

## MATH 100 Beginning Algebra Review

### 1. Catalog Description

#### **MATH 100 Beginning Algebra Review (3) (CR/NC)**

Review of basic algebra skills at the beginning algebra level intended primarily to prepare students for MATH 104. Course open only to students who have taken the ELM examination and are not qualified for MATH 104. Not for baccalaureate credit. Credit/No Credit grading only. 3 lectures.

### 2. Required Background or Experience

An ELM examination score  $< 41$ , the ability to perform routine arithmetical operations with accuracy and confidence, and a need for help at the beginning algebra level.

### 3. Learning Objectives

The student should be able to understand and use the skills of beginning algebra.

### 4. Text and References

For students:

Assessment and Learning in Knowledge Spaces (ALEKS) Online Program

ALEKS Online Support and Student User Guide

Online text materials may include:

ALEKS: *Beginning Algebra*, 1st edition, McGraw-Hill.

Dugopolski, Mark, *Elementary Algebra*, 4th edition, McGraw-Hill.

Hall/Mercer, *Beginning and Intermediate Algebra*, 1st edition, McGraw-Hill.

Miller/O'Neill, *Beginning Algebra*, 1st edition, McGraw-Hill.

Streeter, James, et al., *Beginning and Intermediate Algebra*, 5th edition, McGraw-Hill.

For instructors:

Baker, Harold, *ALEKS Instructor Guide*, ALEKS Corporation, 2003.

Baker, Harold, *Teaching with ALEKS Manual*, ALEKS Corporation, 2003.

Hutchison, Donald, et al., *ALEKS Worktext for Beginning and Intermediate Algebra*, McGraw-Hill, 2001.

### 5. Minimum Student Materials

Paper, pencils, and workbook.

### 6. Minimum University Facilities

Computer laboratory.

7. Content and Method

<u>Content</u>	<u>Topics</u>
Arithmetic readiness	6
Real numbers	3
Linear equations and inequalities	3
Functions, lines, systems of equations	4
Integer exponents and polynomials	3
Rational expressions	3
	22
Total	

Method

ALEKS (Assessment and Learning in Knowledge Spaces), an internet-based software program, guides student learning in this course. ALEKS diagnostic assessments determine which concepts within the course topics a student needs to master. Students receive interactive explanations of the concepts and work practice problems with feedback to facilitate learning. Online homework assignments, online exams, and additional ALEKS assessments are administered to measure understanding and mastery. Classes may incorporate some lecture and class discussion but most work is independent. Students are encouraged to seek tutorial assistance.

8. Methods of Assessment

Students will be assessed via homework, ALEKS diagnostic assessments, timely completion of intermediate course objectives, and scheduled in-class exams. A final exam, which could include a standardized component, may be given. Students must achieve at least 80% on their final ALEKS assessment, 70% on the final exam, **and** 70% in the course to receive a credit in Math 100.