

# Course Syllabus – Spring 2025

CSCI 1900 - Math for Computer Science

# The Stuff You're Looking For...

#### **Contact Information**

Instructor: William H. Rochelle (Rook)
Email: rochellew@etsu.edu
Office: BlueSky 2.2176

#### Office Hours

TBD:

### Class Meeting Schedule

Meeting Days:Monday & WednesdayMeeting Time:1:30pm – 3:30pmLocation:BlueSky 2.XStart Date:August 26, 2024End Date:December 12, 2024

### **Prerequisites**

- MATH 1530, MATH 1720, or MATH 1910

# Weighted Averages for Assignments

Homework: 15%

Quizzes 10%

Attendance: 15% Exams: 60%

#### Awarded Letter for Earned Grade

A (4.0): 93 or above A- (3.75): 90-92 B+ (3.25): 87-89 B (3.0): 83-86 B- (2.75): 80-82 77-79 C+ (2.25): 73-76 C (2.0): C- (1.75): 70-72 D+ (1.25): 67-69 60-66 D (1.0): F(0): 60 or below

<sup>\*</sup> Be sure to review "Other Grading Policies" below.

# **Course Description**

Provides a working knowledge of set theory, mathematical induction and recursion, relations and digraphs, functions, trees and languages, finite-state machines, and languages and how these topics are applied to the practice of computer science. Students who are required to take learning support math must complete it before taking this course.

# Course Learning Outcomes

The course is meant to instruct students on the mathematical principles used in computer applications. With this background, we expect students completing this course to be able to:

- understand examples and perform operations on sets, functions, and relations; (Shared Outcome 4a)
- apply propositional and predicate logic, and matrices using the appropriate terminology; (Shared Outcome 4a)
- effectively use formal logic proofs and logical reasoning to solve problems; (Shared Outcome 4a)
- model problems in computer science using graphs and trees; and (Shared Outcome 4a, Computer Science Outcome 1)
- relate and apply these concepts to practical applications. (Shared Outcome 2b, Shared Outcome 4a, Computer Science Outcome 1)

# Required Materials

#### Textbook:

Discrete Mathematics and its Applications, Eighth Edition, by Kenneth H. Rosen, ISBN: 978-1-259-67651-2

### **Assessment Policies**

The following is a description of the assessments to be used to calculate a student's final grade in the course.

**Online Quizzes:** An online quiz will be given for each of the topics throughout the semester (see course schedule). These quizzes will be conducted via D2L and contain questions comparable to questions found on the written exams. Below are some details regarding the quizzes.

- Each quiz will open at the conclusion of Wednesday's class.
- Each guiz will be due by 11:59 PM the following Monday.
- Each quiz will have an enforced time limit.
- Each quiz will have the number of attempts set to one.
- There will be no provisions made for missed or late work.
- Without exception, all quizzes are to be done on an individual basis

**Written Exams**: There will be four exams given during the semester, each graded on a 100-point scale and carrying equal weight toward the calculation of the student's final grade. The tests will consist of several short and long-answer questions. Additional details regarding each exam will be provided during the scheduled review days (see course schedule). The exams may include any lecture material covered in the lectures, assigned readings, or exercises, even if the material was not directly covered in the lecture.

# Late Work Policy

Late Penalties: No allowances will be made for work submitted late without suitable documentation explaining the university-approved absence to the instructor. More information can be found in ETSU's university Attendance Policy.

#### **Turnitin Plagiarism Detection**

Turnitin is a web-based originality checking service. It searches more than 4.5 billion publicly accessible Internet sites, millions of documents from ProQuest databases, the Gutenberg collection of literary classics, and several million student papers submitted to Turnitin since 1996. ETSU faculty may use Turnitin to help students develop their writing and citation skills and to ensure academic integrity. Any instance of plagiarism detected by Turnitin will be reviewed by the instructor to determine if an instance of academic misconduct has occurred.

