

Math 111A: Abstract Algebra,
Summer 2023

Instructor information: Vardan Oganessian, vaoganes@ucsc.edu
Office Hours (online): Monday 11:30 - 12:30, Friday 12:00 - 1:00, or by appointment

Lectures (online): MWF 10:00 AM - 11:05 AM

Textbook (optional): Topics in Algebra, 2nd ed, by I.N. Herstein.

In fact we will study some standard things and almost any textbook will work for our course.

TA Office Hours: To be determined.

Weekly schedule (tentative):

Week 1: Definition of a group, examples of groups, subgroups.

Week 2: Subgroups and Lagrange Theorem.

Week 3: Normal subgroups and homomorphisms.

Week 4: Homomorphisms.

Week 5: Automorphisms and Cayley's Theorem.

Week 6: Permutation groups and class equations.

Week 7-8: Sylow's theorem.

Week 9-10: Direct products.

Homework: Homework will be assigned on Canvas (see Announcements). The lowest homework grade will be dropped.

The homework will be partially graded for completeness.

Midterm: Scheduled for Friday July 14.

Final Exam: I don't have this information right now. I will let you know as soon as the registrar schedule it.

Course grade: Course grade will be determined by the following scale:

Homework 35%, Midterm 30%, Final 35%

Extensions: Extensions: There are NO EXTENSIONS without appropriate justification. Length of extension can vary based on the circumstances.

DRC Remote Accommodations: UC Santa Cruz is committed to creating an academic environment that supports its diverse student body. If you are a student with a disability who requires accommodations to achieve equal access in this course, please submit your Accommodation Authorization Letter from the Disability Resource Center (DRC) to me privately during my office hours or by appointment, preferably within the first two weeks of the quarter. At this time, I would also like us to discuss ways we can ensure your full participation in the course. I encourage

all students who may benefit from learning more about DRC services to contact the DRC by phone at 831-459-2089 or by email at drc@ucsc.edu.

CAPS (Counseling and Psychological Services): This is a stressful time, so if you are in distress, managing heightened stress and anxiety, or want to get more support and a counselor's perspective on something you are going through, CAPS provides a variety of services for your needs, please visit their website for more information <https://caps.ucsc.edu>. Academic Integrity: Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree. All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC. For the full policy and disciplinary procedures on academic dishonesty, students and instructors should refer to the Academic Integrity page at the Division of Undergraduate Education.

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