Intro to Computer Science for Science, Mathematics, and Engineering I

Students develop software of a few hundred lines of code to solve real problems. For computing majors, the knowledge is a solid foundation for later study. For other majors, the knowledge demystifies society-transforming software, helps with future job tasks often involving interactions with software developers, and empowers one to do basic software development needed in diverse engineering/science jobs.

Instructors:

Kelly Downey (kldowney@ucr.edu) (OH Thur 9am to 11am WCH 118)
Carter Slocum (csloc001@ucr.edu) (OH Thurs 3pm to 4pm WCH 118)
Kris Miller (kmiller@cs.ucr.edu) (OH Thur 12:30pm to 1:30pm WCH 118)

TAs:

Vishv Patel (OH Fri 10am to 12pm Zoom and Thur 5pm to 6pm WCH110)

Marjuka Lazin (OH Wed 7pm to 9pm Zoom and Thur 1pm to 2pm WCH110)

Jincong Lu (OH Thur 7pm to 8pm Zoom and Fri 1pm to 2pm WCH110)

Nikita Aware (OH Fri 12pm to 2pm Zoom and Thur 3pm to 4pm WCH110)

Yugarshi Shashwat (OH Wed 4pm to 5pm Zoom and Thur 4pm to 6pm WCH110)

Saul Gonzalez (OH Fri 11am to 1pm WCH110 and Thur 2:30pm to 3:30pm Zoom)

Aishwarya Pagadala (OH Fri 2pm to 3pm Zoom and Fri 3pm to 5pm WCH110)

Note: Students from any section can attend any TA's office hours

Also: Supplemental instruction (SI): Open SI Session - TBA (SI zoom) (how to login).

https://arc.ucr.edu/si#schedule (Choose spreadsheet tab, "Open", search for CS010A)

Lecture:

Sec 001 KD M W 2-3:20p (Chung 138) Sec 002 KD M W 3:30-4:50p (Chung 138) Sec 003 CS M W 5:00-6:20p (CHSS 1020 INTN) Sec 004 KM M W 9:30 - 10:50a (Sproul 1102)

Labs:

Sec 021 Tues 8-9:50a (Boyce 1471) Vishv Patel and Marjuka Lazin
Sec 022 Tues 10-11:50a (Boyce 1471) Vishv Patel and Marjuka Lazin
Sec 023 Tues 12-1:50p (WCH 142) Jincong Lu and Nikita Aware
Sec 024 Tues 2-3:50p (WCH 142) Nikita Aware and Marjuka Lazin
Sec 026 Tues 12-1:50p (SSC 121) Yugarshi Shashwat and Vishv Patel
Sec 027 Tues 2-3:50p (Physics 2104) Yugarshi Shashwat and Saul Gonzalez
Sec 028 Tues 4-5:50p (Watkins 2240) Saul Gonzalez and Nikita Aware
Sec 029 Tues 6-7:50p (Watkins 2240) Jincong Lu and Aishwarya Pagadala
Sec 030 Tues 7-8:50p (MSE 003) Yugarshi Shashwat and Saul Gonzalez

Course tools:

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<u>eLearn</u> (used for gradebook and all resources)

SLACK Q&A don't make discord or others, use actively for questions to classmates/teachers, post public so all benefit, only email/dm teachers if private.

Textbook/tools:

- 1. Create account using your netid email (jdoe001@ucr.edu) at zyBooks.com
- 2. Enter zyBook code: UCRCS010AFall2022
- 3. Select your class section, for "Student ID" enter your **UCR netid** (like jdoe001), subscribe.

Having Issues subscribing or need to cancel subscription? Email support@zybooks.com or <u>zyBooks help</u> <u>center</u>. If you drop or don't get in, email support for full refund. zyBook is required; extensive work is done in this online learning system.

Don't have a UCR ID? If non-UCR and lack UCR netid, use your school's email (if can't subscribe, ask professors to add your school's suffix); when you later get your UCR netid, ask support@zybooks.com to merge it into your account, and update your Student ID to that netid (here's how).

A subscription is \$65. Students may begin subscribing on Sep 08, 2022 and the cutoff to subscribe is Dec 02, 2022. Subscriptions will last until Dec 23, 2022.

All development and coding must be fully developed and submitted in zyBooks. Work completed outside of zyBooks will not be accepted.

Assignment Types:

- zyBook Participation Activities (PAs) due on Sundays before week starts at 10 pm
- zyBook Challenge Activities (CAs) due on Wednesdays after second lecture of the week at 10 pm
- zyBook Lab Activities (LAs) due on Friday of the week at 10 pm
- Deep Discovery (DD) will be a weekly opportunity to explore why code works. There will be three steps to each DD problem 1) Self Discovery (Self DD) completed during your lab section to allow you to reflect on what you know before the activity 2) Group Discovery (Group DD) completed during lecture with your assigned group to allow for open discussion about different solutions 3) End Reflection (End DD) The final solution to the DD problem submitted individually and graded on correctness.

Target Dates and Topics: All work is due at 10 pm on target date.

