

## GENERAL EDUCATION OUTCOMES ASSESSMENT PLAN - MATH

### COURSE #1 - Math 1220: College Algebra

#### Student Learning Outcome 1:

Use function notation; perform function arithmetic, including composition; find inverse functions.

#### State Essential Skills Linked to SLO 1:

Communication  
Quantitative Reasoning

#### Means of Assessment for SLO 1:

Students in the course will achieve a grade of 80% or higher on selected problems on quizzes and cumulative final exam.

#### Summary of Data

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

#### Student Learning Outcome 2:

Identify functions and their transformations given in algebraic, graphical, numerical, and verbal representations, and explain the connections between these representations.

#### State Essential Skills Linked to SLO 2:

Communication  
Critical Thinking  
Quantitative Reasoning

#### Means of Assessment for SLO 2:

Students in the course will achieve a grade of 80% or higher on selected problems on quizzes and cumulative final exam.

#### Summary of Data

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 3:**

Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.

**State Essential Skills Linked to SLO 3:**

Communication

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 3:**

Students in the course will achieve a grade of 80% or higher on selected problems on quizzes and cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 4:**

Solve equations algebraically to answer questions about graphs, and use graphs to estimate solutions to equations.

**State Essential Skills Linked to SLO 4:**

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 4:**

Students in the course will achieve a grade of 80% or higher on selected problems on a cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 5:**

Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.

**State Essential Skills Linked to SLO 5:**

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 5:**

Students in the course will achieve a grade of 80% or higher on selected problems on quizzes and cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 6:**

Communicate mathematical information using proper notation and verbal explanations.

**State Essential Skills Linked to SLO 6:**

Communication

**Means of Assessment for SLO 6:**

Students will achieve a grade of 80% or higher on a short paper, which they will present to the class, explaining a connection between College Algebra concepts and their major or minor.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**COURSE #2 - Math 1350: Introduction to Statistics****Student Learning Outcome 1:**

Explain the general concepts of statistics.

**State Essential Skills Linked to SLO 1:**

Communication

**Means of Assessment for SLO 1:**

Students will achieve a grade of 80% or higher on a report which they will write and present to the class explaining the general concepts of statistics. This report will focus on real world examples.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 2:**

Presentation and description of data.

**State Essential Skills Linked to SLO 2:**

Communication  
Critical Thinking

**Means of Assessment for SLO 2:**

Students in the course will achieve a grade of 80% or higher on several class assignments and an exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 3:**

Summarize data using measures of central tendency and variation.

**State Essential Skills Linked to SLO 3:**

Communication  
Quantitative Reasoning

**Means of Assessment for SLO 3:**

Students in the course will achieve a grade of 80% or higher on selected problems on an exam and cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 4:**

Present the concepts of probability.

**State Essential Skills Linked to SLO 4:**

Communication

Critical Thinking

**Means of Assessment for SLO 4:**

Students in the course will achieve a grade of 80% or higher on several class assignments and an exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 5:**

Compute point and interval estimates.

**State Essential Skills Linked to SLO 5:**

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 5:**

Students in the course will achieve a grade of 80% or higher on selected problems on a cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 6:**

Perform hypothesis tests.

**State Essential Skills Linked to SLO 6:**

Communication

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 6:**

Students in the course will achieve a grade of 80% or higher on selected problems on a cumulative final exam.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	

**Student Learning Outcome 7:**

Analyze data using regression and correlation.

**State Essential Skills Linked to SLO 7:**

Critical Thinking

Quantitative Reasoning

**Means of Assessment for SLO 7:**

Students in the course will achieve a grade of 80% or higher on a class assignment.

**Summary of Data**

Number of Students Meeting Criterion:		Number of Students Not Meeting Criterion:	
Total Number of Students Assessed:		Percent of Students Meeting Criterion:	