



CSE-1010 – Introduction to Computing

Summer 2023

[Lecture Location: DWTN 305, Class Time: Tu/Wed/Thur: 09:30 AM – 10:55 AM]

[Lab Location: DWTN 305G, Lab Time: Tu/Wed/Thur: 11:00 - 12:00 PM]

Instructor	Office	Contact Details
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Note: Excluding materials for purchases, syllabus information may subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

About:

In CSE 1010, you will learn how to solve computing problems using algorithmic thinking, programming, computing logic, processes, and environments. Lab assignments were developed from problems in mathematics, science, and engineering.

I. Learning Outcomes:

After completing this course students should be able to fulfill the following learning outcomes (LOs):

Learning Outcomes	
LO 1	Develop computational programs to analyze data and solve computing problems in Python.
LO 2	Translate science and engineering problems to mathematical models using algebra, probability, statistics, and domain knowledge.
LO 3	Compute statistics and visualizations of various types of data using Python visualization libraries and pandas to clearly communicate information.

II. Course Materials, Platform and Software:

Textbook: This course uses a custom zyBook that is accessed online. The book can be bought directly from the [zyBook's website](#) or the [UConn bookstore](#). Purchasing the book directly through zyBook's website is usually less expensive. Follow the instructions below:

- Sign in or create an account at <https://learn.zybooks.com/>
- Enter zyBook code: **UCONNCSE1010BaigSummer2023**
- Subscribe

Other materials: Lectures slides will be posted on course website.

Course Website: HuskyCT Course Website can be accessed [here](#).

Discord Server: Use for announcements and discussions (See HuskyCT for Discord server link).

Note: All assessment activities labs, assignments, homeworks will be carried out on zyBook.



Online textbooks have several advantages over traditional printed textbooks. Many difficult concepts have interactive animations to help build intuition, participation activities that encourage you to engage with the material, and challenge questions to give you immediate feedback. If students are on campus and the computer labs are not closed due to SARS CoV-2, zyBooks can be accessed through your specific lab from your course schedule. If students are learning remotely and do not have regular access to the internet, please contact your instructor ASAP. It is not recommended for learning, but zyBook chapters can be downloaded as PDFs for offline study.

1. [HuskyCT](#): Course website for course materials, resources, announcements, exams and grades.
2. Extra Help and Resources:
 - Additional office hours can be allocated only by appointment via:
https://calendly.com/hb_officehours/15min
 - You are HIGHLY encouraged to show your participation and ask questions on Discord channel mentioned above.

Note: Lectures slides will be posted weekly. **Do not publicly post code and partial solutions to problems, mark these private to professors and lab instructors only.** Also, please spend time thinking about your question – the best questions are clear, concise, and ask about concepts. These types of questions can be made public and benefit the entire class. Questions that, for example, ask lab instructors to debug code are of minimal use. Changes to the course syllabus, schedule, or homeworks will be announced immediately in class or at Discord server or at Course Website.

III. Format and Procedures:

Unlike Storrs campus, which is following a flipped-style teaching, we at Stamford will be having lectures and labs separately. The course will have three 100-minutes lectures and three 60 minutes lab weekly. We expect the class sessions to be interactive, with students playing a central role in the experience. Students can carry out discussions on Discord and post their queries there under specific channels/sections.

It is essential that you follow the book contents and finish the assigned contents. Additionally:

- All work must be submitted on time. Late submissions will be marked as a zero for that assignment. Inform the instructor if observance of religious holidays, illness, disability, or other valid reasons interferes with your work so we can try our best to accommodate you.
- All work will either be tracked in zyBooks or handed into HuskyCT.

IV. Grading Policy:

Grades (tends to change) will be based on:

Class Participation (LO1, LO3)	5%
Homework (LO1, LO2, LO3)	25%
Labs (LO1, LO2, LO3)	15%
Lab Participation (LO1, LO2)	5%
Exams (LO1, LO2, LO3)	50%



Class Participation (5%)

Participation is split into 3 + 2 %. 3% participation questions are the participation activities listed on zybook and must be completed there. Remaining 2% are given by instructor based on your participation in activities during lectures.

Homework (25%)

Homeworks consist of challenge questions and lab assignments. Several special homework assignments are inspired by real-world problems in one of UConn's seven engineering disciplines and science more broadly. Students will be required to present a special homework assignment in a group of their peers during a lab session towards the end of the semester. The lowest two homework grades will be dropped (with the exception of the group project homework which will not be dropped).

Challenge questions: small tasks to practice some concept in the book chapter, give immediate feedback, and allow for unlimited attempts.

Programming assignments: Both short and long programming assignments that give immediate feedback. Allows for unlimited attempts but must wait 3 minutes between each attempt

Lab assignments (15%)

Lab assignments consist of problem formalization and programming problems.

Lab Participation (5%)

Participation at your lab section is required. It is expected that you attend and participate in all your weekly lab sections. If you cannot attend your lab section for any reason you must contact your TA.

Exams (50%)

A midterm (25%) and cumulative final (25%).

We strongly encourage high-level discussion of ideas and concepts with peers and instructors, but all assignments besides the last take-home lab assignment, must be completed and submitted individually.

