

AL125 Mathematics - Spring 2010

Concordia University Wisconsin - Beloit Center

Catalog Description:

AL125 MATHEMATICS studies problem solving, structure and properties of the real number systems, number theory, principles of descriptive and inferential statistics, probability, and geometry topics. Emphasis is on application to real life situations. Prerequisite: One year of high school college preparatory algebra and one year of geometry or MATH 121. 3 credit hours.

Course Objective:

The theme of this class is problem solving. There are many identified problem solving strategies. The idea is not to be able to identify which strategy is best for which problem but rather to focus on developing a willingness to try a variety of methods to solve a problem.

The chapters selected are intended to build on a student's previous mathematical experience which is assumed to be one year of college preparatory algebra and one year of college preparatory geometry.

Graphing calculators will be integrated throughout the course. The Texas Instruments TI-83, or similar, is recommended because of easy use and has built in math functions.

Important Dates/Times:

Class meets Thursday, 4/8 through 5/13 from 6:00-10:00pm

Assessment Methods:

Grade scale 90/80/70/60

1. Four quizzes 300 points (75 points each) – no late test accepted
2. Final Exam 150 points – no late test accepted
3. Homework/ project work/ research 300 points (50 points each) – no late work accepted
4. Class participation (attendance)

Note: University policy on cheating and plagiarism will be adhered to.

Text and Supplies:

Required: Aufmann, Richard, Joanne Lockwood, Richard Nation, Dan Clegg. Mathematical Excursions, Second Edition. Boston: Houghton Mifflin, 2007, ISBN 0-618-60853-2.
Scientific calculator - Texas Instruments TI-83 or similar

Recommended: Access to Microsoft Excel or recent spreadsheet program

Class Layout:

Homework assignment – Q/A – Exam – Lecture – Exercise

Instructor:

Jim Akers Home: 815-877-1636 jmakers@hotmail.com (6-10pm M-F, 9am-10pm S-Su)
Work: 815-639-6454 jmakers@woodward.com (8am-5pm M-F)
Website: <http://jimakers.com>

Prior to first class: Please prepare for the class by reviewing the algebra fundamentals and understand how to use your calculator. A good understanding of algebra is very helpful.

- An algebra review can be found at: <http://college.cengage.com/mathematics/aufmann/excursions/2e/resources/ara.html>
- A guide to practice with your calculator can be found at: <http://college.cengage.com/mathematics/aufmann/excursions/2e/assets/keyguide.pdf>
- Other student resources can be found at the text book website: http://college.cengage.com/mathematics/aufmann/excursions/2e/student_home.html
- Further class information can be found at my personal website, <http://jimakers.com>

Disclaimer:

Circumstances may require some changes to this syllabus.