



September 2008

MATH 104 Intermediate Algebra

1. Catalog Description

MATH 104 Intermediate Algebra (3) (CR/NC)

Review of basic algebra skills at the intermediate algebra level intended primarily to prepare students for MATH 116. Not for baccalaureate credit. Credit/No Credit grading only. 3 lectures. Prerequisite: Appropriate score on the ELM examination, or credit in MATH 100.

2. Required Background or Experience

The ability to perform routine algebraic operations with accuracy and confidence, and an appropriate score on the ELM examination, or credit in MATH 100.

3. Learning Objectives

The student should be able to understand and use the skills of intermediate algebra. Students receiving credit in Math 104 will have the prerequisite knowledge and skills for Math 116.

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: *Intermediate Algebra*, 1st edition, McGraw-Hill.

Bello, *Intermediate Algebra*, 2nd edition, McGraw-Hill.

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

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

Streeter, *Intermediate Algebra*, 4th 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 MethodContent

Real numbers and linear equations

Graphs and functions

Systems of linear equations

Exponents and polynomials

Rational expressions and functions

Radicals and quadratic equations

Topics

9

6

2

6

4

5

Total

32

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 104.