CS1113: Computer Science I (Online)   Fall 2020

Course Syllabus

Abstract

Computer Science I will introduce you to the craft of programming and to the Java language. By the end of the course, you will be proficient at translating problems into syntax that can be interpreted and executed by a computer. You won't yet have the skills necessary to create anything you can imagine – that will have to wait for Computer Science II – but you will have built an excellent foundation.

Instructor

- Dr. Blayne Mayfield
- Office: 232 MSCS   Lab: 203E MSCS
- Office hours: Tue/Thu 3:00-5:00 PM Central Time, via the text "Chat" function on the course Canvas page. If necessary, we will proceed from there to a videoconference using Skype. You should also feel free to e-mail any time with questions, and videoconferences can be scheduled outside of office hours as well. The instructor will make every effort to respond to e-mails within 24 hours.
- Email: blayne.mayfield@okstate.edu
- Skype name: blayne_ok

Teaching Assistants

The TAs will hold their office hours by Canvas Chat, as well. If more involved help is needed, the discussion will proceed to a videoconference using Skype. You should also feel free to e-mail a TA any time with questions, and videoconferences can be scheduled outside of office hours as well. The TAs will make every effort to respond to e-mails within 24 hours.

- Kun Chen (kuchen@okstate.edu); Skype name:
  Skype name: "kun chen" (live:2d793a75db897790)
- Shubham Trehan (strehan@okstate.edu);
  Skype name: shubham.trehan7

Office Hours

Here is the schedule of office hours for each week. If one of us has to be absent at some time, he will try to get one of the others to stand in for him. If an office hours session must be canceled because a stand-in is unavailable, I will do my best to post an announcement on the course Canvas page in advance. (All times are given for the Central Time zone.)

- Monday..................2:00-6:00PM (Chen)
- Tuesday.................3:00-5:00PM (Mayfield);   6:00-8:00PM (Chen)
- Wednesday..........11:00AM-1:00PM (Trehan);   1:30-3:30PM (Trehan)
- Thursday...............11:00AM-1:00PM (Trehan);   3:00-5:00PM (Mayfield)
- Friday....................11:00AM-1:00PM (Trehan);   1:30-3:30PM (Trehan)
- Saturday................2:00-6:00PM (Chen)

Objectives

- Use variables, control structures, arrays and method definitions to produce useful text-based programs that solve both toy and real-world problems.
- Design well-structured, encapsulated, self-documenting code that can be maintained, updated, and improved as the course progresses.
- Demonstrate robust code that responds gracefully to errors and unexpected user behavior.
- Choose appropriate data structures and data types for representing problems, explain the rationale for such decisions, and express the underlying computational and memory processes that pertain to the various choices.

Course Meetings

No meetings for the online course. Lecture videos will be posted to Canvas; most will be videos by Dr. Christopher Crick.

Text

The text is online and available from the course Canvas page. When you first pull up the readings from the course page, you will have to purchase access to the online text.

Grading

- Participation activities 10%
- Challenge activities 10%
- Lab assignments 30%
- Final independent project 20%
- Midterm and final exams 30%

You will have the opportunity to complete additional lab assignments for extra credit.

Grade Breakdown

- A 90%
- B 80%
- C 70%
- D 60%

The instructor reserves the right to curve these percentages downwards if necessary, but they will not be curved upwards. If you score 90.0%, you will earn an A.

Policies

- Readings include participation and challenge activities, which should be carried out as you read the online text. Each unit also includes a number of lab programming exercises. All of these are due on specific dates, ordinarily on the Monday after the period scheduled for covering the material.

- Throughout most of the course, work will be submitted through the online interface. However, you will have to install your own Java compiler and produce code independently for the final project.
- The project is a text-based two-player board or card game. About halfway through the course, you will receive instructions about the project expectations, and the last weeks of the course involve progressive submissions of increasingly-functional code.
- There will be two exams, a midterm and a comprehensive final. Together, these will account for 30% of your grade, and the final counts for twice as much as the midterm. Online exam proctoring will be provided through *Examity*, and you are responsible for completing each exam by its due date.
- Academic integrity is taken very seriously. You are permitted (and indeed encouraged) to discuss the course material with fellow students in general terms on the Canvas discussion board, but the programs you write must be your own. **Code copied from each other or found on the net will result in an automatic zero**, and depending on the egregiousness of the offense may result in earning an 'F!' for the course and facing academic disciplinary measures.
- That said, you are welcome to copy code from your own previous assignments, from programming snippets that we go over in lecture, or from the textbook.

Class schedule

- Weeks 1 – 2 (Aug 17 – Aug 30).................Unit 1: Introduction to Java
- Weeks 3 – 4 (Aug 31 – Sep 13).................Unit 2: Variables / Assignments
- Weeks 5 – 6 (Sep 14 – Sep 27)..................Labor Day holiday and Unit 3: Branches
- Weeks 7 – 8 (Sep 28 – Oct 11): ....Unit 4: Loops
- Weeks 9 – 10 (Oct 12 – Oct 25):...............Midterm and Unit 5: Arrays
- Weeks 11 – 12 (Oct 26 – Nov 8)...............Unit 6: User-Defined Methods
- Weeks 13 – 14 (Nov 9 – Nov 22)..............Unit 7: Objects and Classes
- Week 15 (Nov 23 – Nov 29) ....Thanksgiving holiday
- Weeks 16 - 17 (Nov 30 –Dec 11) ....Final project and final exam

Due dates

- Sep 8 ....Unit 1 coursework due
- Sep 21.............Unit 2 coursework due
- Oct 5................Unit 3 coursework due
- Oct 16.............Midterm due
- Oct 19 ....Unit 4 coursework due
- Oct 23 .... Final project milestone (board printout) due
- Nov 2...............Unit 5 coursework due
- Nov 6...............Final project milestone (player input) due
- Nov 16............Unit 6 coursework due
- Nov 20............Final project milestone (computer moves) due

- Dec 4 ....Final project due
- Dec 7 ....Unit 7 coursework due
- Dec 11 ....Final exam due

Syllabus attachment

Other useful information can be found on the [OSU syllabus attachment](#). Students are encouraged to download and read this document.

Office of Student Accessibility Services

If you think you have a qualifying disability and need accommodations, contact the Office of Student Accessibility Services to start the registration process and to ensure timely implementation of appropriate accommodations. More details can be found in the OSU syllabus attachment.