

Math 313 Modern Algebra Fall 2008

Instructor: Fred Schultheis

Office: PPHAC 218

Office Hours: MW 11:30 am - 1:00 pm, and by appointment

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Text: Abstract Algebra: An Introduction, 3rd edition, Thomas W.

Hungerford

Course Content

This course is a modern, abstract approach to the problems of algebra. We will study in detail some of the basic algebraic structures including groups, rings, and fields. Although these topics will probably not appear to be familiar to you from algebra, they all sprang from attempts to solve the more classical types of problems that you would associate with algebra. The main content of the course is contained in the first 8 chapters of the text, although we may omit some sections here and there and possibly add some additional topics from later chapters.

Course Description

The course meets MWF from 2:35 till 3:45 a.m. in PPHAC 233. Homework assignments will be given at each class meeting. Students are expected to complete these assignments by the next class meeting, where they will be discussed. No one can learn mathematics without doing it themselves and so, to the student, homework is the most important part of the course. Since class participation is important, students are expected to attend every class.

Grading

Your final grade will be based on 2-3 hourly exams (about 100 points each), regular graded homework assignments (about 200 points total), class participation (50 points), and a comprehensive final exam (180-200 points). The exams may be in-class, take-home, or a combination of the two. **The final exam is scheduled for Tuesday, December 10, 2013 at 8:30.**

The following grading scale is used for assigning your final grade.

		86 – 89	<i>B+</i>	76 – 79	<i>C+</i>	66 – 69	<i>D+</i>	≤ 59	<i>F</i>
93 – 100	<i>A</i>	83 – 85	<i>B</i>	73 – 75	<i>C</i>	63 – 65	<i>D</i>		
90 – 92	<i>A–</i>	80 – 82	<i>B–</i>	70 – 72	<i>C–</i>	60 – 62	<i>D–</i>		

Attendance

Class attendance is required. You will lose 10% from your class participation grade for each unexcused absence. If you are sleeping in class, you are not there. If you feel the need to leave class before it is over, even if you come back, you are not there. In other words, in any of these cases you will be considered absent and will lose 10% of your class participation grade. You are responsible for all work covered in class and all assignments, even if absent from class. If you must miss more than one class due to illness or emergency, you should notify the instructor. There will be no make-up for missed quizzes. Make-up tests are

given only in extreme cases. If a student has to miss a test it is the student's responsibility to contact the instructor as early as possible.

Learning Disability Accommodations

Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

Course Goals

In this course you will be learning the fundamental concepts from the modern theory of algebra. Upon completing the course, successful students will

- (a) be able to read, comprehend, and write mathematical proofs,
- (b) gain a better understanding of abstract mathematical concepts and why they are important,
- (c) improve their communication and technical writing skills by discussing mathematics problems and presenting solutions in written and oral form.

ACADEMIC HONESTY POLICY GUIDELINES

MATHEMATICS COURSES

The Mathematics and Computer Science Department supports and is governed by the Academic Honesty Policy of Moravian College as stated in the Moravian College Student Handbook (pp. 27-32). The following statements will help clarify the policies of members of the Mathematics faculty.

In all homework assignments which are to be graded, you may use your class notes and any books or library sources. When you use the ideas or thoughts of others, however, you must acknowledge the source. **For graded homework assignments, you may not use a solution manual or the help, orally or in written form, of any living being other than your instructor.** If you receive help from anyone other than your instructor or if you fail to reference your sources you will be violating the Academic Honesty Policy of Moravian College. For homework which is not to be graded, if you choose, you may work with your fellow students. You are responsible for understanding and being able to explain the solution of all assigned problems, both graded and ungraded.

I reserve the right to alter this syllabus at anytime, provided that I inform you in writing of any such alteration.