

Math 6336, Section 01: Algebra II

Spring 2018 Syllabus

1 Course Information

- Location and Time: MW 3:00pm–4:20pm, 402 Lee Drain Building
- Professor: Dr. Martin Malandro
- Department: Mathematics and Statistics
- Office: 433 Lee Drain Building
- E-mail (preferred method of contact): malandro@shsu.edu
- Phone number: (936) 294-1580
- Office Hours: MW 12:30pm–1:50pm, and by appointment.
- Required Materials:
 - Textbook: Abstract Algebra by Dummit and Foote, 3rd ed.

Catalog Course Description: This course is the second half of the graduate algebra sequence. The algebra sequence will include Group and Ring theory. Special topics include groups, group actions, the Sylow Theorems, rings, modules, fields, field extensions, and an introduction to Galois Theory. Credit 3.

Course Objectives/Learning Outcomes: This semester we will cover the essentials of ring theory and module theory at the graduate level. While other topics will also be covered, a successful student will attain mastery of the following topics.

- Euclidean domains, principal ideal domains, and unique factorization domains
- Polynomial rings
- Modules, submodules, quotient modules, and module homomorphisms
- Vector spaces
- The structure theory for finitely generated modules over PIDs
- The rational canonical form
- The Jordan canonical form

2 Grading Policy

Your grade in the course will be calculated using the following weights:

Homework	50%
Exam 1	15%
Exam 2	15%
Final Exam	20%

Grading Scale:

A	90% or better final average
B	80–89% final average
C	70–79% final average
D	60–69% final average
F	59% or lower final average

Homework: Homework is the most important part of the course. To help me maintain my sanity while I grade your homework please adhere to the following requirements:

- **Write on only one side of the page.**
- **Do not staple or paperclip anything. Instead write your name at the top of each page.**
- **One page, one problem: Do not combine multiple problems onto a single page.**
- **State what you are about to prove before you do so. A proof without a statement before it is incorrect mathematical writing. If a problem asks for a computation, state what is being asked for before doing the computation.**

Any graded in-class activities will be recorded as homework grades.

No homework make-ups: No make-ups for missed homework assignments or in-class activities will be available. Therefore, in calculating your averages, I will drop your (1) lowest homework score.

Exams: Many exam problems will be similar to homework problems or examples worked in class. The final exam will be cumulative.

If you arrive late to an exam, you may still take the exam in the remaining time as long as nobody has finished the exam yet.

No exam grades will be dropped, and there will be no do-overs.

Exam make-up policy: If you miss an exam, you will be expected to show appropriate cause in writing. If you must miss an exam, I expect you to contact me beforehand. If that is impossible, then you must contact me no later than 24 hours after the exam. If you miss an exam and have not contacted me by this time, you forfeit your right to a make-up.

Academic Honesty Policy: You may work with other students in the class to find solutions to homework problems. However, when it comes time to write up your work to be turned in, *you must write it alone, in your own words.* Doing otherwise is considered cheating. Anything you write down while working with others should be erased or thrown away before you go off on your own to write up the work you'll turn in for credit. I expect that what you turn in will be a reflection of your own understanding.

Consulting outside sources (such as other textbooks, professors, the internet, etc.) is allowed, but if you use ideas you got from an outside source you must mention the source in your write-up. Keep in mind that your goal with this course is to learn the material well enough to pass the comprehensive exam.

Exams are individual endeavors, where no help is to be given or received. Cheating on an exam includes, but is not limited to, sharing answers or using any form of cheat sheet.

Cheating is punishable with an F in the course and a referral to the Dean of Students on academic dishonesty charges.

Grade Dispute Policy: All grade issues need to be brought to my attention within one week of having your grade returned/posted.

Final Exam Schedule: Wednesday May 9, 5pm–7pm

3 Classroom Policies

Attendance Policy: I expect you to attend every class. If you miss a class, then I expect you to get notes from a classmate. I expect you to arrive to class on time.

Classroom Rules of Conduct: Students must refrain from behavior in class that disrupts the learning process. Students are prohibited from using tobacco or smoking products in class, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times or about inappropriate things, wearing inappropriate clothing, using cellphones, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Math-related questions and math-related discussion in the classroom are encouraged. However, chatter is disruptive to the learning process and will not be tolerated. Furthermore, any variation of the question “do we need to know this for the test?” is banned.

Disabilities policy: Any student with a disability that affects his/her academic performance should contact the Office of Services for Students with Disabilities in the SHSU Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786) to request accommodations.

Use of Telephones and Text Messengers in Class: Generally speaking, you may not use cell phones, computers, or other devices capable of communication in class. The one exception is that during lecture periods, you may keep your cell phone on vibrate so that you can receive text messages in case of an emergency. You may not, however, be distracted or distracting to others in checking your text messages in class, and you may not send text messages in class. All messengers must be put away for exams.

4 Tentative Schedule

Exam 1	Wednesday Feb 21
Exam 2	Wednesday April 4
Final Exam	Wednesday May 9, 5pm–7pm

The date/time of the final exam is set by official SHSU policy. Although I do not expect any other dates to change, all other dates in this list are tentative and subject to change.

5 Additional Information

All information on this syllabus is subject to change. All changes will be announced in class. Further university policies regarding academic dishonesty, student absences on religious holy days, disabilities, and visitors in the classroom which apply to this course may be found at <http://www.shsu.edu/syllabus/>. If there is a conflict between information on this syllabus and official university policy, university policy takes precedence.