

Abstract Algebra I - MATH 3510.002 - Spring 2023
MW 2:00pm - 3:20pm; Room: PHYS 311

Instructor: Steven Widmer

Office: GAB 423B, Email: steven.widmer@unt.edu

Office Hours: Mon/Wed/Fri 10:30am - 12pm; Tue 11am - 1pm; and by appointment.

I should have availability at other times, so please send me an email to set up an appointment outside of office hour times. Office hours are for help with specific problems or for answering questions about the course.

Final Exam: Monday, May 8, 1:30pm - 3:30pm

<http://registrar.unt.edu/exams/final-exam-schedule/spring>

Textbook: *A First Course in Abstract Algebra*, 8th ed. by J. Fraleigh, N. Brand

Course Description : (3 hours) An introduction to algebraic structures including groups, rings, integral domains, and fields.

Prerequisites: Math 3000, Math 2700 (may be taken concurrently)

Grade Policy:

Exam Average	45%
Homework	25%
Final Exam	30%

The grade distributions will be 90% - 100% is an A, 80% - less than 90% is a B, 70% - less than 80% is a C, 60% - less than 70% is a D, less than 60% is an F.

Attendance: Attendance is mandatory and students are expected to attend class meetings regularly. Students are responsible for all information given in class, regardless of their attendance.

Homework: No late homework will be accepted for any reason whatsoever. Homework will be collected each Wednesday. Your homework assignment must be stapled together and ready to turn in at the beginning of class. The lowest two homework scores will be dropped when completing the semester grades. The homework assignments will be updated each week in Canvas to indicate what problems will be due.

Exams: You will have three exams and a comprehensive final exam. Actual exams dates and content will be announced in class, usually at least two weeks before the exam date. The tentative exam dates are Feb. 20, Mar. 29, Apr. 26. Your lowest exam score will be replaced with your final exam score (if it's higher).

Make-up Policy: No make-up exams will be given for any reason. An exam may be taken prior to the scheduled date. You must request for this accommodation via email at least one week prior to day you wish to take the early exam. If you miss an exam you will receive a 0 for that exam and your final exam score will replace the 0.

Academic Dishonesty: Cooperation is encouraged in doing the homework assignments but not allowed on the quizzes/tests/exams. Cheating will not be tolerated. Any student found cheating will receive no credit on the assignment and a report will be filed with the office of academic integrity.

ADA Policy: UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website](https://disability.unt.edu/) (<https://disability.unt.edu/>).

Math is not a spectator sport. You will not learn mathematics from watching your instructor or friends or a screen display ideas and solve problems. You must try the problems, finish problems, ask questions, make mistakes, correct mistakes, put concepts into your own words, and practice, practice, practice.

Note: This syllabus is subject to change as the instructor deems necessary. Any/all changes will be announced during regular class time. It is the responsibility of the student to attend each scheduled class to be informed of these changes.

Course Calendar - 3510 - Spring 2023

This is a tentative calendar and may be changed at any time

Monday	Wednesday
1/16 University Closed: MLK Jr. Holiday	1/18 Sec 1-3 : Intro and Examples
1/23 Sec 4 : Groups	1/25 Sec 4 : Groups
1/30 Sec 5 : Subgroups	2/1 Sec 6 : Cyclic Groups
2/6 Sec 6 : Cyclic Groups	2/8 Sec 8 : Permutation Groups
2/13 Sec 9 : Alternating Groups	2/15 Review for Exam 1
2/20 Exam 1	2/22 Sec 10 : Cosets
2/27 Sec 10 : Lagrange's Theorem	3/1 Sec 11 : Direct Products
3/6 Sec 11 : Finitely Generated Abelian Groups	3/8 Sec 13 : Homomorphisms
3/13 Spring Break	3/15 Spring Break
3/20 Sec 14 : Factor Groups	3/22 Sec 14 : Computations & Simple Groups
3/27 Review for Exam 2	3/29 Exam 2
4/3 Sec 16 : Group Actions	4/5 Sec 16 : Group Actions
4/10 Sec 17 : Counting	4/12 Sec 18 : Rings and Fields
4/17 Sec 18 : Rings and Fields	4/19 Sec 19 : Integral Domains
4/24 Review for Exam 3	4/26 Exam 3
5/1 Fermat's Theorem	5/3 Review for final exam
5/8 Final Exam at 1:30pm	5/10