

Course Outline

COURSE: GUID 565B **DIVISION:** 30 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2010 Inactive Course

SHORT TITLE: DIR STUDY/LAB ALG

LONG TITLE: Directed Study Lab in Intermediate Algebra - 2nd half

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
1	18	Lecture:	0	0
		Lab:	3	54
		Other:	0	0
		Total:	3	54

COURSE DESCRIPTION:

This course is designed for students who have demonstrated difficulty mastering intermediate algebra and who are eligible to receive Learning Disability Services. Course content parallels Mathematics 233B. Material is presented in a concrete, multi-sensory manner, and the lab allows opportunity for immediate practice, questions, repetition, and review. This is a pass/no pass course. **COREQUISITE:** Concurrent enrollment in MATH 233B is required. **ADVISORY:** Completion of GUID 557 or demonstrated deficit in mathematics. Recommended for students with verified learning disability.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: C - Credit - Degree Non Applicable

GRADING MODES

P - Pass/No Pass

REPEATABILITY: R - Course may be repeated

Maximum of 99 times, 100 credit hours

SCHEDULE TYPES:

04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Analyze a variety of problems involving contemporary applications of linear, quadratic, exponential, logarithmic, and rational functions,

and determine and implement an appropriate method of solution for these problems.

ILO: 2, 1, 4

Measure: Quizzes, skill demonstration, class discussion, homework review

2. Graph quadratic, logarithmic, and exponential functions, and identify and describe attributes of the graph such as x- and y-intercepts, domain, range, max and min.

ILO: 7, 2, 1

Measure: Oral reports, group projects, skill demonstration, homework review

3. Analyze the graph of a given function, identify the function as linear, quadratic, logarithmic, exponential or other, and utilize the graph in solving applied problems.

ILO: 2, 1

Measure: Quizzes, homework review, skill demonstrations

4. Differentiate between an expression or equation; identify the equation or expression as linear, quadratic, rational, radical, exponential or logarithmic; and determine and implement an appropriate strategy to simplify if it is an expression or solve if it is an equation.

ILO: 2, 7, 1, 4 Measure: Quizzes, group projects, class discussion, homework review, skill demonstration

5. Set up and solve linear and non-linear inequalities both algebraically and graphically.

ILO: 7, 2, 4, 1

Measure: Quizzes, group work, homework review, skill demonstration

6. Demonstrate proficiency with a scientific calculator.

ILO: 2, 1, 7

Measure: Group work, skill demonstration, quizzes, homework assignments

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Inactive Course: 09/24/2007

The course content will parallel Math 233B. Teaching methods and format will meet LD students' needs including multisensory approach with material presented in smaller concrete blocks with greater opportunity for repetition, review, and practice.

4 Hours

3 Hours Review of factoring, solving polynomial equations by factoring, problem solving strategies involving polynomial functions and equations. Homework will be assigned for this and all other topics throughout the semester.

Introduction to rational expressions, simplifying rational expressions, multiplying and dividing rational expressions.

3 Hours

Adding and subtraction rational expressions, simplifying complex expressions.

2 Hours Solving rational equations, applications, variation

problems. Review for exam #1.

4 Hours

Exam #1, Review of properties of exponents, Introduction to roots, radicals and rational exponents.

4 Hours

Simplifying radical expressions by converting to exponential form, multiplying radicals.

4 Hours

Dividing radical expressions, including rationalizing the denominator, adding/subtraction radical expressions.

4 Hours

Solving radical equations, complex numbers, review for exam #2.

2 Hours

Exam #2, solving quadratic equations by completing the square and by quadratic formula.

4 Hours Applications of quadratic equations, graphing quadratic functions.

4 Hours

Standard form of quadratic functions, quadratic and rational inequalities, review for exam #3.

2 Hours

Exam #3, composite and inverse functions, graphing exponential and logarithmic functions.

4 Hours

Properties of logs, solving logarithmic and exponential functions.

4 Hours

Applications of logarithmic and exponential functions, Review for Exam #4

4 Hours

Exam #4, review for final exam

2 Hours

Final Practice Exam

Included in content section.

METHODS OF INSTRUCTION:

Mini-lecture, demonstrations, discussions, group problem solving self-graded practice quizzes/tests, and guided practice.

METHODS OF EVALUATION:

The types of writing assignments required:

None

The problem-solving assignments required:

Exams

Other: In class problem solving.

The types of skill demonstrations required:

None

The types of objective examinations used in the course:

None

Other category:

Participation in class discussions, question and answer sessions and completion of practice tests.

The basis for assigning students grades in the course:

Writing assignments: 0% - 0%
Problem-solving demonstrations: 49% - 51%
Skill demonstrations: 0% - 0%
Objective examinations: 0% - 0%
Other methods of evaluation: 49% - 51%

REPRESENTATIVE TEXTBOOKS:

Angel, Allen R., "Intermediate Algebra", Pearson/Prentice Hall, 2004 or other appropriate college level text.

Reading level of text: 10th grade. Verified by: Shuk

Other Materials Required to be Purchased by the Student: Scientific calculator.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Not Transferable

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: B

Classification: E

Noncredit Category: Y

Cooperative Education:

Program Status: 2 Stand-alone

Special Class Status: S

CAN:

CAN Sequence:

CSU Crosswalk Course Department:

CSU Crosswalk Course Number:

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: E

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456095

Sports/Physical Education Course: N

Taxonomy of Program: 170200

