Syllabus for MAS6331 Fall 2023: Algebra 1

- Instructor: Dr. Richard Crew, LIT 404
- Office Hours: MW4
- Web: `https://people.clas.ufl.edu/rcrew/`
- email: `rcrew@ufl.edu`
- Meeting time: MWF3 in 205 Little Hall.

Course Description

This is the first semester of a two-semester sequence intened to prepare students for the Mathematics Department Ph.D. exam, and for advanced work in algebra and related subjects. The prerequisite is MAS5311–12 or an equivalent course at another university.

The first semester will cover the theory of fields and field extensions, Galois theory, some category theory and commutative algebra. The second semster will continue with commutative algebra, and cover some non-commutative algebra. If time permits we will also cover some topics such as linear groups or representation theory.

There is no single texbook for the course. I will be using the following texts:

- Dummit & Foote, *Abstract Algebra.*
- Lang, *Algebra.*
- Hungerford, *Algebra.*

Other resources and texts will be brought up from time to time.

Course Grades

The course grade will be based entirely on periodically assigned homework sets. These will be announced in class but you should also look for them on the course CANVAS page. Homework is due in class on the assigned date and late homework will not be accepted. Allowance however will be made for exceptional events such as severe illness or injury to yourself or a close family member, curricular requirements of other University Units, court-ordered appearances, jury duty or complusory military duty.

Attendance will not recorded but you will want to attend every lecture as there is no guarantee that what I talk about is any book. If you must miss a class, try to get notes from another student. I do not always write up notes for the lectures. I am usually available for help outside of office hours, at least during MWF.

Letter grades will be assigned in the usual way:

- A: 90% or above.
- B: 80-89%.
- C: 70-79%.
- D: 60-69%.

- E: Below 60%.

This scale may be modified later in the semester.

Other Course Policies

- *Honor pledge.* 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 specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report anycondition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.
- *Diversity.* The Mathematics Department is committed to diversity and inclusion of all students. We acknowledge, respect, and value the diverse nature, background and perspective of students and believe that it furthers academic achievements It is our intent to present materials and activities that are respectful of diversity: race, color, creed, gender, gender identity, sexual orientation, age, religious status, national origin, ethnicity, disability, socioeconomic status, and any other distinguishing qualities.
- *Accomodation for disabilities.* Students requiring such accommodations should connect with the Disability Resource Center. This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.