

**Course Outline**

**COURSE:** GUID 565A      **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 - 1st 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 233A. 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 233A 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 and quadratic functions and determine and implement an

appropriate method of solution for these problems.

ILO: 2, 7, 1

Measure: Quizzes, group work, and skill demonstration

2. Graph linear equations and inequalities and utilize the graphs in problem solving.

ILO: 7, 2, 1

Measure: Oral reports, and skill demonstration

3. Set up and solve linear, compound, and absolute value inequalities using algebra and graphs. Determine appropriate use of the algebra and graphs to solve applied problems.

ILO: 7, 2, 4, 1 Measure: Quizzes, group work, skill demonstration and class discussion

4. Set up systems of linear equations using matrices and use Cramer's rule to solve systems of linear equations. Analyze problems to determine the most appropriate method to use when solving a given system.

ILO: 2, 7, 4, 1 Measure: Oral reports, group work, skill demonstration and homework review

5. Demonstrate proficiency with a scientific calculator and use the calculator in solving various problems.

ILO: 2, 7 Measure: Oral reports, homework review and skill demonstration

6. Use function operations and function notation to add, subtract, multiply, divide, and compose polynomials.

ILO: 2, 1, 7

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

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

Inactive Course: 09/24/2007

6 Hours

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

Review basic concepts including the properties and operations of real numbers. Use of a scientific calculator will be required here and throughout the course. Extensive homework will be assigned for these topics and all the succeeding ones.

4 Hours

Solve linear equations and applications involving word problems.

4 Hours

Solve linear, compound, and absolute value inequalities using both algebraic and graphing methods.

4 Hours

Solve linear equations and graph the solutions. Use the slope-intercept and point-slope forms of the equation of a line.

4 Hours

Work with function notation and the algebra of functions, including

composition.

2 Hours

Solve and graph linear inequalities.

5 Hours

Solve systems of linear equations in two variables and employ these methods to solve applied problems.

4 Hours

Solve systems of linear equations in three variables and employ these methods to solve applied problems.

4 Hours

Solve systems of equations using matrices and Cramer's rule.

2 Hours

Solve systems of linear inequalities.

4 Hours

Add, subtract, multiply, and divide polynomials.

5 Hours

Factor polynomials.

4 Hours

Solve polynomial equations and review for the final exam.

2 Hours

Comprehensive practice final 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: A

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: N

Occupational Course: E

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456094

Sports/Physical Education Course: N

Taxonomy of Program: 170200