

Course objectives

EW7 is an introductory course on computer programming for lower-division students in science and engineering. The principal goal of the course is to introduce basic computer programming concepts and apply them to computer-based problem-solving methods. The course stresses hands-on computer programming using MATLAB, a powerful high-level programming environment.

Teaching staff

Professor Panos Papadopoulos (panos@berkeley.edu)

Professor Andrew Packard (in videos)

GSI staff

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Course format

This offering of E7 is online, with content delivered here on the bCourses (Canvas) platform.

EW7 consists of:

- videotaped lectures and online quizzes which you may view asynchronously
- programming assignments
- synchronous online assignment introduction sessions (this will be hosted on Zoom Mondays, Wednesdays, and Fridays 1000-1100 in lieu of the synchronous Friday discussion session listed in the course description and will be recorded for those who cannot attend)
- online supervised computer laboratory sections
- the Piazza discussion forum
- a Zoom-proctored final examination

The online lectures will be delivered by the faculty and will be posted on a regular schedule. The lectures are organized in 26 topical modules, each consisting of a

number of units. All the lectures are captioned and slides from the lectures will be available in PDF format for download.

You are expected to watch all videos in each of the modules in sequence at a time that is convenient for you, but *within the timeframe specified in the course syllabus*. Each module is composed of about an hour of "lecture" video featuring the professors, interspersed with quizzes that reinforce the module's content. Attempting every quiz is a requirement of progressing through the module. **You may retake any quiz at any time throughout the duration of the course to improve your score.** Each module culminates in a programming assignment that you will complete and upload to bCourses.

All content modules are available now.

Programming assignments will generally be due on Monday, Wednesday, and Friday of every week, starting on Wednesday June 10. Late submissions will not be accepted for credit under any circumstances.

The synchronous online assignment discussion sessions will be led through Zoom by the GSIs and will be hosted for each programming assignment. The discussion sessions will introduce the programming assignments will be recorded and uploaded to bCourses for your convenience. The discussions will take place Mondays, Wednesdays, and Fridays 1000-1100 and recordings will be posted shortly afterwards.

The synchronous computer laboratory session will be supervised by one of the GSIs, and you are encouraged to attend as many of the laboratory discussion session as you need to successfully complete each assignment. The purpose of these sessions is to provide a forum for you to ask questions and get clarification about the module assignments in a small-group setting. The sessions will also be hosted on Zoom and will take place Tuesdays and Thursdays 0900-1200 and Wednesdays 1700-2000.

The popular course discussion forum Piazza is integrated into bCourses (see the left sidebar). The instruction team will monitor and contribute to this forum, and you are encouraged to use it to seek help from the instructors and your peers. Please be an active participant at Piazza.

The course will begin on Monday, June 8 and end on Friday, August 14. The exam will take place on Friday, August 14, 0900-1200. This is a proctored exam for which you will be asked to be logged into your Zoom account with the video option enabled.

Course Website

Congratulations, you found it! All the asynchronous course content is available by clicking on "Modules" in the left NavBar. Bookmark [the module list](#) if you have trouble remembering how to get there.

Course Text and Requirements

There is no textbook requirement for the course. However, you do need to own (or have access to) the 2018a release of MATLAB (or newer, that is 2018b through 2020a). Older releases will not be allowed because of potential incompatibilities. UC Berkeley student should be able to obtain the 2020a MATLAB license free of charge by visiting this [pageLinks to an external site.](#). Alternatively, we recommend that you obtain the [Student Version of MATLAB \(Links to an external site.\)](#). The MATLAB software comes with extensive built-in help, and tutorials can be found on the [Mathworks website \(Links to an external site.\)](#). Among other things that website hosts documentation, including manuals that you can download.

An internet connection is required for successful participation in this course. It is also recommended that you use a headset for better audio quality when interacting with the instructors in Zoom.

Academic Honesty

It is acceptable to discuss with your classmates the material contained in the quizzes and laboratory assignments. *However, we require that your submissions represent your own work.* Copying someone else's work or allowing your work to be copied constitutes cheating, and will result in zero credit for the entire assignment. In addition, Berkeley students who are found to cheat in assignments or exams will be referred to Student Judicial Affairs. For details, see the website of the [Berkeley Center for Student ConductLinks to an external site.](#)

Grades and Grading

The course grade will be assigned based on the following percentages:

- 20% quizzes
- 40% module assignments
- 40% in-person exam

You will need to score at least 50% on the in-person exam to get a passing grade in the course, regardless of your performance on quizzes or module assignments.

If you find any discrepancies between the issued grades and the grades posted on bCourses, please bring them to the attention of the instructors immediately.