MATH 1030Q: Elementary Discrete Mathematics

Fall 2026 ~ UConn Hartford Campus

Instructor: Maureen Ringrose

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Class Time: Sept. 3 - Dec. 10, 2026
Thursdays 4:00 pm - 6:30 pm

Location: HTB Room 227

Office Hours: after class or virtual, by appointment

COURSE OVERVIEW

Course Description

Math 1030Q Elementary Discrete Math: Topics chosen from discrete mathematics. May include counting and probability, sequences, graph theory, deductive reasoning, the axiomatic method and finite geometries, number systems, voting methods, apportionment methods, mathematics of finance, number theory. 3 credit hours

COURSE INFORMATION and EXPECTATIONS

Required Materials and Text:

1. The *FREE* textbook for the course is "Math in Society" by David Lippman. http://www.opentextbookstore.com/mathinsociety/

2. Calculator not connected to the internet for quizzes and the final exam.

3. We will use MyOpenMath to do online homework: https://www.myopenmath.com/index.php

4. **Laptop and/or Tablet with stable internet connection.** Ensure your device can run Desmos, Geogebra and similar applications. Have access to Microsoft Excel or Google Sheets.

Missing Class: It is vital that you attend all classes. In the unfortunate event that you are unable to attend part or all of a particular class, you are to send an email to me as soon as possible and make me aware of the situation. We will discuss what additional assignments can be completed to make up for the missed class time. This is a professional courtesy and does not excuse the absence or tardiness.

Attendance: This course covers a lot of material, and you are expected to do an appropriate amount of work outside of class, which may consist of more than just the homework problems. There will be ample opportunities for questions and review, which are designed to lessen the burden of work outside of the classroom and give you a chance to ask questions as you come across them and work closely with me and other students.

If you absolutely need to miss class on one or more instances, please discuss this with me as soon as possible. You are responsible for any material that you miss.

Late Work Policy: Late work will not be accepted or graded unless you speak with the instructor.

Missed Quiz: If you miss a quiz, you will have one week in which to make up the quiz with exceptions made on a case-by-case basis. If not done by then, you will receive a score of zero.

Outside preparation: Read your textbook. Read through any explanation and the examples. Work out the examples for yourself. You will need a calculator.

How to Succeed in This Course:

- Complete all assignments
- Print the schedule and/or set due date reminders
- Read through the material BEFORE the week begins to get an idea of what we will cover (see course schedule). This will help you to follow the topics and ideas more closely and ask questions that will better help you to understand the concepts and mechanics.
- Practice problems regularly and beyond what is on the homework
- Make sure to attend the live classes and actively participate (take notes, ask questions, etc.)
- Read and attempt the textbook examples on the week's content while studying
- Watch the ample videos provided on MyOpenMath

COURSE ASSIGNMENTS

Homework: Mathematics is best learned over time and with regular practice, and most of this learning occurs outside of the classroom. I encourage you to try and do as much work as you can without looking at your book and notes, which will be incredibly beneficial in diagnosing what you need to practice most while studying for the quizzes.

Quizzes: We will cover seven chapters in this course, and there will be a quiz at the end of each chapter on the following class that will be completed in groups. You will be expected to turn in your own work for each quiz and list the names of any other students that you worked with on the quiz, with at most 3 people per group. No resources other than those explicitly allowed may be used to complete the quizzes. The quizzes will take place during the scheduled class time. I will bring a printed copy of the quiz for everyone, and you should plan to submit your quiz within an hour. Work MUST be handwritten. Any group members that submit identical documents (identical phrasing, handwriting, etc.) will receive zeros. We will discuss more details as we near the first quiz. Your lowest score on one (1) quiz will be dropped at the end of the semester. If you need to reschedule a quiz for any reason, please talk to me immediately.

Final Exam: A comprehensive final exam will occur during finals week as scheduled by the University. The final exam will be completed independently.

SCHEDULE OF ASSIGNMENTS

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Week #	Date of Class	Topics Covered/Assignments Due this day
1	Sept. 3	Voting Methods, Part 1 (pgs. 35-42, stop at Borda Count)
2	Sept. 10	Voting Methods, Part 2 (pgs. 42-52)
3	Sept. 17	Weighted Voting Systems (pgs. 59-69) Voting Methods HW due **Voting Methods Quiz**
4	Sept. 24	Apportionment, Part 1 (pgs. 75-83) Weighted Voting HW Due **Weighted Voting Quiz**
5	Oct. 1	Apportionment, Part 2 (pgs. 84-90)
6	Oct. 8	Graph Theory, Part 1 (pgs. 117-132, stop at Hamiltonian Circuits) Apportionment HW Due **Apportionment Quiz**
7	Oct. 15	Graph Theory, Part 2 (pgs. 132-145)
8	Oct. 22	Finance, Part 1 (pgs. 197-204, stop at Annuities) Graph Theory HW Due **Graph Theory Quiz**
9	Oct. 29	Finance, Part 2 (pgs. 204-221)
10	Nov. 5	Scheduling, Part 1 (pgs. 155-163, stop at Critical Path Algorithm) Finance HW Due **Finance Quiz**
11	Nov. 12	Scheduling, Part 2 (pgs. 163-168)
12	Nov. 19	Probability, Part 1 (pgs. 279-289, stop at and skip Bayes' Theorem) Scheduling HW Due **Scheduling Quiz**
13	Dec. 3	Probability, Part 2 (pgs. 293-309)
14	Dec. 10	Probability HW Due **Probability Quiz**
	Final Exam TBD	

EVALUATION

Grading:

Homework 20% + Chapter Quizzes 60% + Final Exam 20% = Total Score out of 100%

Grading Scale

Total Point %	Grade	Total Point %	Grade	Total Point %	Grade
92.5 to 100	A	79.5 to 82.49	B-	66.5 to 69.49	D+
89.5 to 92.49	A-	76.5 to 79.49	C+	62.5 to 66.49	D
86.5 to 89.49	B+	72.5 to 76.49	C	59.5 to 62.49	D-
82.5 to 86.49	B	69.5 to 72.49	C-		

COURSE POLICIES

INCOMPLETES

Department policy strongly discourages incompletes, except for extreme circumstances (most often involving one's health or the health of a family member). If the need to consider this option arises, please contact me as soon as possible.

SPECIAL NEEDS

Every effort is made to accommodate students with documented special needs. Please see me during the first week of class so we can discuss any needed modifications and/or accommodations. The relevant policies can be found on UConn's A-Z index site map under disabilities. Students with disabilities must be registered with the UConn Center for Students with Disabilities in order for appropriate classroom accommodations to be provided.

Academic Integrity: Please respect your work, and the work of others. Cheating will be taken seriously. Examples of things that will be addressed include, but are not limited to, communicating with anyone not explicitly allowed during any quiz or exam, representing another person's work as your own (this includes copying or paraphrasing a solution from a friend, solution manual, tutor, or website), or bringing unauthorized materials to any quiz or exam. Consequences may include, but are not limited to, a score of zero on the assignment, quiz, or exam, or a grade of F in the course. To read UConn's full policy on Academic Integrity, visit community.uconn.edu/the-student-code-appendix-a/.

"Academic misconduct is dishonest or unethical academic behavior that includes, but is not limited to, misrepresenting mastery in an academic area (e.g., cheating), failing to properly credit information, research, or ideas to their rightful originators or representing such information, research, or ideas as your own (e.g., plagiarism)."