

General Information

Course

Name: MHI 289I, Programming in Health Informatics

CRN: 38216

Instructor

Matt Bishop

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Office Hours: TuTh 11:00am–11:50am, W 2:10pm–3:00pm by appointment, or by chance

I will hold Wednesday's office hours over Zoom. I have posted the link on Canvas, in Announcements. Please feel free to use that. I will hold the other office hours in 2203 Watershed Sciences.

When you send me email, please *begin* the Subject field with "MHI 289I" 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 fall behind. When that happens, I skim the Subject fields to see which letters are very important. Putting "MHI 289I" at the beginning of the Subject field will tell me it is very important.

Lectures

M 1:10pm–3:00pm, Room 1331 Center for Health and Technology

Course Outline

Basics of computer programming essential to the study of informatics. Impacts on systems within healthcare, public health, nursing, research, and others. The class will teach students to write programs in the Python programming language.

Course Goals

The overall goal is to learn how to use the Python programming language to solve problems. More specifically, we hope you will:

1. Learn how to design and write an algorithm to solve a problem, and implement it on a computer; and
2. Learn the basics of the Python programming language, and through it the basic control and data structures, operations and data types in programming languages.

Text

Charles Severance, *Python for Everybody: Exploring Data in Python 3*, CreateSpace Independent Publishing Platform, Seattle, WA, USA (2016). ISBN: 978-1-5300-5112-0.

It is on-line at <https://www.py4e.com/book> and is free. If you want a physical book, you can order it from Amazon. When I last checked (on the first day of class), it cost \$14.9.

Recommended: Serena Bonaretti, *Learn Python with Jupyter*. A printed version is not yet available, but is said to be coming this fall. It is on-line at <https://www.learnpythonwithjupyter.com/> and is free.

Class Web Site

The class web site is on Canvas. To access it, go to <https://canvas.ucdavis.edu> and log in using your campus login and password. Then go to MHI 289I 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/mhi289i-2025-04> has everything except the Zoom information, your 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

We expect the weighting to be as follows (but reserve the right to change it, with notice):

Homework assignments 1–4	18% each
Project	28%

When we grade an assignment, we will look not simply at your answers but also the program(s) you used to obtain the answers. We grade on style, documentation, and a number of factors as well as correctness. See the handout **All About Homework** for more details.

UC Davis Student Resources

UC Davis has developed a web site of student resources. The resources cover academic support, health and wellness, career and internships, and the campus community; It also addresses virtual classroom fatigue. The web site is <https://ebeler.faculty.ucdavis.edu/resources/faq-student-resources/>. Please consult it whenever you feel necessary. And as always, feel free to reach out to me, too. If I can't help, I will suggest people and places that might be able to.

Academic Integrity

The UC Davis Code of Academic Conduct, available at <https://ossja.ucdavis.edu/code-academic-conduct>, applies to this class. For this course, all submitted work must be your own. You may discuss your assignments with classmates or the instructor 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.

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.

Also, remember to cite, and give the source for, anything you copy or paraphrase, as is standard academic protocol. Plagiarism is cheating.