#### **Grade Appeal Process**

A student may appeal a course grade if the student has evidence that the grade was assigned in a malicious, capricious, erroneous, or arbitrary manner. Please review ETSU's grade appeal process here:

https://catalog.etsu.edu/content.php?catoid=46&navoid=1906#grade-appeal-policy

# **Expectations and Other Course Policies**

Students should conduct themselves professionally by showing mutual respect between each other, the instructor, and other faculty. Professional behavior includes arriving on time, arriving prepared for class, paying attention when others are speaking, and fostering an inclusive and friendly environment for other students. Students who are unable to conduct themselves professionally and with mutual respect for other students or the instructor will be asked to leave the classroom.

This class meets in-person twice a week in a synchronous lecture format. Students are highly encouraged to ask for help during office hours.

The Office of Post-secondary Education, Department of Education in Code of Federal Regulation (CFR) 34 Section 600.2 states that **students should expect a <u>minimum</u> of 2 hours of out-of-class work each week for each hour of in-class instruction**. For example, a 4 credit hour course that meets twice a week for 2 hours has 4 hours of in class instruction, therefore the student should spend at least 8 per week doing assignments and/or studying for that course at home, for a total of 12 hours dedicated to that course each week.

### Attendance and Participation

The instructor strongly encourages attending all class sessions. Please use your best judgment when deciding whether to come to class. If you are ill, do not come to class. Please notify your instructor if you will be unable to attend class. You will be allowed to catch up upon your return. Students are still responsible for any materials covered and assignments due on the date of absence. If you contract an illness that you feel is severe enough to warrant extra time for assignment(s) and other coursework, please reach out at your earliest convenience – preferably, before the next assignment is due.

### Communicating with the Instructor

Email is the primary and recommended form of communication between instructor(s) and student(s). <u>Please include course number and section in the subject line of the Email (e.g., CSCI 1250 003)</u>. The instructor will respond to emails within a reasonable amount of time; however, <u>students should not expect a reply outside of ETSU's working hours (8:00am – 4:30pm)</u>. Please be aware of this as you work through assignments, and plan accordingly. The instructor will not respond to electronic communication other than correspondence via ETSU Email.

Students should send all Emails from their own student ETSU Email address.

In addition to email communication, students are highly encouraged to seek assistance during office hours. If the instructor's posted office hours are not amenable to the student's schedule, students are encouraged to schedule a meeting.

### **Entertainment Technologies in the Classroom**

Do not bring entertainment technologies into the classroom. This includes, but is not limited to, portable DVD players, video game consoles and selfie sticks. Cell phones, tablets and laptops are permitted to be in the classroom, but **should be put away during tests and quizzes**, **as well as other assignments if the device is not being used to complete that assignment**. Additionally, cell phones should be silenced during class. Should an emergency call occur, please step outside of the classroom before answering the call. Under no circumstance should a cell phone, laptop computer, or other electronic device be used to watch entertainment videos during

class, e.g., Netflix, YouTube, TikTok. **Students found in violation of this policy will be asked to leave the classroom.** 

#### Disabilities and Accommodations

It is the policy of ETSU to accommodate students with disabilities, pursuant to federal law, state law and the University's commitment to equal educational opportunities. Any student with a disability who needs accommodations, for example note taking assistance, exam time adjustment or seating placement, should meet with Disability Services. Faculty accommodation forms are provided to eligible students and should be shared with the instructor as early in the semester as possible. Disability Services can be reached via telephone at (423) 439-8346 or web at <a href="https://www.etsu.edu/students/ds/">https://www.etsu.edu/students/ds/</a>.

Students may choose to not utilize the accommodations even though they are approved for them. If students choose to use their testing accommodations, they may make arrangements with the instructor, or schedule their exams with Disability Services; preferably five days in advance.

The instructor cannot provide special accommodations for tests, quizzes, or other assignments to students without a notice from Disability Services. The instructor encourages students to contact Disability Services early in the semester even if they do not intend to use their accommodations. Disability Services can issue temporary accommodations, including parking, for temporary disabilities, e.g., waiting on a broken leg to heal.

#### Other University Information and Resources

- Syllabus Attachment: https://www.etsu.edu/curriculum-innovation/syllabusattachment.php
- ETSU Catalogs: https://catalog.etsu.edu/