

University at Buffalo

*Department of Computer Science & Engineering
338 Davis Hall – (716) 645-3180*

Syllabus

Please read this sheet carefully, and save it for future reference.

The syllabus is subject to change based on the needs of the course and will be communicated with you as appropriate.

Instructor

Name	Email	Office	Office Hours
Dr. Eric Mikida	epmikida@buffalo.edu	208 Capen Hall	M/T 1:00-3:00PM, W 3:00-5:00PM

Course Information

CSE 503 Computer Science for Non-Majors I – 3 credits

Course Description

Provides the fundamentals of computer science with an emphasis on applying programming skills to solve problems and increase human efficiency. Topics include variables, data types, expressions, control flow, functions, input/output, data storage, networking, security, selection, sorting, iteration and the use of aggregate data structures such as lists and more general collections. No previous programming experience required.

Course Learning Outcomes

Students who successfully complete this course will be able to:

1. *Describe how course topics are used to solve real-world problems*
2. *Describe computational solutions to a problem they are given*
3. *Read and trace code*
4. *Translate an algorithm to a working computational solution in two or more programming languages*
5. *Relate a new problem to prior examples and adapt the extant solution*
6. *Describe the source of a bug or failure in code*
7. *Explain the security impacts of course topics*
8. *Choose an appropriate data structure to solve a problem*
9. *Discuss the asymptotic runtime of programs*

Prerequisites

None.

Textbook

There is no textbook for the course. All needed materials will be provided via the course website.

Computing Resources

You will be using various free on-line tools for this course – links will be posted on the course website. Course-related communications should be via the Piazza forum linked from the course website. Piazza posts can be either public to the class or private to instructors. Any e-mail communications must come from your UB e-mail account and include [CSE 503] in the subject line. All communications with course staff are expected to be professional.

Course Requirements*Lectures*

The conceptual and theoretical course content will be delivered primarily in the in-person lectures. You are expected to attend lecture and take your own notes to prepare for later assessments. If you are out of class for an extended period of time because of sickness, notify your instructor as soon as possible. If you miss a significant portion of the semester it is recommended that you resign from the course.

Labs

Weekly lab sessions will be conducted in Baldy 21. You are expected to attend and complete any assigned lab work during the session. Lab sessions begin on 9/13.

Course Requirements and Grading Policy

The following indicates the grade breakdown which will be used in assigning grades in the course. I reserve the right to make adjustments if I deem them to be necessary. Any changes will be communicated to the class in writing via e-mail to each student's UB e-mail account.

Requirement	Quantity	Weight	Details	Date(s)
Programming Homeworks	5	50%	Lab activities allow students to put into practice knowledge and skills presented in lecture.	Approximately every two weeks
Programming project	1	30%	The project gives students an opportunity to work on a substantial piece of code, and give an in-class presentation.	
Final Exam	1	20%	Cumulative exam	Final exam period

Overall course grade

Percentage	Letter grade	Percentage	Letter grade
95 - 100	A	70-74	C+
90 - 94	A-	65-69	C
85 - 89	B+	60-64	C-
80-84	B	55-59	D
75-79	B-	0-54	F

Regrading

Any questions about the grading of a piece of work *must be raised within one week of the date that the graded work was returned to you.*

Incomplete (I) grades

A grade of incomplete ("I") indicates that additional coursework is required to fulfill the requirements of a given course. Students may only be given an "I" grade if they have a passing average in coursework that has been completed and have well-defined parameters to complete the course requirements that could result in a grade better than the default grade. An "I" grade may not be assigned to a student who did not attend the course.

Prior to the end of the semester, students must initiate the request for an "I" grade and receive the instructor's approval. Assignment of an "I" grade is at the discretion of the instructor.

The last day to resign the course is **Friday, November 11, 2022.**

Diversity

The UB School of Engineering and Applied Sciences considers the diversity of its students, faculty, and staff to be a strength, critical to our success. We are committed to providing a safe space and a culture of mutual respect and inclusiveness for all. We believe a community of faculty, students, and staff who bring diverse life experiences and perspectives leads to a superior working environment, and we welcome differences in race, ethnicity, gender, age, religion, language, intellectual and physical ability, sexual orientation, gender identity, socioeconomic status, and veteran status.

Accessibility Resources

If you have any disability which requires reasonable accommodations to enable you to participate in this course, please contact the Office of Accessibility Resources in 60 Capen Hall, 716-645-2608 and also the instructor of this course during the first week of class. The office will provide you with information and review appropriate arrangements for reasonable accommodations, which can be found on the web at: <http://www.buffalo.edu/studentlife/who-we-are/departments/accessibility.html>.

Classroom Decorum

To prevent and respond to distracting behavior, faculty should clarify standards for the conduct of class, either in the syllabus, or by referencing the expectations cited in the Student Conduct Regulations. Classroom "etiquette" expectations should include:

- Not coming to lab or recitation meetings late or leaving early. Do not leave a meeting unless it is an absolute necessity.
- Not talking with other classmates during lab and recitation meetings while the TA or another student is speaking.
- Showing respect and concern for others by not monopolizing class discussion. Allow others time to give their input and ask questions. Do not stray from the topic of class discussion.

Academic Integrity

Academic integrity is a fundamental university value. Through the honest completion of academic work, students sustain the integrity of the university while facilitating the university's imperative for the transmission of knowledge and culture based upon the generation of new and innovative ideas. Please refer to the university Undergraduate Academic Integrity Policy (https://catalog.buffalo.edu/policies/academic_integrity_2019-20.html) for additional information.

As an engineer or computer scientist, you have special ethical obligations. As per the NSPE Code of Ethics, "engineers shall avoid deceptive acts" and "shall conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession (<https://www.nspe.org/resources/ethics/code-ethics>). Similar sentiments of honesty, integrity, fairness, and responsibility are fundamental to the ACM Code of Ethics (<https://www.acm.org/code-of-ethics>).

A violation in this class generally results in an F for the entire course. The Computer Science and Engineering department's policy on academic integrity can be found here:

<https://engineering.buffalo.edu/computer-science-engineering/information-for-students/policies/academic-integrity.html>

Critical Campus Resources

Sexual Violence

UB is committed to providing a safe learning environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and stalking. If you have experienced gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), UB has resources to help. This includes academic accommodations, health and counseling services, housing accommodations, helping with legal protective orders, and assistance with reporting the incident to police or other UB officials if you so choose. Please contact UB's Title IX Coordinator at 716-645-2266 for more information. For confidential assistance, you may also contact a Crisis Services Campus Advocate at 716-796-4399.

Mental Health

As a student you may experience a range of issues that can cause barriers to learning or reduce your ability to participate in daily activities. These might include strained relationships, anxiety, high levels of stress, alcohol/drug problems, feeling down, health concerns, or unwanted sexual experiences. Counseling, Health Services, and Health Promotion are here to help with these or other issues you may experience. You can learn more about these programs and services by contacting:

Counseling Services:

- 120 Richmond Quad (North Campus), 716-645-2720
- 202 Michael Hall (South Campus), 716-829-5800

Health Services:

- 4350 Maple Rd, Amherst, NY 14226, 716-829-3316

Health Promotion:

- 114 Student Union (North Campus), 716-645-2837