Math 330
Abstract Algebra I
Spring, 2014

Instructor: Dr. Intermont

Office:	OU 203B	Phone: 337-7107
	e-mail: intermon@kzoo.edu	
Web Page:	http://kzoo.edu/~intermon	
Hours:	Monday:	9:30–10:30
	Tuesday:	1:00–2:00
	Wednesday:	9:30–10:30
	Friday:	9:30–10:30
	And by appointment	

Text: *Contemporary Abstract Algebra* by Gallian, 6th edition.

Content: In this class we will begin our exploration of the subject of abstract algebra. Our focus will be on the portion of the subject known as group theory; then we'll discuss the basics of rings and fields. We'll start with Chapter 1, and work our way through Parts 2 and 3, finishing approximately with Chapter 17.

Proof Writing: This class is an intensive proof writing class. It is expected that you are already familiar with the basics of writing proofs, and your ability to logically and coherently write up a proof will heavily impact your grade.

Grades: There are several pieces to this course. Each sort of assignment plays a role in helping you absorb the material into the framework of your own knowledge.

Problem Sets: 25% This is the practice part of the course. Most of us do not learn by watching; we learn by doing. Problem sets provide a forum for discussion on the material as well as a basis for questions, and practice in communication. The problem sets will be assigned weekly, and selected problems will be graded. The work you submit, like a finished essay, should be well written, legible, and in order. If the grader cannot easily find a problem and easily read it, that problem will not be graded. Please note that while collaboration is acceptable on homework assignments, collaboration refers to talking about problems and does not include copying solutions or writing solutions together.

Quizzes: 10% Short quizzes given on a regular basis are meant to provide (extrinsic) motivation to learn the definitions, to practice writing basic proofs, to know some simple examples. But quizzes shouldn't be seen as stressful experiences which is why these are weighted at only 10% (there will be between 5 and 7 of them most likely).

Midterm: 20% There is a time to work individually and to be required to put the material together as completely as possible and take stock of where that leaves you. It will be in class, on Friday of Week 5.

Conversation: 5% Around the same time as the midterm each student will have a short individual conversation with the instructor outside of class time. This oral exam will provide students with the opportunity to present mathematics at the blackboard. The broad strokes of the conversation will be given in class before the appointments.

(Group) Paper:15% Early in the quarter, each student will be assigned a personal group for exploration throughout the quarter. This will culminate in a paper

about the properties and significance of the group and, most likely, a short presentation to the class. This is an opportunity to be individually responsible for knowledge, and an opportunity to build both oral and written communication skills. The paper will be due around week 9 of the term.

Final Exam: 25% This is the opportunity to integrate the course material. Furthermore, it's an opportunity to show off some skills that might have been difficult at the beginning of the course, but are now routine. This is **Tuesday, June 10, 8:30-11 am**, as scheduled by the Registrar.

Grace Days: Quizzes will be announced at least one class day before being given. Students are expected to be in class for quizzes. To allow for some flexibility in students' needs to not attend class, at the end of the term, the lowest quiz grade will be dropped. Likewise, to allow for some flexibility with the on-going deadline of homework, each student is endowed with two grace days. One "grace day' ' refers to any time after the problem set was due until 24 hours after it was due. So, each student may submit one problem set two days late or two problem sets each one day late. After these grace days have been used, late homework will not be graded.