

MATH 5013 - Modern Algebra II - Spring 2015

INSTRUCTOR: Dr. Roger Zierau

OFFICE: MS502A

OFFICE HOURS: Wed 1:30-2:20 p.m. (in MSCS 502A), Tues 4:30-5:30 (in the MLSC) and by appointment.

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TEXT: *Abstract Algebra*, third edition, by D. Dummit and R. Foote is the required textbook.

COURSE CONTENT: This course is the second of a two course sequence. We will pick up where we left off last semester. The rough schedule of topics is:

- (1) Linear algebra (Ch. 11).
- (2) Modules (Ch. 10.1-3).
- (3) Rings (Ch. 7).
- (4) Special types of rings (Ch. 8).
- (5) Polynomial rings (Ch. 9).
- (6) Slightly more advanced study of polynomial rings in several variables (Ch. 15.1-2).

At times the presentation and material will differ from that of the textbook.

ATTENDANCE: Attendance is required.

GRADING: Regular homework will be assigned. Some of these exercises will be collected and graded. This homework is very important. It will count for a total of 100 points. There will also be several more in-depth homework assignments worth a total of 60 points. There will be two exams; these will occur during the weeks of Feb. 23 and April 6. These exams will have an in-class part and a take-home part and will be worth 100 points each. The final exam will be comprehensive and will be worth 100 points. The final is on Wednesday, May 6 from 8:00 to 9:50 a.m. Letter grades will be assigned as follows:

360-460 points: guaranteed A

300-359 points: at least a B

200-299 points: at least a C

0-199 points: probable F.

MISSED WORK: Students shall be offered reasonable accommodation in the event that he or she misses an exam or is unable to turn in a homework assignment on time for a valid and documented reason. Valid reasons include official University activities, activities associated with military service, illness and family emergencies. Appropriate documentation shall be provided by the student in a timely fashion, preferably in advance, to support his or her request for accommodation.

D2L: This syllabus, homework assignments and some other information will be posted on D2L. Students should be sure to set their email on D2L to an address that they regularly use; certain announcements and reminders will be emailed to students using this address.

SYLLABUS ATTACHMENT: For various information such as drop dates, university policies on student disabilities and academic integrity, etc. see the OSU Syllabus Attachment (posted on D2L).