

## Math 321: Abstract Algebra

Summer 2022

George Mason University

**Course meetings:** MTWR 10:30-12:35, Planetary 206

**Instructor:** Martha Hartt, [mhartt@gmu.edu](mailto:mhartt@gmu.edu),  
Exploratory Hall, Room 4311

**Office hours:** MTWH 1pm-2pm

**Prerequisites:**

Both Math 300 and either Math 213 or Math 215 are required prerequisites.

**Course materials:** The textbook is

*Contemporary Abstract Algebra, 9th edition, by Joseph A. Gallian*

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**Course topics and goals:**

The course topics include the theory of groups and rings. We will cover most of chapters 0-15 of the book, time permitting. That means on average, we will cover slightly more than one chapter per day. Course goals include:

- content mastery
- mathematical literacy
- proof-writing
- working with examples and counterexamples

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**Structure of the course:**

Students are expected to attend class every day, which will consist of 1-1.75 hours of lecture followed by group-work.

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**Grading:**

Each student receives a final numerical score based on the following breakdown:

Assessment	Percentage of final grade
Participation	10%
Homework	40%
Oral Midterm	20%
Oral Final	30%

A student's numerical grade is then converted to a final letter grade using the following scale:

A-: 89.5 - 92.49; A: 92.5 - 97.49; A+: 97.5 - 100  
B-: 79.5 - 82.49; B: 82.5 - 87.49; B+: 87.5 - 89.49  
C-: 69.5 - 72.49; C: 72.5 - 77.49; C+: 77.5 - 79.49  
D: 59.5 - 69.49; F: 0 - 59.49.

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### Homework Assignments:

Each class period some homework problems will be assigned. The homework assigned each week Monday-Thursday will be due the following Tuesday at the beginning of class. **No late work will be accepted.** Students are encouraged to work on assignments together and come to office hours to work through assignments with me. However, use of the internet is not permitted on homework assignments. Homework assignments should be either typed up using *L<sup>A</sup>T<sub>E</sub>X* or **legibly** handwritten. Please note that points may be deducted for solutions that are not legible or unorganized.

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### Exams:

Exams are scheduled as follows:

Assessment	Date	Time
Oral Midterm	<b>Thursday June 9</b>	during class
Oral Final	<b>Thursday June 23</b>	during class

All students are expected to complete exams as scheduled. **Any conflicts must be communicated to the instructor immediately.** Any accommodation of conflicts is at the sole discretion of the instructor.

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### Academic Integrity:

You are expected to follow the GMU Honor Code:

<https://oai.gmu.edu/mason-honor-code/>

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### Services and accommodations:

If you have a learning or physical difference that may affect your academic work, please see me and contact the Office of Disability Services (ODS) at 993-2474, <http://ods.gmu.edu>. All academic accommodations must be arranged through the ODS.