MAS 5312 – Introduction to Algebra 2, Spring 2015

Dr. Richard Crew
Department of Mathematics,
University of Florida
Office Hours TBA

Introduction

This is the second semester of the Mathematics Department’s first year algebra sequence, intended to prepare the student for the first year exams in algebra. The general format of the course will be the same as in the first semester: weekly homework, three hour exams during the semester, no final exam. The text, as always, is Dummit and Foote’s Abstract Algebra, 3rd edition. Topics covered: rings and ideals, vector spaces and linear algebra, modules, finitely generated modules over a principal ideal domain, and the elementary theory of fields. Specifically, this is chapters 7-9 and parts of chapters 10-12. If time permits we will cover some applications to linear coding theory and number theory. There will be a brief reconsideration of some topics from the first semester.

Course Format and Grading

The course grade will be based on three hour exams during the semester and weekly homework assignments. The homework will be graded for completeness, and for the correctness of certain selected problems. The total homework grade will account for 25% of the total course grade, as will each of the three exams. The exam dates will be announced later.

Late homework will not be accepted without a valid medical excuse.

Course grades will be given on the usual scale: A, 90% or above; B, 80% up to 90%; C, 70% up to 80%, D, 60% up to 70%; E, below 60%. This may be modified slightly after the second midterm exam.

Course Policies

If you miss a class, it is your responsibility to find out what happened, and whether any homework was assigned, or any announcements made. Except in the case of documented medical emergencies, makeup tests will only be given if they are arranged in advance with the instructor. Most cases will require a valid medical excuse.

Students needing arrangements for disabilities should contact the Dean of Students.