

MAS 5312 Introduction to Algebra 2

Spring 2014

Section	Period	Meeting Time	Room
2779	MWF 3rd	9:35 – 10:25	Lit 205

Professor Alexandre Turull

480 Little Hall
(352) 294 2337
turull@ufl.edu

Office Hours

Monday	Tuesday	Wednesday	Thursday	Friday
12:50 – 1:40		12:50 – 1:40		12:50 – 1:40

Also by appointment

- Calendar** — Lecture topics and their approximate dates.
- Homework Problems** — List of homework assignments.

Basic information:

This course is the second part of a two semester sequence. In this sequence the student is to learn the basic concepts and results in algebra. Full mathematical rigor and abstraction is used throughout. It should prepare for the First Year Algebra Exam. Sample problems for both the First Year Algebra Exam, and the Final Exam for the this course are available.

Textbook:

Abstract Algebra, 3rd Edition, by D. S. Dummit and R. M. Foote
In the second semester, we will cover most of chapters 7 – 13.
Reading and homework will be assigned and discussed in class.
You are expected to participate in classroom discussions.

Some Major Topics:

- Rings, ideals, quotient rings, rings of fractions.
- Integral domains, unique factorization domains, principal ideal domains.
- Polynomial rings.
- Modules, free modules.
- Classifications of finitely generated modules over principal ideal domains.
- Rational canonical form, and Jordan canonical form of endomorphisms of vectors spaces.
- Fields, splitting fields, cyclotomic fields.

Students with disabilities

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

Attendance policy

Students are expected to attend class regularly.

The UF policy on attendance is here:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

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."

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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.

Website

<http://people.ufl.edu/turull/mas5312-syllabus>

Tests (Written medical documentation is required for makeup tests.)

Test 1: Friday, February 7

Test 2: Friday, February 28

Test 3: Friday, March 28

Test 4: Monday, April 21

Final: Thursday, May 1, 12:30 — 2:30 p.m.

Final grade:

Best 3 of four 40 point tests		120
final		80
Total		200

A ≥ 180		C ≥ 140
A- ≥ 173		C- ≥ 133
B+ ≥ 167		D+ ≥ 127
B ≥ 160		D ≥ 120
B- ≥ 153		D- ≥ 113
C+ ≥ 147		E < 113

Missed tests:

Any missed test will be assigned a zero.

Since it is expected that some students will miss a test because of medical reasons, the following policy will apply to all students. For the final grade computation, only the three best test grades will be used.

Make-up tests:

Because of the policy on missed tests, it is extremely unlikely that a make-up test will be offered. If a student needs to miss two tests, he or she needs to contact the instructor as soon as possible and provide extensive documentation.