



MATH 95 - Foundations of Algebra for Math Intensive Fields

Course Outline

Approval Date: 12/13/2018

Effective Date: 08/12/2019

SECTION A

Unique ID Number CCC000601130

Discipline(s) Mathematics

Division Mathematics

Subject Area Mathematics

Subject Code MATH

Course Number 95

Course Title Foundations of Algebra for Math Intensive Fields

TOP Code/SAM Code 1701.00 - Mathematics, General / E - Non-Occupational

Rationale for adding this course to the curriculum Math 95 is a part of the re-write for mathematics curriculum to be compliant with AB705 and chancellor's office directives. This course provides the same content as Math 82, the co-req to College Algebra. It is being offered for those students who would like a full semester to build their algebra foundation.

Units 5

Cross List N/A

Typical Course Weeks 18

Total Instructional Hours

Contact Hours

Lecture 72.00

Lab 0.00

Activity 36.00

Work Experience 0.00

Outside of Class Hours 162.00

Total Contact Hours 108

Total Student Hours 270

Open Entry/Open Exit No

- e. Solving radical equations
- f. Radical functions (simple graphs and domain restrictions)
- g. Complex numbers (brief, but include conjugates)
- G. Quadratics
 - a. Solving by factoring, square root property, completing the square and quadratic formula
 - b. Quadratic functions and graphs
 - c. Finding maximums and/or minimums
- H. Functions
 - a. Function notation
 - b. Analyzing the graphs of functions
 - c. Composition of functions
 - d. Evaluating piecewise defined functions from equation and graph
 - e. Domain and range
- I. Logarithms and exponentials
 - a. Inverse functions (including domain and range)
 - b. Exponential functions and their graphs (including domain and range)
 - c. Logarithmic functions and their graphs (including domain and range)
 - d. Properties of logarithms
 - e. Solving logarithmic and exponential equations
 - f. Applications including growth, decay and interest
- J. Equations of circles and their graphs (centered at origin)
- K. Study skills / affective domain (this should be integrated into the class, not taught as a separate section)
 - a. Growth mindset and grit
 - b. How to study for a math class
 - c. Test taking strategies
 - d. Campus resources
 - e.

4. Methods of Instruction:

Activity:

Discussion:

Lecture:

Other: Online adaptation will include video instruction, discussion boards, and an online homework platform.

5. Methods of Evaluation: Describe the general types of evaluations for this course and provide at least two, specific examples.

Typical classroom assessment techniques

Exams/Tests --

Quizzes --

Home Work --

Final Exam --

Mid Term --

Additional assessment information:

In face to face classes, it is recommended that one hour a week in the Math Success Center be assigned as a homework assignment worth 3 - 5% of the semester grade.

