Syllabus – Introduction to Abstract Algebra – Fall 2024

Instructor / Class Information

Instructor	Dr. Vince Guingona
	vguingona@towson.edu
	YR 226
Class Times	Monday and Wednesday, 10:00am – 11:50am, YR 130
Office Hours	Monday and Wednesday, 2:00pm – 3:00pm
	Friday, 10:00am – 11:00am
	Or by appointment
Exam Dates	Wednesday, September 25, 10:00am – 10:50am
	Wednesday, October 23, 10:00am – 10:50am
	Wednesday, November 20, 10:00am – 10:50am
Final Exam	Monday, December 16, 8:00am – 10:00am

Course Information

Prerequisites: MATH 265, MATH 267, and MATH 274.

Course Description: Elementary number theory; congruencies, groups up to and including the isomorphism theorems, commutative rings, polynomials, unique factorization, irreducibility, finite fields.

Course Objectives: In this course, we will study algebraic structures, including groups, commutative rings, fields, the integers, and polynomial rings. This course will be a "proof based" course, focusing on reading and writing formal proofs in the algebraic setting.

Textbook: *Abstract Algebra* by Beachy (recommended text).

Calculator Policy: Calculators will not be allowed on exams and quizzes.

Grading Policy

Your course grade will be based on the following assessments:

Component	Homework	Quizzes	Exam 1	Exam 2	Exam 3	Final Exam
Value	15%	15%	15%	15%	15%	25%

The course average will then be used to determine your course grade from the table below.

Precent	0-59	60-66	67-69	70-76	77-79	80-82	83-86	87-89	90-92	93-100
Grade	F	D	D+	C	C+	B-	B	B+	A-	A

Exams, Quizzes, and Homework

Exams: There are a total of three midterm exams, each worth 15% of your overall grade. Exams will fall on Wednesdays and cover the first half of the class period (the other half is usual lecture). The exact date of each exam as well as its coverage can be found on the *Timeline*. The use of external resources during exams, such as calculators, cell phones, computers, smart watches, and so on, are prohibited.

Quizzes: During weeks on which there is no exam, we will have a 15-minute quiz at the beginning of class. There are a total of 10 quizzes, each worth 1.5% of your course grade, for a total of 15%. The exact date and coverage of each quiz can be found on the *Timeline*. As with exams, the use of external resources during quizzes is prohibited.

Homework Assignments: We will have weekly homework assignments, posted on Blackboard. These will be due at the beginning of class on Mondays, and should be submitted through Blackboard. There will be a total of 14 homework assignments throughout the semester, totaling 15% of your overall course grade (so each assignment is approximately 1%). You may work with other students on your homework assignments, but each student must turn in their own copy. The exact due date and coverage of each homework assignment can be found on the *Timeline*.

***TeX* Bonus:** Although not required, I strongly recommend using *LaTeX* to type up your homework solutions. I will give you 1 point (out of 10) in extra credit on each homework assignment for using *LaTeX*. *LaTeX* is a type-setting program for mathematics. One easy way to get started is to visit Overleaf and make a free account. They even have nice tutorials for using LaTeX. Alternatively, you can see the videos I made for my MATH 267 Spring 2022 class: Video 1, Video 2.

Other Policies

Attendance: As in all TU classes, regular class attendance is expected. If you are absent from class, it is your responsibility to get any missed information from your classmates.

Make-Ups and Late Work: Late homework assignments will not be accepted, and no make-up quizzes will be given. In case of a documented excused absence that covers a homework assignment, or a quiz, you will be exempted from that assessment and the respective grade simply will not be a part of your grade record. If you have a documented excused absence that covers an exam, I will work with you to find a reasonable alternative accommodation.

It is TU policy to excuse student absences for the following reasons: illness or injury when the student is unable to attend class; death of a family member (see the Student Bereavement Procedure on the website); religious observance where the nature of the observance prevents

the student from attending class; participation in University activities at the request of University authorities; and compelling verifiable circumstances beyond the control of the student. Absences that do not fall in any of these five categories are unexcused. In case of a scheduled excused absence, the student must provide documentation at least one week prior to the date of the absence for it to be excused; otherwise, documentation must be provided as soon as possible.

Academic Integrity: Exams and quizzes are to be completed strictly individually using only the material provided by your instructor. Students are expected to be familiar with TU's Student Academic Integrity Policy, especially the sections that define plagiarism, cheating and complicity (II.B-II.E) and describe the possible grade penalties (V.C). You may work with other students in the course on the homework assignments, but each student must submit their own version.

Accessibility and Disability Services (ADS): This course is in compliance with Towson University policies for students with disabilities. Students with disabilities are encouraged to register with ADS at:

Cook Library, Academic Commons, Suite 321
410-704-2638
https://www.towson.edu/accessibility-disability-services/

Students who suspect that they have a disability but do not have documentation are encouraged to contact ADS (see the ADS website) for advice on how to obtain appropriate evaluation. A memo from ADS authorizing your accommodation is needed before any accommodation can be made.

Diversity: In accordance with TU, FCSM, and departmental objectives, everyone in this course is expected to be respectful of each other without regard to race, class, linguistic background, religion, political beliefs, sex, gender identity or expression, sexual orientation, ethnicity, age, veterans status, or physical ability. If you feel that these expectations have not been met, please, contact Dr. Felice Shore.