

Ring Theory
Syllabus for Mathematics 345 Winter 2016
Dr. Cheryl Beaver

MTWF 1-1:50 p.m. MNB 130

FINAL EXAM: Monday, March 14, 12-1:50 p.m.

Office: MNB 123

Phone: 503-838-8404

Email: beaverc@wou.edu

Web Page: www.wou.edu/~beaverc

OFFICE HOURS & SCHEDULE					
Time	Monday	Tuesday	Wednesday	Thursday	Friday
9-10					
10-11	Office hour				
11-12		Meeting			Office hour
12-1			Office hour		Office hour
1-1:50	MTH 345	MTH 345	MTH 345		MTH 345
2-2:50		Office hour			
3-4		Meeting			
4-5					

Please feel free to drop by my office during my office hours for help. You do not need to make an appointment to come to office hours. If you have direct scheduling conflicts with my office hours and would like further help, please let me know.

Prerequisites: Mathematics 344 with a grade of C- or better.

Text: *Contemporary Abstract Algebra*, 8th Edition by Gallian.

Course Content and Goals: At the end of the term successful students will

- know basic definitions of ring theory;
- know and utilize several examples of rings, including matrix rings and polynomial rings;
- understand the ring theory introduced in class and in the homework;
- improve their proof writing and problem solving;
- increase their understanding and appreciation of abstraction in mathematics; and
- improve their skills in writing, speaking, and reading mathematical proofs.

Homework: Homework from the text and occasionally additional problems will be assigned and (selected problems) graded on a regular basis. Occasionally in-class work will be collected for grading.

Much of your learning will occur while doing the homework assignments. Please carefully read the book and schedule lots of time to work on the homework. It can be helpful to work in groups, but always depending on others to get your work done is a mistake. If you work with others, please cite them at the end of the assignment and never directly copy another person's work. Proofs require some creativity. It is unlikely that

two proofs of the same problem will look exactly alike. You should understand and write up your own solution to each problem in your own words.

Quizzes: Quizzes may be given on an as-needed basis. Quizzes will be considered in-class work and count toward your homework grade.

Exams: There will be two midterm exams and a final exam. Missed exams may not be made up except in rare cases with prior notification and instructor approval. Cell phones must be turned off during exams. *Tentative* exam dates are 1/29 and 2/26.

Late homework: Homework is due by 4:30 pm on its due date. If you are not done with all of your homework by 4:30 on its due date, please turn in what you have done for partial credit as LATE HOMEWORK IS NOT ACCEPTED. Your lowest homework score will be dropped. In-class work may not be made up.

Grades: Grades will be based on the following:

Homework:	40%
2 Midterms:	24% (20% each)
Final:	20%

Appropriate Classroom Behavior: You are ultimately responsible for your own attendance and performance. Disruptive classroom behavior of any kind is not appropriate. Proscribed Conduct for all students is described in the University Catalog. Any student found cheating on an exam or copying from another student's exam paper will receive a zero score on that exam.

Learning Disabilities: If you have a documented learning disability, please talk to me during the first few days of class, I will be more than happy to accommodate you in any way that I can. If you have a documented disability which requires any academic accommodations, you must go to the Office of Disability Services (ODS) for appropriate coordination of your accommodations. You can drop by APSC 405 or contact ODS at (503) 838-8250 (V,TTY) to schedule an appointment.

Incomplete Policy: An Incomplete can only be granted for a student who is passing a class and has a documented emergency that prevents them from completing the course.

Veterans and Active Military Personnel with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.

Cell Phone Policy¹: Please silence cell phones and put them away. No texting during class.

¹ If you are in an emergency situation in which you need to have your cell phone on quiet; please speak to me about it before class.