s19-mas5312-syllabus

MAS 5312 Introduction to Algebra 2

Spring 2019

<table>
<thead>
<tr>
<th>Class number</th>
<th>Period</th>
<th>Meeting Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>17670</td>
<td>MWF 3rd</td>
<td>9:35 – 10:25</td>
<td>Lit 221</td>
</tr>
</tbody>
</table>

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

Office Hours

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>1:55 – 2:45</td>
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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 this course are available.

Textbook:

In the second semester, we will cover most of chapters 7 – 13.
Reading and homework will be assigned and discussed in class.
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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 vector spaces.
- Fields, splitting fields, cyclotomic fields.

**UF grading policies for assigning grade points**
See https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

**Students with disabilities**
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.

**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.”

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

Test 1: Friday, February 8

Test 2: Friday, March 1

Test 3: Friday, March 29

Test 4: Monday, April 22

Final: Thursday, May 2, 3:00 — 5:00 p.m.

Final grade:

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<tbody>
<tr>
<td>Best 3 of four 40 point</td>
<td>120</td>
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<tr>
<td>tests</td>
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<tr>
<td>final</td>
<td>80</td>
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<td>Total</td>
<td>200</td>
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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.

Course evaluation:
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/