Physical Science Department established that students must have correctly answered a minimum of 27 of the 70 questions (i.e. 39%) to pass the exam, as well as the course. If a student failed the exit exam but was otherwise passing the class (D or better), the student was eligible to take a multiple-choice departmental appeals exam. Any student that failed the appeals exam received a failing grade in Chemistry 201. The national average was provided by the ACS and is based on the scores of 744 students in 9 schools.

#### Overview of Results

Range of Scores Possible: 0 – 70 (0% - 100%)  
Range of Scores Achieved: 15 – 58 (21% - 83%)  
Average Score: 36/70 (52%)

Number of students passing (27/70 or greater): 53/64 (82.8%)  
Number of students failing (less than 27/70): 11/64 (17.2%)

The national average score for this test: 40/70 (57%)  
Number of students achieving the National Average score and above: 21/64 (32.8%)  
Number of students not achieving the National Average Score: 43/64 (67.2%)

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