General Information

Instructor

Matt Bishop; *Email*: bishop@cs.ucdavis.edu; *Web*: http://seclab.cs.ucdavis.edu/~bishop
Office: 2209 Watershed Science; *Phone*: (530) 752-8060
Office Hours: Mon 11:00am–11:50am, Wed 2:10pm–3:00pm, Fri 12:10pm–1:00pm; or by appointment; or by chance
When you send me email, please begin the Subject field with "ECS 10" so I see that the letter has to do with the class. I receive lots of email and, while I look at it all, I *sometimes* miss things, or skim the Subject fields to see which letters are very important. Putting "ECS 10" in the Subject field will tell me it is important.

Teaching Assistants

Ming Xiao, *Email*: minxiao@ucdavis.edu
Eilwoo Baik, *Email*: ebaik@ucdavis.edu
Tianhong Song, *Email*: thsong@ucdavis.edu

Lectures

MWF 10:00am–10:50am in 106 Wellman

Discussion Sections

You may go to any discussion section you like as long as there is room for those registered for that section.
   Section A01: Mon 1:10pm–2:00pm in 1130 Banier; TA Eilwoo Baik
   Section A02: Wed 12:10pm–1:00pm in 217 Olson; TA Ming Xiao
   Section A03: Wed 9:00am–9:50am in 146 Robbins; TA Eilwoo Baik
   Section A04: Wed 4:10pm–5:00pm in 1120 Hart; TA Tianhong Song
   Section A05: Thu 8:00am–8:50am in 110 Hunt; TA Ming Xiao

Laboratory (and TA Office) Hours

We have reserved the following lab times for this class:
   Mon 2:00pm–4:00pm in 2020 SciLab; TA Ming Xiao
   Tue 10:00am–12:00pm in 1131 Meyer; TA Ming Xiao
   Tue 1:00pm–3:00pm in 1131 Meyer; TA Eilwoo Baik
   Thu 1:00pm–3:00pm in 1131 Meyer; TA Eilwoo Baik
   Fri 11:00am–1:00pm in 2020 SciLab; TA Tianhong Song
In addition, Python 3 and PyScripter are installed on the PCs in 75 Hutchison and 2101 Student Community Center. Those rooms do not have classes, so you can use the systems in there whenever the rooms are opened. You are free to use any of the other computer labs when they are not otherwise scheduled, but they may not have the software installed. Please check that you use Python 3, not Python 2—the two have significant differences, and a program written for one will not run on the other.

   You can see when the rooms are open and the number of stations available by going to
http://clm.ucdavis.edu/rooms/available/

Course Outline

Introduction to principles of computing. Methods and algorithms for solving problems by use of a digital computer. The class will teach students to write programs in the Python programming language. After completing the class, students should be well-prepared for course 30 and for independent programming projects.

Course Goals

The overall goal is to learn computers by studying programming and how to use them to solve problems. More specifically, we hope you will:

1. Learn some basics about computers: a bit about their organization, software, and how they represent information;

2. Learn how to write small and moderately-sized programs, and how to use an integrated development environment, debuggers, compilers, and interpreters;
3. Learn the basics of the Python programming language, and through it the basic control and data structures, operations and data types in programming languages; and
4. Learn how to design and write an algorithm.

Prerequisite

Two years of high school algebra

Text

Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers, *How to Think Like a Computer Scientist*. This book is on-line at `http://www.openbookproject.net/thinkcs/python/english3e/`. It is free.

Class Web Site

The class web site is on SmartSite. To access it, go to `http://smartsite.ucdavis.edu` and log in using your campus login and password. Then go to ECS 10 in your schedule. Announcements, assignments, handouts, and grades will be posted there, and you *must* submit any assignments there. The alternate web site, `http://nob.cs.ucdavis.edu/classes/ecs10-2012-01` has everything except grades, and you cannot submit work there.

Extra Credit

Extra credit is tallied separately from regular scores. If you end up on a borderline between two grades at the end of the course, extra credit will count in your favor. But failure to do extra credit will never be counted against you, because grades are assigned on the basis of regular scores. You should do extra credit if you find it interesting and think that it might teach you something. Remember, though, it is not wise to skimp on the regular assignment in order to do extra credit!

Grading

Homework assignments	40%
Midterms	30%
Final	30%

Academic Integrity

The UC Davis Code of Academic Conduct, available at `http://sja.ucdavis.edu/cac.html`, applies to this class. In particular, for this course, all work submitted for credit must be your own. You may discuss your assignments with classmates, with the instructor, or with the teaching assistant in the course to get ideas or a critique of your ideas, but the ideas and words you submit must be your own. Unless explicitly stated otherwise, collaboration is considered cheating and will be dealt with accordingly.

The single exception to this rule is debugging. Once you have written your program, if you need help debugging it, you are free to ask a classmate for help providing that classmate has also written the program. Sometimes having someone else look over a program that is not quite working right will lead you to the best way to fix it, and you both will gain valuable experience in looking at programs and figuring out what is going on. But you must not collaborate on writing the program.