

**Prerequisites:** Grade of C or better in MAT 137.

**Description:** MAT 365 Modern Geometry (3). Major theorems of Euclidean geometry; introduction to non-Euclidean geometry. Emphasis on problem solving and proofs.

**Recommended textbook:** Allan Berele, Jerry Goldman, Geometry theorems and constructions, Prentice Hall 2001

**Grading:**

- Weights: 25% homework, quizzes; 55% tests; 20% final
- Tests: There will be 3 tests. The exact dates will be announced at least a week before the tests in class and on the course web page. Use of calculators may not be allowed on the tests. Use of compass and straight edge may be required. Class attendance is very important. You are responsible for material covered in class whether or not it is in the text. It is important to take notes, and review them after class.
- Comprehensive final exam: Monday December 9 from 12:30 to 2:30.
- Quiz: A quiz may be given at any time without announcement.
- Homework: Homework will be assigned and collected regularly. Check the course web page for assignments and due dates. Homework is the foundation of your learning. You cannot expect to solve the assigned problems easily. Some problems require a great deal of effort and time. Even if you are unable to solve a problem, the time spent on trying is not wasted. Assignments are due at the beginning of the class. No late homework is accepted, but you can turn in your work before the deadline. It is recommended to create study groups and discuss the assigned problems but you need to write your final solution from scratch on your own. Write out your solutions neatly. Include the assignment number and staple your sheets. Give detailed explanations but be concise. Do not turn in scratch work. Even if I am able to figure out what you think, I can't give you full credit for a badly written solution. Solving a problem is half of the battle, the other part is to write it down so that someone without any previous knowledge can understand it. Check your scores regularly on the grade-sheet posted on the web.
- We are going to do constructions on paper using compass and straight edge and also on computers using the Geometers SketchPad.

**Make up** tests will be given only in case of verified medical or other emergency which must be documented. You must make a reasonable effort to notify me as soon as you can, before the missed test is given. The best way to contact me is by email.

All the information on this syllabus are subject to change and any class announcements regarding the syllabus are considered official amendments to it. This syllabus and other information is available on the course web page.