MATH 7282, Section 1 — Fall, 2020

M 4:30 - 6:30 p.m., Somewhere with an internet connection and access to Zoom.

Instructor: Dr. Ben McCarty

Office: DH 345 (if we're ever on campus!)
Email: bmmccrt1@memphis.edu
Office hours: 1:00 - 2:00 T Th (or appointment)

Prerequisites: Permission of Instructor.

Goals: This course focuses develops a more advanced perspective on algebra, with an eye toward applications to high school or college algebra. We will discuss rings, integral domains, and fields, emphasizing along the way connections to polynomials and related functions covered in a typical college algebra course.

Texts: No textbook is required. Instead we will make use of course notes and assignments. Other reading materials may be distributed virtually as needed.

Expectations: As you know, our course consists of 2 hours in class (virtually), and 1 hour of online instruction. My goal with the in-class instruction is to get y'all involved each week, solving problems, and discussing solutions/ideas. Mathematics is largely learned by doing. With that in mind, classes will proceed with me introducing concepts/ideas, and you working problems individually and/or in groups. My goal is for you, the students, to solve most of the problems, produce examples, and take ownership of this material. You will be expected to present solutions to your peers, and critique the solutions presented by your peers. Part of the goal here is to practice teaching, to anticipate points of student confusion, and to improve our teaching.

Without a text, you will need to take complete notes, and your attendance is important. Your notes should include any definitions, theorems and examples presented in class, as well as example problems worked out and presented by you or your fellow classmates along the way.

Some homework will be assigned each week through eCourseware. Some problems will be basic and review some content familiar from high school or college algebra, will others will go deeper into algebraic theory. In all cases the expectation is that you spend a reasonable amount of time attempting each. Talk to your peers, ask me questions, and write up your solutions each week. If you don't have all of the solutions perfect, there will be opportunity to correct them after the in-class discussion. The point is for you to learn from it.

Grading Policy: Grades will be based on your in-class and online presentations and participation, graded homework, and 2 take-home exams. The homework will consist of both MyMathLab grades, and your solutions/critiques for problems posted on eCourseware.

Grade Breakdown:	60 %	2 Exams
	30 %	Homework
	10 %	Class Presentations

The grading scale (rounded to the nearest whole number) is straightforward:

$90\% - 100\%$	:	A	$80\% - 89\%$	:	B
$70\% - 79\%$	:	C	$60\% - 69\%$	:	D
$0\% - 59\%$	:	F			

Other Miscellany: I will send out email emails from time to time with announcements and/or supplemental materials. Be sure that you check your Memphis email regularly (or have it forwarded to your preferred email address) and to regularly check eCourseware.

I have no objection to the use of calculators where appropriate, and we will at times make use of them, along with other software. A TI-83 or better may be helpful, but is not required. A laptop and/or a tablet will not only be helpful, but necessary.

Office hours will be conducted virtually, through zoom. I've set aside the times shown at the beginning for office hours, but do feel free to send a request for a meeting any time and if I'm able, I'll try to accommodate it.

Important Information:
For holidays/university closures, see
http://www.memphis.edu/registrar/calendars/academic/ay2021.php
For COVID-19 Info:
https://www.memphis.edu/msci/news/covid.php