

PIC 40A Introduction to Programming for Internet

Lecture 1 Winter 2024

Instructor information:

Name: Sarah Burnett

Lecture hours: Monday, Wednesday, Friday 12-12:50pm

Lecture location: Geology 4645

Office hours: Wednesday 9-10am or by appointment

Office location: Math Sciences 7304

TA information:

Name: Kye Shi

Discussion hours: Tuesday, Thursday (12-12:50pm)

Discussion location: Geology 4645

Office hours:

Office location:

Course description and content:

Lecture, three hours; discussion, two hours. Requisites: course 10A or Computer Science 31 or equivalent, and one from course 10B, 16A, 20A, Computer Science 32, or equivalent, with grades of C- or better. Introduction to programming for World Wide Web for students with strong foundation in programming. HTML5 and CSS3 markup languages to design websites; client-side scripting with JavaScript to enable event-driven interactivity, animations, and cookie tracking; server-side scripting with PHP to render HTML pages, store, and retrieve data on server; and introduction to databases through SQLite3. P/NP or letter grading.

I will teach PIC40A based on the material from Michael Andrews and Mike Lindstrom. Mike's slides are provided on Bruin Learn. We will cover a large subset of the slide but not in the same order.

We will discuss the following languages.

- **HTML5** - a markup language (not a programming language) for how information on a webpage should be rendered/displayed in a web browser.
- **Javascript** - a programming language that is used heavily in web development. Javascript allows us to make webpages interactive. It also allows us to generate more complicated webpages that would be a huge hassle to write with raw HTML.
- **PHP** - a programming language which allows us to generate HTML that a web browser displays without the clients ever seeing the code that goes on behind the scenes. It

allows us to perform server-side operations like writing to files or looking up hashed passwords.

- **CSS3** - provides a means for specifying format/display instructions to the web browser when it parses HTML. A browser can have its own defaults. The CSS gives the control back to the web developer so that we can make pretty websites.
- **SQLite3** - a standardized query language to work with databases.

Course materials:

Official Browser: Google Chrome

Text Editor: Sublime Text or VScode

PIC server: This is where your live webpage will live. It is maintained by the Math IT people during the weekdays M-F 9-5.

Bruin Learn/Canvas: Lectures and assignments will be delivered through Bruin Learn and its integrated tools. My main means of distributing important information about the class will be through Piazza, so make sure that you have email notifications correctly set-up and check Bruin Learn and Piazza regularly.

Office hours and Piazza:

Piazza: We will be using Piazza as our primary interface for course questions and discussion. Rather than emailing me a question, you should make a post on Piazza. There may be others with the same question as you, or one of your classmates may be able to respond more rapidly than I can. Piazza also allows you to post anonymously, if you so choose. If you want to ask a question with more than 1-2 lines of code, you should send your instructors a private message. Any questions involving private information should be private messages directly to me or your TA.

Office hours: Will be held in person. You can request an office hour appointment. Give me 24 hours' notice. The purpose of office hours is primarily to discuss/clarify course concepts and for us to provide assignment-related hints.

Grading:

Your final course grade will be calculated by:

Weight	Category
40%	Assignments
10%	Project
20%	Midterm exam
30%	Cumulative final exam

Assignment: There will be 8 assignments. The assignment sets involve problems using material introduced in lecture. Some of them will build onto your final project. They will be posted on Bruin Learn and should be submitted through on Gradescope through Bruin Learn as well as to the PIC server. You may submit multiple times before the deadline. To avoid losing points, carefully follow the submission instructions provided. Name your files as instructed and submit all files. Codes must run without errors to receive points. Assignments will work towards building a webpage. If you miss an assignment or had an error, you should attend discussion afterwards to learn how to fix your page. (Make a separate directory. Do not alter ANY assignments after the deadline.)

Students are encouraged to work together on the assignment problems, but everyone should submit their own work and typing. Any form of plagiarism will be taken very seriously (more on this below). For this reason, it is best to avoid sending each other code.

Project: You will create a website with items such as a welcome page, a login page, a phishing page, a blog post page, and a merch page. Some of these tasks will appear on assignments which will build on the final project. At the end of the quarter, you will turn in your completed project. More information will appear on Bruin Learn after week 6.

Midterm exam: We will have one 50-minute, in-class midterm on February 12th.

Final exam: We will have an in-class final 8:00am on March 20th.

Missed assignments and make-up policy: All homework assignments are due on Wednesdays by 10pm. If you find you could improve or if there is a server issue at night, the assignment can be accepted until 12pm Thursday (before your discussion). During the discussion the assignment will be reviewed so you can make corrections on a separate copy. If you do not turn in the assignment by the late deadline, the grade will be a 0. Also, any changes to the live webpage after the late deadline will result in a 0. The files submitted to Gradescope must be identical to the files on the server. The lowest homework grade will be dropped. If you have an excused absence for the midterm, the final exam grade will replace your midterm score. The final exam must be taken to pass the class.

Regrade: Any issues about grading must be addressed within 1 week of the return due date through Gradescope. After that time no score changes will be allowed.

Grade cut-offs: The default grading scheme will be A is 93 and C is 70. Final grade cut-offs may be adjusted at the end of the quarter, but only to the benefit of the students.

Additional information:

Accommodations: Any student requiring accommodations should contact the [Center for Accessible Education](#) (CAE) as soon as possible. Within the first two weeks of the quarter, we should discuss and coordinate any CAE-approved accommodations.

Counseling: Resources are available to foster the well-being of all UCLA students as they pursue their academic goals. Any student who finds themselves in immediate distress, please call [Counseling and Psychological Services](#) (CAPS) to speak directly with a counselor 24/7, or please call 911. Your physical and mental health are more important than any class.

Academic integrity: The only materials that you are allowed (and encouraged) to plagiarize are my code snippets, your TA's work in discussion, and your TA's and my help in office hours. All graded assignments must be your own work. An algorithm will be used to determine how well assignments match. Students are not allowed to use ChatGPT or similar AI to attempt to write their homework or final exam. If a student is suspected of turning in work that's not original, they will be asked to make an appointment where they'll go through and explain their code line-by-line. Any other plagiarism on assignments will result in a 0 on all assignments. Any incident of plagiarism on assignments or exams will be reported.