## MATH 465: Modern Algebra I

 $Fall\ 2025$ 

MoWeFr 10:00-10:50, MDD 214

**Instructor:** Arturo Magidin

Office Hours: MoWe 13:00-14:30, Tu 13:00-14:00, Th 14:00-15:00, or by arrangement.

Office: MDD 404. Campus Phone: 482-6706.

e-mail: magidin@louisiana.edu

Course homepage: http://userweb.ucs.louisiana.edu/~avm1260/math465.html

Course Moodle Page: MATH465-001-202640.

**PREREQUISITES:** Consent of the Department.

**TEXTBOOK:** There will be no required textbook. I will be trying to follow *Contemporary Abstract Algebra* by Joseph A. Gallian; the book is currently in its 11th Edition. I have a copy of the 5th Edition. I may provide you with copies of some sections of the book.

We will be covering PART 2: GROUPS (Chapters 1 through 11); I also hope to cover Chapter 24. The calendar I am providing is *very* tentative, as this is my first time teaching out of this book.

**MOODLE:** I will keep a MOODLE page associated to the course. The page will contain handouts and important dates, same as the course page listed above (solutions to homeworks and exams, homeworks due, etc).

MY OFFICE AND OFFICE HOURS: My office is in Maxim Doucet Hall Room 404. I will have four office hour sessions a week, tentatively set as above. We can also meet by appointment if you cannot make the regular office hours. Email me, or see me just before or just after class to make an appointment. Feel free to ask for an appointment, especially if you cannot make the regular office hours for some reason.

**NOTE ON E-MAIL:** I do not always use Outlook to reply to e-mails. This sometimes confuses Outlook, and it may not display my entire message when you open it. I always end my emails with my signature block. If you do not see my signature block at the bottom of the message, you are not seeing the whole text; on Outlook, there will be three dots at the bottom, and if you click them, you should be able to see the full message. If you are using a different email client, try to "See original" or "See entire message".

In order to comply with federal law and respect your privacy rights, I can only reply to emails that come from your official UL email address, and can only send my replies to that email.

**HOMEWORKS:** Homework is a major part of this course, and very important. Mathematics is learned almost exclusively by doing, and that is what homework is for: to help you understand the material, and to help you zero in on the material you are finding difficult. Do not be afraid to ask for help from your fellow students, or most especially **from me.** In fact, that's basically what my office hours are for.

Homework will be assigned almost every week, and will usually be due on Friday. I may change the schedule a bit to accommodate very long or very short assignments, as well as midterms. In that case, I will give you sufficient advance notice of the change.

You may work on the homework in groups. However, each of you must write up his or her own work individually. Please be assured, it is almost invariably very easy to tell when someone is copying. I will give you worked out solutions to the assigned homework problems as you turn them in. Be sure to read them, and compare it with your graded assignments. Homework is due at the beginning of class, as you come in. I will not accept late homeworks for any reason.

ChatGPT AND OTHER SYNTHETIC TEXT EXTRUDERS. Note that CHATGPT and other (mislabeled) "artificial intelligence" products are *not* search engines and are *not* intelligent. Generative AI products (generically, "AI" here) work by trying to predict the most likely next word in light of previous words in the sentence and the given prompt, on the basis of its training data. They are not reproducing "information", nor are they making sense (any sense that is perceived in their output is the creation of those reading that output). They are also not very good at writing proofs or solving numerical problems.

Use of these products in this class is a violation of course policy, and will result in at least a zero grade in the assignment, even if clearly labeled as the output of an AI product. Repeat offenses, may result in more severe penalties, up to and including a grade of F for the entire course.

**TESTS:** There will be one in-class midterm; there will also be a two and a half hour comprehensive final exam. They will take place on the following days:

Midtetrm October 1st.

Final: Thursday December 11, 2:00 pm – 4:30 pm.

**GRADING:** Your final grade will be based on your homeworks and class participation, midterm, and final, in the following way:

Homeworks and class participation:	55%
Midterm	20%
Final	25%

I will drop your lowest two homework scores and your lowest two quiz scores before averaging each separately. I will take each score and scale it appropriately so your final score is out of 1000 (so the final will be worth up to 250 points, the first midterm up to 200, etc).

Note that getting 100% on the final is not enough to pass the course (though it cannot hurt). I do not curve, but I do scale (ask if you do not understand the difference).

I do not have a rigid correspondence between numerical and letter grades; this is where consideration for people who have improved (or not) throughout the semester comes in, or for people who do exceedingly well in the final, etc. For your reference, however, the following is a good approximation. Taking your final grade of 1000 points:

Letter grade	Approximate		
	Appı	ox.	Range
$\mathbf{A}$	900	_	1000
$\mathbf{B}$	775	_	875
${f C}$	650	_	750
$\mathbf{D}$	550	_	625
F	0	_	550

**TIME REQUIREMENTS:** Expect to spend about 8–10 hours a week on this course, in addition to the three lectures. This includes working on homework, reading, and reviewing. If you find yourself regularly spending considerably more time than this, let me know!

MAKE-UP WORK: I do not receive late homeworks and will not allow anyone to make up any homeworks not turned in. If you cannot make it to class, have someone drop off the homework for you. If you will not be able to take an exam for a **valid** absence (illness, family emergency, UL-sponsored travel, etc), you must **notify me in advance** and we will arrange for a make-up exam.