V. Grading Scale:

Percentage	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0



VI. Collaboration:

High-level discussion of ideas and problems with peers is encouraged, but labs, Assignments, and exams must be completed and submitted individually. You can ask for clarifications on the topic of the assignments or its phrasing. You can discuss the course material with other students, and you are encouraged to discuss assignments related questions directly connected to class material. If you use the web, you must explicitly disclose every single piece of information you used and its source. Bottom line: talking **in general terms** about what is expected in the assignment is acceptable. Discussing how to solve the problem in detail or sharing code with others is not.

If you need additional clarifications regarding the collaboration policy, **please contact the instructor**. If you have any doubts about what is appropriate to discuss, **ask**.

VII. Late Policy:

To guarantee timely grading and feedback, I wish to make sure that assignments are handed in at the appropriate time. Deadlines are based on Eastern Standard Time; if you are in a different time zone, please adjust your submittal times accordingly. **You simply cannot be late**, any submission arriving after the deadline receives a 0. All assignments are graded on a 100 points basis. The lowest assignment and lowest lab grade will be dropped from the semester note (no questions asked).

VIII. Weekly Time Commitment:

You should expect to dedicate at least **9-10 hours** a week to this course outside the classroom. This expectation is based on the various course activities, assignments, and assessments and the University of Connecticut's policy regarding credit hours. More information related to hours per week per credit can be accessed at the [Online Student website](#).

IX. Academic Misconduct

The penalty for academic misconduct is an F in the course. Academic misconduct includes but is not limited to:

- Submitting any code, you did not write yourself
- Sharing any code with classmates
- Sharing a video feed of your code
- Discussing exams before all grades are posted
- Posting questions on forums like Reddit, Stack- Overflow, or Chegg, etc.

X. Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication



- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

XI. Accommodations for students with disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or visit <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government.” (Retrieved March 24, 2013 from [Blackboard’s website](#)).

XII. Help

[Technical and Academic Help](#) provides a guide to technical and academic assistance. This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

XIII. Tentative Course Schedule: (*Assessments deadlines are on the next page*)

Week	Topics	Labs	Dates
1	Course Overview and Python Basics	Lab0	May 30
	Variables and Expressions		May 31
	Functions	Lab 1	June 01
2	Control Flow	Lab 2	June 06
	Iteration and Definite Loops	Lab 3	June 07
	Indefinite Loops	Lab 4	June 08
3	Review before exam	Review	June 13
	Midterm Assessment	Lab 5	June 14
	Classes and Basic Data Structures	Lab 6	June 15
4	Advanced Data Structures and Functions I	Lab 7	June 20
	Advanced Data Structures and Functions II	Lab 8	June 21
	Input, Output, and Modules	Lab 9	June 22
5	Python External Libraries	Lab 10	June 27
	Data Science: Data and Visualization	Review	June 28
	Review / Probability and Statistics (tentative)		June 28
	Final Exam		June 29

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Course Schedule

- Unless otherwise indicated, all course deliverables are due at 11:59 PM ET.
- Unless otherwise indicated, every assignment is required.
- The deadline for assessments from week 2 onwards are likely to change.

Week	Topics	Participation Activities	Labs	Homework	Deadlines
1: 05/30 – 6/01	Course Overview and Python Basics	1.1 – 1.7 (1.8 – 1.11 optional)	1.12 – 1.17	1.18 – 1.19	June 05 (11:59pm)
	Variables and Expressions	2.1 – 2.11 (2.12 optional)	2.13, 2.15, 2.16 (2.14, 2.17, 2.21, 2.22 optional)	2.18 – 2.20	
	Functions	3.1 – 3.2, 3.4 – 3.11 (3.3, 3.12 – 3.15 optional)	3.19 – 3.22 (3.16, 3.17, 3.18, 3.27 optional)	3.23 – 3.25	
2: 6/6 – 6/8	Control Flow	4.1 – 4.2, 4.9 – 4.11 (4.3 – 4.8 optional)	4.13, 4.14, 4.16, 4.17, 4.19 (4.18, 4.20 optional)	4.15, 4.21, 4.22	June 12 (11:59pm)
	Iteration and definite loops	5.1 – 5.15 (5.16 optional)	5.18 – 5.21 (5.22, 5.26 optional)	5.24	
	Indefinite Loops	6.1 – 6.6	6.7 – 6.9 (6.10 – 6.13 optional)	6.14, 6.16	
3: 6/13 – 6/15	Review and Midterm Exam				June 19 (11:59pm)
	Classes and Basic Data Structures	7.1 – 7.12 (7.13 – 7.16 optional)	7.17 – 7.18, 7.20, 7.22 – 7.24 (7.19, 7.21, 7.27 optional)		
	Advanced Data Structures and Functions	8.1 – 8.9	8.10 – 8.11, 8.13 – 8.14, 8.16 (8.12, 8.15, 8.20 optional)	8.17, 8.19	
4: 6/20 – 6/22	Advanced Data Structures and Functions	9.1 – 9.15	9.16 – 9.20 (9.23 optional)	9.21	June 26 (11:59pm)
	Input, Output, and Modules				
5: 6/27 – 6/29	Data Science: Data and Visualization	10.1 – 10.12	10.13, 10.17	10.14 (Bonus)	June 27 (11:59pm)
	Final Exam				