

**SYLLABUS – MATH 321**  
**Fall 2009**

Dr. J. Shapiro

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

**Hours:** TR 1:00 - 2:00 and by appointment

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**Text:** “Contemporary Abstract Algebra”, by Joseph A. Gallian, Seventh Edition

**Web:** [math.gmu.edu/~jshapiro/m321/](http://math.gmu.edu/~jshapiro/m321/)

**Prerequisite:** The official prerequisite for this course is Math 290 or its equivalent. Primarily what is needed for this course is a knowledge of elementary set theory and familiarity with “mathematical proofs”. If you have some doubts as to whether or not you have sufficient background for this course, please speak to me.

**Material to be covered:** We will cover, in order, chapters 0 - 16 (this is a bit optimistic). The two main topics covered are group theory and ring theory with the majority of the time spent on the former.

**Grading** There will be two in-class exams during the term, each worth 100 points. The first exam is tentatively scheduled for Thursday, Oct. 8. In addition, homework will be collected regularly (they will be worth approximately 25 points). Typically, homework will be due on Fridays, 3:00 at my office (rather than in the classroom, though you can always hand it in early). Since the hand-in homework counts toward your grade, you are required do these on your own, though you are allowed to ask me questions on the work. The homework will be announced in class and will also be posted on my web page for this course (it may appear on the web page before I announce it in class). The page can be accessed directly by the above or via the math Department’s homepage under “Course Home Pages”. There will be two “parts” to the homework assignment. The first is listed as hand-in, which is self evident. The second part is called additional and this does not have to be turned in. It is designed to further your understanding of the material. While on occasion, given a good reason, I will accept an assignment handed in late, I reserve the right to refuse any work submitted after the due date. The final, which is comprehensive, is worth 150 points and is scheduled for Thurs. Dec. 17 10:30 am 1:15 pm