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Week's		Self		1	1	End		
chapter/topics	PAs	DD	Group DD	CAs	LAs	DD	Exam	Note
1: Intro & I/O	Sun 9/25	Tues 9/27	Wed 9/28	Wed 9/28	Fri 9/30	Fri 9/30		
2: Variables & Assignments	Sun 10/2	Tues 10/4	Wed 10/5	Wed 10/5	Fri 10/7	Fri 10/7		
3: Branches	Sun 10/9	Tues 10/11	Wed 10/12	Wed 10/12	Fri 10/14	Fri 10/14		
4:While Loops	Sun 10/16	Tues 10/18	Wed 10/19	Wed 10/19	Fri 10/21	Fri 10/21		
5: For loops/ strings	Sun 10/23	Tues 10/25	Wed 10/26	Wed 10/26	Fri 10/28	Fri 10/28		
6: Functions / Strings (cont).	Wed 11/02	Tue 11/01	Wed 11/02	Wed 11/02	Fri 11/04	Fri 11/04	Midterm 10/31	Larger on-your-own program this week.
7: Vectors	Sun 11/06	Tues 11/08	Wed 11/09	Wed 11/09	Fri 11/11	Fri 11/11		
8: Vectors (cont) / Troubleshooting	· ·		Wed 11/16	<u> </u>	Fri 11/18	Fri 11/18		
9: File IO / Classes	Sun 11/20	Tues 11/22	Wed 11/23	Wed 11/23	Sun 11/27	Sun 11/27		<u> </u>
10: Classes (cont)	Sun 11/27	Tues 11/29	Wed 11/30) Wed 11/30	Fri 12/02	Fri 12/02		Larger on-your-own program this week. No late items after Fri. No code withdrawals after Wed.
Finals week								See UCR's <u>final exam matrix</u> for Fall 2022

Grading:

5% in class exercise (lowest score dropped)

5% zyBook "Participation Activities" (Readings)

5% zyBook "Challenge Activities"

10% zyBook LAB exercises (via zyBook)

10% Deep Discovery Assignment

5% Group Deep Discovery

5% Individual Solution/ End Deep Discovery

5% lab attendance & self deep discovery assignment (weekly 2 hr lab sessions)

10% PROGRAM assignments (via zyBook)

5% for each assignment

20% Midterm

30% Final (Must get 70% on Final to get above D+ in class)

Grades usually follow a 90/80/70/60 scale, with +/- grades.

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Your class grade requires attendance during your scheduled lab time. If you are unable to attend your scheduled lab time due to a valid reason, you will be allowed to attend a different lab section. This should be an occasional occurrence not the norm. To do this, please post on the Slack lab attendance channel what section you are normally in and what lab section you will be attending for this one time.

Your class grade requires attendance during your scheduled lecture time. If you are unable to attend your lecture time for a valid reason, please reach out to your instructor via the Slack lecture attendance channel within 24 hours of the scheduled lecture to see if you are able to make up any participation you might have missed.

Grades will be displayed in the gradebook on eLearn. If you have a grade dispute, it must be reported no later than one week after the due date of the assignment. To report, fill out the grade discrepancy form. Please make sure to include your section number. If the grade dispute is reported more than a week after the due date, the dispute will not be investigated.

As part of an effort to continually improve, we may analyze student performance and survey data in this class, and may publish analysis results in anonymized form.

Final Exam Schedule

Section 001 (Downey)

Mon Dec 5, 3:00 pm to 6:00 pm

Section 002 (Downey)

Wed Dec 7, 7:00 pm to 10:00 pm

Section 003 (Slocum)

Sat Dec 3, 7:00 pm to 10:00 pm

Section 004 (Miller)

Mon Dec 5, 7:00 pm to 10:00 pm

Section 005 (Downey)

• Tues Dec 6, 3:00 pm to 6:00 pm

Collaboration:

Appropriate collaboration among students on zyBook activities, lab, group deep discovery, and classroom exercises is strongly encouraged (e.g. via discussion board posts, study groups, and lab discussions). If you collaborate for labs, each student must type their own lab and cannot just simply copy and paste. At the beginning of each lab, please add a comment with the names of any students you have collaborated with on that lab.

Collaboration (including online resources, tutors, or former students) on zyBook PROGRAM assignments, self and end deep discovery, and exams is forbidden and is considered cheating. We pursue academic dishonesty cases vigorously and report cases to UCR's Office of Student Conduct.

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Late Policy:

PAs, CAs, LAs will be accepted up to 7 days after the target date for a small deduction of 1% per day late. The last day to submit any work, including late work, is Dec 2nd at 10 pm. All other types of assignments (in class activities, self DD, group DD, and end DD) will not be accepted late. However, the lowest score for each of these types of assignments will be dropped. Programming assignments will not be accepted late and a lowest score will not be dropped.

If you miss an assignment or submit late work, you do not need to contact the instructor since these policies exist to cover times when you need to miss class or are ill. Your final course grade will reflect these policies.

Classroom Etiquette:

We value our students and want everyone to feel that this class is welcoming and without judgment. The classroom is a place of respect for both students and instructors. We aim to not judge a student based on their race, religion, gender, or economic position. We strive to recognize each student for their uniqueness and talent. If you ever feel that we are not doing this or have a suggestion of how we can do this better, please let us know so we can learn to do better.

In return, please try to do the same in the classroom, lab room, and any social media sites or boards associated with this course. Please come to class prepared and show respect to your peers and the instructors. Some ways to do this is to greet group members by name, put phones and computers away during lectures, participate in group discussions, and respect all opinions even if they are different from yours. Any form of disrespect will not be tolerated in this class.

Resources for success:

don't hesitate -- getting help in CS is very normal!

- CS10A Supplemental Instruction (SI):
 Schedule/Links are above.
 CS10A SI Google Drive Spring 2022
- CS Undergrad Learning Assistants (ULA)

Website: https://ucr-ula.github.io/
Discord: https://discord.gg/54Nu2Vgu4f

Tutoring at the ARC:

https://arc.ucr.edu/tap

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