MTH 3110: Abstract Algebra I
Course and Homework Policy

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Office Hours: (subject to change)

Mon:	11-11:50am
Mon:	3:30-4:30pm or various days/times by appointment
Wed:	11-11:50am

COURSE INFORMATION

MTH 3110, Section 001 Abstract Algebra I   Fall 2018

Class Time: MW 2-3:15PM   Location: Science Building 1007

Course Website: http://math.msudenver.edu/_u_/schaeffer-fry/teaching/abstract

Text: *Contemporary Abstract Algebra* by Joseph Gallian. Currently they are on the 9th edition, but older editions are less expensive. So, anything 6th edition and later will be fine - we will work around the differences. Just Google it and see what happens...

REQUIRED COURSE MATERIALS

- textbook: *Contemporary Abstract Algebra* by Joseph Gallian.
- notebook (whatever you are comfortable with) for class notes
- active participation and a positive attitude!

ATTENDANCE AND CLASS POLICY

Students are expected to attend every scheduled class and to actively participate. It is the student's responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during scheduled classes, by email, or through the class pages.

Out of respect for yourself and your fellow classmates, please be prompt to class and stay until class is over. All electronics must be turned off by the beginning of class. This means cell phones, computers, etc. Please come to class ready to work with your classmates and be involved in the learning process!

Your textbook may be helpful but is not required during most classes, unless otherwise stated. It is also in your best interest to bring a notebook (or similar) for taking detailed notes during class.

An act of Academic Dishonesty may lead to sanctions including a reduction in grade, probation, suspension or expulsion.

HOMEWORK, IN-CLASS ASSIGNMENTS, AND QUIZZES

Your assignments score will be worth 35% of your final grade. This will be comprised of regularly assigned homework (possibly including work with the computer algebra system GAP), "FlashQuizzes", and any in-class assignments.

FLASHQUIZZES

There will be quick "FlashQuizzes" throughout the semester, over definitions, small computations, etc. These will be factored into your assignments score.

Regular Homework

Homework is arguably the most important part of the course. It is where you will grapple with the topics and internalize the material. For this reason, **a passing grade will *not* be awarded to any students who have not earned a majority of the homework points**. Always read the assigned pages and make sure to complete and understand all practice problems. Reading and homework assignments will be assigned regularly.

You are highly encouraged to work together - talking through problems with your classmates is a great way to solidify your understanding of the material. **However, keep in mind that your solutions must be your own.** This means that when you go to do your final writeup of your homework, it should be on your own. Your work should be neat and clearly written in mathematical language - this may require multiple drafts of your proofs.

Unless otherwise stated, homework assignments must be handed in at the *beginning* of class on the day they are due.

Redoing Homework

You may redo one problem from each homework assignment for full points. This must be turned in within a week of receiving the original graded assignment.

But Dr. Mandi - What if I completely bomb an *entire* homework assignment?! Because homework and mathematical writing are such an important part of this course, each student will also begin the semester with two "full redos", but will have opportunities to collect more. You can cash a "full redo" in for a second attempt at an entire homework assignment for full credit. Your rewritten assignment will be due one week after I pass back the original graded homework.

But Dr. Mandi - what if I breeze through and ace every single homework assignment?! Up to three unused "full redos" can be cashed in at the end of the semester for extra credit on your homework grade (2% per "full redo").

How to I turn in a redo or full redo? Staple your resubmission (redo or full redo) to your original graded homework - do not write anything on the original after I've turned it back!

What if I just didn't even do the homework to begin with? Alternatively, "full redos" may be cashed in to turn in a homework assignment up to a week late. *Late homework will not be accepted without the use of a "full redo".*

Homework Expectations

In an attempt at full disclosure, here are some important notes about homework in Dr. Mandi's class.

Structure: Problem Sets will include 3 sections:
1. Notation and Definitions to Know: These are things you should spend time making sure you know and understand fully. Those marked with an $*$ will be fair-game for the next FlashQuiz.
2. Practice Problems: Because there is not time in the world for me to grade every single problem you should be doing to learn the material, these are extra problems that do not need to be turned in. (In particular, I will include basic computational problems here.) *However, you may find they are super helpful for studying for exams.*
3. Problems to Turn In: These are the problems I will grade, and will usually involve proofs. There will usually be 3 - 5 such problems each week. See below for more on expectations and

the usual grading scheme for these problems.

Grading Scheme: Usually, the Problems to Turn In will each be graded on a 5-point scale, with points *roughly* allocated as follows:

- 1 point is for making a *legitimate* attempt at the problem.

- 2 points are for the calculations and basic ideas

- 2 points are for the mathematical writing

Certainly some problems may be more involved than others, so the point scheme may differ occasionally.

Expectations

You should think of every problem you turn in as a writing assignment. You have all passed the Proofs course, and in this class you should work toward proficiency in your mathematical writing. Even calculations should be thought of as "proofs" - shown using complete thoughts (i.e. sentences) with explanations and reasoning for each step.

I do not post solutions to homework problems. There are several reasons for this, some related to academic integrity, etc (especially given our "redo" system), but the most important is that I would prefer you to come to me with questions so that I can get a true feeling for your understanding of the material. I write many comments on your homework, which should be taken into consideration (along with coming to me with any questions) to improve your work. Note that the answers to some problems in the book can be found in the appendix.

