CS2500-- Fall 2019
London Campus
Dr. Laney Strange

Contact Information

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Course	khoury.neu.edu/home/laney/cs2500/fall19
Piazza	piazza.com/northeastern/fall2019/cs2500london

Lecture
- Monday, 3:00-4:30pm. Kew.
- Wednesday, 3:00-4:00pm. Richmond.

Labs
- Section I: Friday, 9:00-10:00am, Marleybone
- Section II: Friday, 12:00-1:00pm. Richmond

Office Hours
- Monday: 5:00-8:00pm. Knightsbridge
- Wednesday: 5:00-8:00pm. Mayfair
- Thursday: 2:000-4:30pm. Stratford

Final Exam
- December 9, 2019. 3-5:00pm, Marleybone.

Required Textbook:
- How to Design Programs (2nd edition). Felleisen, Findler, Flatt, and Krishnamruthi; MIT Press 2014. You can access the book online or buy a paper copy.

Course Description
This course is an introduction to computing and programming. Our major goal is to introduce you to the principles of systematic problem solving through programming and the basic rules of computation.

By the end of this course, you will have a sense for the differences between a programmer and a well-trained software engineer. You will also have a sense of the complexities involved in developing solid software. You'll be able to apply what we learn to solve many non-computational problems in a systematic way.

Fundies does not assume any prior programming experience. It is suitable for all students, majors and

non-majors alike, who wish to explore the ideas behind the discipline of computer science. It does assume familiarity with (high-school-level) arithmetic and algebra, and it demands curiosity, self-discipline, and the capacity to work well with others.

The major topics within the course will be covered in roughly the following order, but we may spend more or less time on a topic than the below outline indicates.

Topics
Introduction to Dr. Racket and Beginner Student Language (BSL)
Arithmetic Operators
Booleans and Conditional Data
The Design Recipe
World Programs
Structures
Lists; Lists of Structures
Scope and Local
Trees
Mutually Recursive Data
Graphs
Generative Recursion

Evaluation

Your grade for CS2500 will be based on the following factors:

Factor	Number	Weight
Homework Sets (one dropped)	9	45%
Exam 1	1	10%
Exam 2	1	10%
Final Exam	1	20%
Participation / Attendance		15%

Homeworks

Homeworks will be assigned (roughly) every week. Homework Sets will be posted on the course website. You will submit your homework solution via the Khoury Bottlenose server, which we will review in our first lab.

You may submit homework up to 5 days late. However, a late homework loses 7 points for each full calendar day (or part of a day) that it is late after the deadline. Moreover, if you submit your homework late it will be graded with next week's batch of assignments, so you'll receive your score much later than if you submit on time.

One of your homeworks will be dropped and will not count towards your overall grade.

Participation + Labs

You'll notice that 15% of your grade is allocated for participation. That includes attendance in lecture and lab, as well as active participation and effort on lab assignments.

Our lab meets once a week. We will usually include some group work that must be completed, along with an individual lab assignment. The individual assignment is graded on participation and effort; submit whatever you have completed at the end of lab time.

Exams

There are two exams during the semester, as well as a final exam. The two midterm exams will be administered during lecture/lab. They are designed to be shorter than a full period, though, as we don't want you to feel rushed to complete it.

The final exam will be administered during the last week of classes in London.

For each exam, you may bring an 8.5x11 inch piece of paper (I think that's called "A4" in London), double sided, with anything written (or typed) on it that you want.

Late/Makeup Policy + Attendance

A homework solution may be submitted up to 5 days late, with a reduction of 7 points per day (or part of a day) that it is late. A homework submitted more than 5 days after the deadline will receive zero credit.

Attendance is required for lectures, and, along with your engagement during lecture, it counts towards your participation grade. Registers will be taken for all classes, and late arrival (later than 15 minutes) will be counted as an absence. Notify the Academic Operations Officer (osa@nchlondon.ac.uk, and cc: laneys@northeastern.edu) as soon as you are aware that you must miss a class for any reason.

Each absence after two missed classes on a given course will result in the deduction of two percent of the total course grade (up to a deduction of 15% overall).

Attendance is most important, of course, for exams. You will receive a score of zero for an exam that you miss without prior notification of extenuating circumstances.

When you attend lecture and lab, I ask that you be fully present. Please be respectful of your fellow students and me by participating attentively and non-disruptively. You may use computers in class, but only for taking notes. You may not use phones during class.

Piazza/Communication
Sign up for the course piazza page: piazza.com/northeastern/fall2019/cs2500london

Piazza is here for you to ask clarifying questions on homework assignments, which the course staff is happy to answer. It is also used for discussions among students about the approach you might take to solving problems in the class.

The quickest way to get feedback and help from your classmates is via Piazza. Piazza is an extension of our classroom discussion, and we expect everyone to behave accordingly. No disrespect, rudeness, or abuse will be tolerated -- towards fellow students or towards the course staff. Piazza will be disabled if we feel it is being misused.

You may not post your code on Piazza, but you can ask, answer, and discuss different things you've tried, what worked and didn't work, and resources you've found.

We'll also use Piazza to post course announcements, so make sure your email settings are turned on!

Email (laneys@northeastern.edu) is the best tool for specific questions or concerns about your experience in class or anything sensitive in nature. During the week, I'll respond within 24 hours, but don't expect a response after 9pm. On the weekends I'll be slower to respond, but if you reach out over a weekend you can expect to hear back by Sunday evening.

Office hours are the best place for talking through your approach to a homework problem. We're not here to give you answers, of course, but to be your fellow computer scientists thinking through a tough problem with you. Expect us to ask more questions than we answer.

Academic Integrity
While students are encouraged to discuss course materials, no plagiarism/copying is allowed on homework. In particular:
- You may not copy anyone else's code under any circumstances.
- You may not permit any other student to see any part of your program, except when requesting assistance in debugging.
- You may not permit yourself to see any part of another student's program, except when rendering assistance in debugging.
- You may not post a public question to Piazza that contains any part of your code.

If you have a question about what is considered a violation of this policy, please ask!
The university's academic integrity policy discusses actions regarded as violations and consequences for students: http://www.northeastern.edu/osccr/academic-integrity

Accessibility
Students who wish to receive academic services and/or accommodations, such as extra time on exams, should speak to me at the beginning of the semester.

Technical Requirements
We will use Dr. Racket (v7.3), a programming environment for a family of programming languages. For Fundies I, we stick to the teaching languages. Download Racket to install on your own computer: https://download.racket-lang.org/

Dr. Racket runs on most popular Operating Systems (Windows, Mac OSX, Linux). Programs written in the teaching languages have mostly the same behavior on all platforms.

You also must sign up for a Khoury account. Follow these instructions to register for one: bit.ly/ccisaccount. You'll use your Khoury account to submit your homework assignments and lab assignments via the Bottlenose server.

In London, our lab classroom does not have its own desktop computers. Please bring your laptops to lab.