SYLLABUS FOR ALGEBRAIC STRUCTURES

Note: This syllabus is available online at http://www.fiu.edu/~ghezzil/teaching.html

Lecture: Tuesday and Thursday 3:30 PM to 4:45 PM in GC 285.

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E-mail is the best way to contact me.

Office hours: Tuesday and Thursday 2:00 PM to 3:00 PM, and by appointment.


Prerequisites: MAS 3105 (Linear Algebra) and MAA 3200 (Introduction to Advance Mathematics).

Grading: Your grade for the course will be based on the following:

Exam 1 (Thursday, February 15): 100 points.

Exam 2 (Thursday, March 15): 100 points.

Final Exam (Tuesday, April 24, 15:30-18:15): 150 points. It will be comprehensive.

Homework: 100 points.
Homework 1 (30 points): due Thursday 2/8
Homework 2 (30 points): due Thursday 3/8
Homework 3 (40 points): due Thursday 4/12
Assignments will be announced in class.
Most of the problems will be selected from the list of suggested homework.
Late homework will not be accepted.

There will be no ‘make-up’ exams. Unless a valid excuse (medical or family emergencies, University-related travel such as athletic or academic competitions) is presented in advance, a missed exam will receive the score 0. Students must look at this syllabus carefully and plan well ahead: personal travel is NOT a valid excuse. If a student misses an exam for a valid reason and provides written verification from an appropriate authority (not a family member), that percentage of the grade may be made up on the final. Students with conflicting final exam schedules may be allowed to take an alternate final, which is always given after the regularly scheduled final. No student will be allowed to take the final exam early.

Note: use of calculators, books, notes, or electronic devices of any kind on exam is prohibited.

Grade-scale: The following percentages will guarantee the associated grade:
> 90  : A  
80-85: B  
65-75: C  
<50: F
88-90: A- 
78-80: B- 
55-65: D
85-88: B+ 
75-78: C+ 
50-55: D-

Attendance: Attendance is expected and required. You are responsible for all material covered in class and all announcements made. The instructor reserves the right to make any changes she considers academically advisable. Any changes in this syllabus will be announced during class meetings and students are responsible to be aware of
them. Please avoid coming in late or leaving class early. If you miss an entire
class, get notes and homework assignments from a classmate.

**Important Dates:**
See [http://www.fiu.edu/~register/calendars.htm](http://www.fiu.edu/~register/calendars.htm)
Monday, 3/12: Last day to drop a course with a DR grade
March 19-24: Spring Break, no class
Thursday, 4/19: Last class meeting

**Tentative Topics:**
Fundamental concepts of groups, rings, and fields:
Sections 0, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 18, 19, 20, 26, 27.
Additional selected topics if time allows.

**Suggested Homework:**
Below is a list of suggested homework problems for each section. This homework will
not be collected; however, a VERY GOOD WAY TO PREPARE FOR EXAMS is to be
sure you have understood the material covered in class and done all the suggested
problems. Most of the questions I ask are closely related to the homework and to the
examples shown in class.
*If you don’t have time to do the homework, you don’t have time to take this class.*

**Section 0 #** 29, 31

**Section 4 #** 1, 5, 7, 11, 13, 15, 20, 29, 32, 33, 34, 35, 37

**Section 5 #** 1-4, 9, 11, 21, 23, 27, 29, 36, 43, 46, 51-54

**Section 6 #** 1, 3, 9, 11, 17, 19, 23, 35, 37, 39, 45, 47, 50, 51

**Section 8 #** 1, 3, 5, 7, 9, 17, 18, 31, 33, 36, 46

**Section 9 #** 1-15 odd, 29, 30, 33, 36

**Section 10 #** 1, 3, 5, 6, 7, 13, 15, 21, 23, 28, 29, 30, 31, 34, 35, 39

**Section 11 #** 1, 3, 5, 7, 9, 15, 16, 17, 21, 23, 25, 39, 41, 46, 53

**Section 13 #** 1-9 odd, 15-29 odd, 33, 35, 39, 44, 45, 47, 48, 49, 50, 52

**Section 14 #** 1-15 odd, 29, 31, 34, 35

**Section 15 #** 28, 35, 36

**Section 18 #** 1-23 odd, 35, 38, 43, 44, 46

**Section 19 #** 1-13 odd, 14, 18, 29

**Section 20 #** 1-5, 29, 30

**Section 26 #** 1, 3, 9, 11, 13, 17, 18, 22, 26, 27

**Section 27 #** 1, 3, 34, 35, 36