LaTeX

LaTeX(pronounced "lah-tech") is a system for typesetting mathematical or scientific documents, and is how mathematicians generally write up their research papers, etc. I will award extra credit in the form of one additional "full redo" for any assignment completed using LaTeX.

Though there is a learning curve, there is a huge advantage to using it to typeset your homework (aside from the extra redo!). For example, you don't have to erase and rewrite - just copy/paste, delete, etc! It will also benefit you in the future - if you plan on grad school or another mathematical career, it will be very important for writing up results, but you can also use it to create worksheets, etc if you plan on teaching.

There is a ton of information online about it, but I will post information on obtaining and using LaTeX on the course website, and you can always email or come by to ask questions about it. Possibly the easiest way to get started is to use Overleaf, which is free and compiles your documents automatically online.

REGULAR EXAMS

There will be two exams during regularly-scheduled classes, *tentatively* scheduled for **Monday, September 24** and **Monday, November 5**. Each exam will be worth 20% of your grade. The use of cell phones or any form of cheating will not be tolerated.

MISSED EXAM
POLICY

In general, there will be no make-up exams in the course. However, in complex and unusual circumstances which are beyond your control, a make-up exam may be given on a case-by-case basis. This will require providing a detailed account of the situation and supporting documents. Approval in these cases is at the sole discretion of Dr. Mandi. In addition, if you have a verifiable conflict (e.g. for athletics, etc), you must let me know **before** you miss an exam so that we can work together to schedule a make-up.

FINAL EXAM: The final exam may consist of in-class, take-home, and/or presentation portions. The date, time, and location will be announced later in the semester. It will be worth 25% of your final grade.

HELP   You can get help from me during office hours and from your math-major peers at walk-in tutoring in SI 1046. For information on these and more resources, see `http://mcs.msudenver.edu/student-support`. Please take advantage of these resources, and do not be shy about asking me questions!

SOME SUGGESTED USES OF OFFICE HOURS

Please utilize my office hours. This can be for any questions or comments you have about the course, math in general, etc. If my regular office hours don't work, you are welcome to email me to try to find a time that does, or to email me your questions. Just a few examples of good uses of my office hours (or email) would be:

- to ask question about homework before it is due (*after* you have spent a good amount of time trying to work it out on your own or in a study group!)
- to ask questions about a homework after you've gotten it back (especially if you don't understand why you missed points!)
- to clarify anything you didn't understand from lecture or ask about topics beyond what we see in class
- to ask LaTeX questions
- to ask general questions about math/grad school/research experiences/......!

GRADES   The following grading scheme will be used to calculate the final course grades*:

Item	Percent of Grade
Homework/Quizzes/Class Assignments	35%
Regular Exams	40%
Final Exam	25%

Your course grade will be no lower than the following*:

$\geq 90\%$	$\geq 80\%$	$\geq 70\%$	$\geq 60\%$	less than 60%
A	B	C	D	F

*with the caveat that you will not receive a grade of C or better if you have not obtained at least 50% of the homework points.

STUDENTS WITH DISABILITIES: Metropolitan State University of Denver is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability which may impact your performance, attendance, or grades in this class and are requesting accommodations, then you must first register with the Access Center, located in the Plaza Building, Room 122, 303-556-8387.

The Access Center is the designated department responsible for coordinating accommodations and services for students with disabilities. Accommodations will not be granted prior to my receipt of your faculty notification letter from the Access Center. Please note that accommodations are never provided retroactively (i.e., prior to the receipt of your faculty notification letter.) Once I am in

receipt of your official Access Center faculty notification letter, I would be happy to meet with you to discuss your accommodations. All discussions will remain confidential. Further information is available by visiting the Access center website `http://www.msudenver.edu/access/`.

WITHDRAWING FROM THE COURSE: You may drop the course with a full refund through **Sunday, Aug 26**, and you may drop with 50% refund through **Wednesday, Sept 5**. You may drop with a W by **Friday, Nov 2**.

HOLIDAY INFORMATION There will be no classes on the following days:
- Labor Day: Sept 3
- Fall Break: Nov 19 - 23

Observance of religious holidays follows University policy.

UNIVERSITY POLICIES: Students are responsible for full knowledge of the provisions and regulations pertaining to all aspects of their attendance at MSU Denver, and should familiarize themselves with the following policies:

1. GENERAL UNIVERSITY POLICIES

2. GRADES AND NOTATIONS including WITHDRAWAL FROM A COURSE, ADMINISTRATIVE WITHDRAWAL, and INCOMPLETE POLICIES

Students should be aware that any kind of withdrawal can have a negative impact on some types of financial aid, including scholarships.

3. ACADEMIC DISHONESTY

4. PROHIBITION ON SEXUAL MISCONDUCT

5. ACCOMMODATIONS TO ASSIST INDIVIDUALS WITH DISABILITIES

6. CLASS ATTENDANCE ON RELIGIOUS HOLIDAYS

7. ELECTRONIC COMMUNICATION (STUDENT EMAIL) POLICY

For a complete description of these policies go to `https://mcs.msudenver.edu/policies`

TIPS FOR SUCCESS:
- Come to class, be engaged, and take careful notes
- Take advantage of office hours - I don't bite!
- Start the homework early so you have time to ask questions at office hours
- Work with your classmates - talking through problems together will help you learn the material
- Read the sections in the textbook ahead of time and work through the examples

Keep in mind: I'm here to help you learn. If you have a concern in the class, get stuck, or just need to talk about something you can always email or stop by my office. Remember, I can't help you if I don't know you need help!