

**SYLLABUS**  
**MATH 494 - Abstract Algebra 2**  
**Spring 2007**

Dr. J. Shapiro

**Office:** Science & Tech. I, Room 201C

**Hours:** 1 - 2:30 and by appointment

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**Text:** “Contemporary Abstract Algebra”, by Gallian

**Web:** [math.gmu.edu/~jshapiro/algebra2/index.html](http://math.gmu.edu/~jshapiro/algebra2/index.html)

**Prerequisite:** The prerequisite for this course is one semester of abstract algebra. It is assumed that you have some familiarity with groups, rings, homomorphism, ideals, and quotient objects.

**Material to be covered:** Will include polynomial rings, PIDs, UFDs, fields, extension fields, splitting fields, finite fields, the Sylow Theorems (as much as can be reasonably covered).

**Grading:** There will be two in-class exams during the term, each worth 100 points. You will also have approximately four or five homework assignments to turn in. Since the hand-in homework counts toward your grade, you will do these on your own, though you are allowed to ask me questions on the work. While on occasion, given a good reason, I will accept a late assignment, I reserve the right to refuse any work submitted after the due date. The final (150 points) is comprehensive and will include a take home part. The in-class part will be given on:

Thursday, May 10, 10:30 - 1:15pm.

Homework assignments and announcements about exams will be posted throughout the semester on the course web page. The page can be accessed from the math department home page or directly at the following URL that is listed above

Your homework assignments will in general consist of two parts; hand-in and additional work. The latter will not be graded, but it is still very important that you do this work.