Instructor: Dr. Anna Haensch
Office: 418 College Hall
Email: haenscha@duq.edu
Class Meeting: T, W 3:00-4:15, Fisher 607
Office Hours: T 1:45-4:00, W 1:00-2:50, and by appt.
Course Website: http://www.mathcs.duq.edu/~haensch/Math411.html

Course

The goal of *Abstract Algebra I*, is to provide an introduction to algebraic structures with emphasis on groups, including subgroups, abelian and cyclic groups, permutation groups, cosets and quotient groups, as well as homomorphisms and isomorphisms. Prerequisites: MATH 250, MATH 215, MATH 310.

Writing

This course carries a "W" designation, meaning that it is a writing intensive course. A primary focus of this class is to learn how to write mathematics well, particularly in proofs. This includes writing in complete, coherent sentences, using proper mathematical style and notation, and reasoning correctly. The subject of mathematical writing will be regularly discussed in class, with many suggestions and guidelines for you to use in your work; it is imperative that you pay close attention to the many details we will consider. The quality of your presentation and writing will be assessed in all of your graded papers. In particular, each homework assignment will include a portion of formal proof writing, as well as at least 75% of each of Exams 1 and 2 and the Final. Therefore, *at least* one third of the assessment in this course will be based on writing assignments.

Supplies

The text for this course is *Contemporary Abstract Algebra,* by Joseph Gallian, 8th Edition.

Grading

Homework	30%
Exam 1	20%
Exam 2	20%
Final Exam	30%

90-100%	A
80-89%	B
70-79%	C
60-69%	D
below 60%	F

Note: I will give ± grades accordingly. If in doubt, please come and ask me.

- **Homework:** Each week there will be an homework problem set consisting of 4-6 problems. You may work together on the homework, but each student is responsible for submitting their own write-up. Solutions are due in my office by 5:00 pm every Thursday.

- **Exams:** Exams 1 and 2 will be scheduled one-third and two-thirds into the semester, respectively. The *cumulative* final exam will be on Thursday, Dec. 15, 1:30-3:30 in our usual classroom.

Tips for Success

- **My Office Hours:** If you're feeling lost, please come see me in office hours. I'm always happy to answer questions about classwork or homework problems, with the one stipulation that you aren't allowed to write anything down in my office. But you can come and see me as many times as you like!

- **Work Together:** I strongly encourage working together; collaborating on homework is a great way to maximize your learning. Just remember that each person is responsible for submitting their own homework assignment each week. #teamworkmakesthedreamwork

- **Course Website:** Check the course website often for updated homework assignments and course announcements. I will always post new problem sets at least one week before they are due.

Course Policies

- **Cell Phones:** The use of cell phones is strictly forbidden in the class.

- **Academic Integrity:** You are encouraged to work together, but any work you submit should be your own. Any cheating in the form of copying, plagiarizing, or allowing others to do so, will be grounds for receiving an F in the course.

- **Disabilities:** It is the policy of Duquesne University to provide reasonable accommodations to students with documented disabilities. If you require accommodations in this class, please contact the Office of Freshman Development and Special Student Services in 309 Duquesne Union (412-396-6657) as soon as possible.