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MATH 301: Abstract Algebra I

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Instructor	Nicholas Vlamis	Office	507 Kiely Hall
E-mail	nicholas.vlamis@qc.cuny.edu	Office Hour	Monday/Wednesday 4–5pm
Class	MW 1:40–3:30pm, 277 Kiely Hall	Course Website	301s23.nickvlamis.com

Course Description

This is standard first course in abstract algebra. We will begin with the basics of elementary number theory (that is, the structure of the integers) and then move on to the study of groups. We will end with a brief introduction to the basic structure of rings.

Prerequisites

The official prerequisite for the course is Math 231: Linear Algebra.

Course Textbook

We will use the 2021 edition of *Abstract Algebra* by Thomas W. Judson. This book is freely available to download at <http://abstract.ups.edu/download.html>. If you prefer (as I do) to have a physical copy of the book, it can be purchased via Amazon for around \$24, see <http://abstract.ups.edu/purchase.html>.

Optional text: *Contemporary Abstract Algebra* by Joseph A. Gallian.

Course Website

All course content will be accessed via our course website: <https://301s23.nickvlamis.com>. You should plan to regularly check this site for updates.

Assessment

Your course grade will be determined from the following categories and weights:

Homework	20%
Exams	75%
Engagement	5%

At the beginning of the course, a document will be provided explaining the homework policy, including expectations and grading. Your assignment with the lowest score will be dropped.

There will be three exams of equal weight, so each is worth 25% of your total grade. The first exam will be **Wednesday, March 1**; the second exam will be **Monday, April 3**. The third exam will be given during the final exam slot for the course: **1:45–3:45PM on Wednesday, May 17 in 277 Kiely Hall**. The final exam will **not** be cumulative.

Expectations

Engagement: You are expected to be an active member of the class. This can take many shapes, including (but not limited to) asking/answering questions in class or on Discord, working diligently on problems in class (when appropriate), and presenting solutions to problems. As noted above, your engagement will account for a portion of your grade. I will provide progress reports on each of the two exams during the semester.

Office Hour: My office hours will be held in my office in Kiely Hall. This time will be student driven, so please come with questions—you can ask me anything you like. You may also make an appointment to meet with me at a time outside of office hours if necessary.

Academic Honesty: It is expected that all submitted work is solely your work. Even if you work on an assignment with your peers, the work you turn in must be in your own words: it is not acceptable to turn in work identical to a peer's. I reserve the right to request an individual meeting with any student to discuss their solution to any problem. Anyone caught cheating will—at minimum—receive no credit for the assignment.

Cross-listing considerations: This course has been cross-listed as both an undergraduate course (MATH 301) and a graduate course (MATH 601). The class sessions will be the same for students enrolled in the two classes; however, students enrolled in MATH 601 will have higher expectations, as outlined below. Graduate students must enroll in MATH 601 and not MATH 301. Undergraduate students may decide to enroll in either MATH 301 or MATH 601. If an undergraduate student enrolls in MATH 301, they will not be able to enroll in MATH 601 in the future, and MATH 301 cannot count toward a graduate degree at Queens College. If an undergraduate student enrolls in MATH 601 and is an Accelerated Masters student, MATH 601 may count as 3 of the maximum 12 credits toward their Masters Degree. If an undergraduate student enrolls in MATH 601 and is NOT an Accelerated Masters student AND MATH 601 is not one of the courses that fulfills their MATH degree requirements AND MATH 601 is not used toward the 120 credits in their undergraduate degree, then MATH 601 may count as 3 of the maximum 12 credits toward an eventual Queens College Master's Degree. Please contact me if you have any questions about this policy.

Expectations for graduate students: Students taking MATH 601, the graduate version, will be held to a higher standard when being graded. Also, additional homework problems will be assigned and the exams will be slightly different (in particular, they will have at least one more challenging problem).

Student Concerns: Any student with a disability or other special circumstances should make an appointment and discuss this with me. Students with disabilities needing academic accommodation should register with and provide documentation to the Office of Special Services. You can reach them by phone at 718-997-5870 (you may need to leave a voicemail) or via the internet at <https://www.qc.cuny.edu/StudentLife/services/specialserv/Pages/default.aspx?> The Office of Special Services will provide a letter for you to give to me indicating the need for accommodation and the nature of it. This should be done during the first week of class. For more information about services available to Queens College students, contact the Office of Special Services.

This document is a contract. Your enrollment in the course will be taken as your acknowledgement and acceptance of the contents of the syllabus.