

Peter Sin

Department of Mathematics

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MAS5312 Introduction to Algebra 2 Spring 2025

Instructor: Prof. Peter Sin ([Links to an external site.](#))**Time and Location:**

MWF Per. 3, Little 221.

Office Hours:

Dr Sin : TPer. 7, WPer. 5, Little 432, and by appointment.

Textbook:

Abstract Algebra, 3rd Edition, by D. S. Dummit and R. M. Foote. A list of errata for this book is available [here](#)

Aim of Course

This course is the second part of a two semester sequence to prepare students for the First Year Algebra Exam. In this sequence the student will learn the basic concepts and results in algebra. Full mathematical rigor and abstraction are used throughout. The first semester focused mainly on group theory, with material taken from chapters 1-6 of the text. In the second semester the main topics are rings and modules and fields, with material selected from chapters 7-13 of the text.

Grading

Grades will be based on two midterms (25% each) and a final exam (50%).

Mathematical accuracy and clarity of exposition are the qualities which will earn high marks. Most graduate students must maintain a GPA not less than 3.0 to satisfy the conditions of their funding.

Midterm Exam: 2/14/25 and 3/28/25 during normal class period.

Final Exam: 5/2/2025 10:00 AM – 12:00 PM Lit 221

Suggested Problems

Below are some suggested excercises, grouped in a similar way to the graded assignments

of MAS5311 last Fall. However they are not graded.

I recommend doing far more than those in this list, but I provide this list so that we have at least some problems in common for discussions.

7.1.13, 7.1.21, 7.1.23, 7.1.25

7.2.10, 7.3.13, 7.3.22, 7.3.34

(In 7.3 exercises note that R is assumed to have $a \neq 0$.)

7.3.29, 7.4.1, 7.4.13, 7.4.25

7.5.2, 7.6.3, 8.1.7, 8.1.8

8.2.6, 8.2.8, 8.3.6, 8.3.7

7.4.32, 9.1.3, 9.1.5, 9.1.17

7.2.3, 7.2.4, 7.2.5, 7.5.5

9.4.8, 9.4.15, 9.5.1, 10.1.13

10.1.8, 10.2.13, 10.3.5, 10.3.11

11.3.1, 11.3.4, 12.1.2, 12.1.5

Resources

[First Year Algebra Exam Syllabus](#)

[GMA Archive of past First Year algebra exams](#)

Disabilities statement

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <http://www.dso.ufl.edu/drc/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Health and Wellness

U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352-392-1575 so that a team member can reach out to the student.

Counseling and Wellness Center: <http://www.counseling.ufl.edu>, 352-392-1575.

Sexual Assault Recovery Services (SARS)

Student Health Care Center, 352-392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). <http://www.police.ufl.edu/>

Honor Code

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code.

On all work submitted for credit by students at the University of Florida, the following pledge is either

required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions.

Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate

personnel. If you have any questions or concerns, please consult with the instructor of this class.

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals.

Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at

<https://gatorevals.aa.ufl.edu/public-results/>.