

MATH 263—Discrete Mathematics

Spring 2024 ~ Section 103 ~ MW 6:30–7:45 p.m. ~ YR 219

The basics

Instructor: Ben Cohen

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Office: YR 374 (a.k.a. the “corner office”)

Office hours: MW 7:45–8:15 p.m. and by appointment

Course description

Sets, logic, induction, functions, relations, sequences, recursion, combinatorics, graphs and trees, matrices with an emphasis on applications in computer science.

Prerequisite: completion of COSC 236 with a grade of “C” or higher.

Textbook

Discrete Mathematics with Applications, 5th ed., by Susanna S. Epp (Cengage, 2020). These materials are integrated into our course in Blackboard. Through RedShelf you will immediately have access to your online course materials—digital textbook and online homework—for a free period through the add/drop deadline. After the free access period, your student account will be charged by the University Billing Office unless you have opted out by that date. The direct access pricing is the lowest possible price available for access to Cengage WebAssign for this course.

Course learning outcomes

This University Core course is designed to meet the following four learning goals.

1. Construct and evaluate logical arguments.
2. Apply and adapt a variety of appropriate strategies to solve mathematical problems.
3. Recognize and apply mathematics in contexts outside of mathematics.
4. Organize and consolidate mathematical thinking through written and oral communication.

Grading

Your final grade will be based on your success in meeting the goals and objectives of this course as demonstrated throughout the semester and in the course assignments and examinations. The breakdown is as follows.

- Midterm exams: 18% each (54% total)
 - Exam 1 (chapters 2 and 3): Monday, Feb. 26
 - Exam 2 (chapter 4): Monday, April 1
 - Exam 3 (chapters 5–7): Monday, April 29
- Final exam: 26%
 - Saturday, May 18, 10:15 a.m.–12:15 p.m.
- Homework: 20%
 - The lowest homework score (among serious attempts only) will be dropped.

Final grades will be assigned based on the semester average rounded to the nearest percentage point (based *only* on the digit in the tenths place).

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

Please note that any requests for extra credit or other special consideration in assigning grades must regrettably be declined.

Exams

The three midterm exams will be administered during class on the dates specified earlier; if in-person classes are not held on an exam date (e.g., the university closes early due to weather and cancels evening classes), the exam will be administered during the next in-person class meeting. **Note that the final exam will be administered on a Saturday. If you have another final exam at the same time, please see me as soon as possible.**

Homework

Homework will be assigned approximately every 1–2 weeks. These assignments are to be completed on paper and submitted at the start of a specified class. You are welcome to work with your peers; I ask, however, that each student write up and submit their own individual assignment.

If class does not meet on an assignment due date, the due date will automatically be extended to the next class meeting.

Late work will be accepted as outlined under “Attendance and make-up work.”

Academic integrity

The academic integrity policy for this course is consistent with the TU Academic Integrity Policy, which can be reviewed at <https://www.towson.edu/about/administration/policies/03-01-00-student-academic-integrity-policy.html>.

While you are welcome to seek additional resources outside of class to help you understand the material, all work that you submit must be your own. The use of “homework help” or file-sharing services such as Chegg and CourseHero, as well as the use of generative AI (e.g., ChatGPT) to help complete assignments, is a violation of the TU Academic Integrity Policy.

Communication

In accordance with TU policy, you are expected to check your email daily. (Please communicate with me via email and not via Blackboard message.)

Note that due to loopholes in federal privacy law (i.e., FERPA), I cannot share details about grades via email. (You can thank ESPN for that. Yes, really. Look up *State ex rel. ESPN, Inc. v. Ohio State University*.)

Attendance and make-up work

It is the policy of the university to excuse student absences for the following reasons: illness or injury when the student is unable to attend class, 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.

In the event of an excused absence due to illness or other unforeseen circumstances, you are responsible for contacting me within 24 hours (i.e., by 6:30 p.m. the following day); documentation may subsequently be requested.

Homework: A student who is absent for an excused reason on a day an assignment is due will typically be expected to submit the assignment at the start of the following class. Each student will additionally receive one “free pass” that can be used at any point in the semester to turn in an assignment late (following the same timeline as an excused absence) when none of the above-mentioned circumstances apply. Assignments otherwise not submitted by the due date will receive a score of 0, which will not be eligible to be dropped.

Exams: A make-up exam will be offered only in the event of an excused absence; an unexcused absence on an exam day will result in the assignment of a score of 0 for the missed exam. A make-up exam must occur no later than one week after the missed exam.

Exceptions to these timelines and policies may be granted when circumstances make an immediate return to class impossible or impractical.

Tutoring and Learning Center

The Tutoring and Learning Center (TLC) makes tutoring services for this course available on a drop-in basis and by appointment. For detailed information, visit the TLC’s website at <https://www.towson.edu/tutoring-learning>.

Counseling resources

The Towson University Counseling Center (TUCC) provides free and confidential counseling services. For more information about the TUCC, please visit its website at <https://www.towson.edu/counseling>.

Accessibility and Disability Services

This course complies with Towson University policies for students with disabilities. Students with disabilities are encouraged to register with Accessibility and Disability Services (ADS) at (410) 704-2638 (voice) or (410) 704-4423 (TDD). Students who suspect that they have a disability but do not have documentation are encouraged to contact ADS for advice on how to obtain appropriate evaluation. *A memo from ADS authorizing your accommodation is needed before any accommodation can be made.*

To learn how to arrange for any appropriate accommodations, students with disabilities should visit the Accessibility and Disability Services (ADS) webpage at <https://www.towson.edu/accessibility-disability-services>.

Title IX policy

Towson University (TU) is committed to ensuring a safe, productive learning environment on our campus that does not tolerate sexual misconduct, including harassment, stalking, sexual assault, sexual exploitation, or intimate partner violence [Policy 06.01.60]. It is important for you to know that there are resources available if you or someone you know needs assistance. You may speak to a member of university administration, faculty, or staff, but keep in mind that they have an obligation to report the incident to the Title IX Coordinator.

It is a goal that you feel able to share information related to your life experiences in classroom discussions and in one-on-one meetings. However, it is required to share information with the Title IX Coordinator regarding disclosures, but know that the information will be kept private to the greatest extent possible. If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the TU Counseling Center 410-704-2512 to schedule an appointment, and locally within the community at TurnAround, Inc., 443-279-0379 (24-hour hotline) or 410-377-8111 to schedule an appointment.

Mathematics Department diversity statement

Department of Mathematics Commitment to Diversity: Towson University values diversity and fosters a climate that is grounded in respect and inclusion. Everyone participating in this course is expected to treat all others in accordance with this vision and policy. TU's diversity tenets include sex, sexual orientation, race and ethnicity, color, nationality, gender identity or expression, mental or physical ability, religious affiliation, age, and veteran status. If you feel that these expectations have not been met, please contact the Math Department's Diversity representative, Dr. Elizabeth Goode, at egoode@towson.edu.