

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 college level courses in math, statistics, and other courses requiring the use of intermediate algebra.

4. Text and References

For students:

Assessment and Learning in Knowledge Spaces (ALEKS) Online Program

ALEKS Online Support

Online text materials may include:

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

Binttenger, *Intermediate Algebra*, 10th edition, Pearson Addison Wesley.

Dugopolski, Mark, *Intermediate Algebra*, 6th edition, McGraw-Hill.

Lial/Hornsby/McGinnis, *Intermediate Algebra*, 10th edition, Pearson Addison Wesley.

Streeter, *Intermediate Algebra*, 5th edition, McGraw-Hill.

For instructors:

ALEKS Online Training Center: http://www.aleks.com/highered/math/training_center

ALEKS Instructor User Guides: http://www.aleks.com/highered/math/user_guides

5. Minimum Student Materials

Paper, pencils, and notebook.

6. Minimum University Facilities

Computer laboratory.

7. Content and Method

<u>Content</u>	<u>Topics</u>
Real numbers and linear equations	71
Graphs and linear functions	27
Systems of linear equations	6
Exponents and polynomials	49
Rational expressions and functions	28
Radicals and quadratic equations	<u>32</u>
	Total 213

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 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. Students must achieve at least 80% on their final ALEKS assessment **and** 70% in the course to receive a credit in Math 104.