Syllabus

Instructor

That's me! I am Eric Reed, and you can email me at **reederic@foothill.edu (mailto:reederic@foothill.edu)** . It's easiest for me if you ask questions through the private or public message center here in the course, and only use email if you have trouble logging in. I get a huge amount of email and there's a chance that a time critical question will get lost if you email me.

Why do I get so much email? I am also the **STEM Center** **(http://foothill.edu/stemcenter)** director here at Foothill. Which, by the way, is a good place to know. More about that later.

I teach both math and computer science. I hold an M.S. in math from CSU East Bay and an M.S. in computer science from Georgia Tech. Feel free to ask me about either one.

What you really need to know is that I am glad you are here, and my goal is your success in this course.

Office Hours

You can find me online on Sundays from 10am-11am at foothill.edu/stemcenter/onlinecs

We will hold two office hours on campus as well:

- Tuesday 11AM - Noon Room 4412
- Friday 6pm-7pm Room 4601

You may always feel free to contact me for an appointment.

Oh, what about this course?

CS 3C is an advanced lower division computer programming course using the Python language. The truth is, the course is more about the computer science concepts than the language. We will learn about time complexity (Big-O notation), data structures like trees and hash tables, and topics related to algorithms like sorts and minimum spanning trees   To succeed in this class, you need a solid understanding of Python structure and statements, and some experience with object oriented design. You will need time to complete the projects. Plan for five hours per week reading and understanding the modules, and at least ten hours per week to complete the assignments. Finally, you will also need both a desire to learn and a positive attitude.

A note about getting the assignments done. You have probably figured out that programming is a beast when it comes to deadlines. You never really know how close you are to a finished product, and then suddenly it all comes together. For this reason it is important to start early and plan to have your assignments complete a few days before the due date. That way you have some wiggle room in case things don't go as smoothly as you like.

And where's the book?

There is no required textbook for the course. The **["official" Python tutorial (https://docs.python.org/3/tutorial/)](https://docs.python.org/3/tutorial/)** should get you through any Python review that you need, and it's completely free. **[Problem Solving with Data Structures and Algorithms Using Python (https://runestone.academy/runestone/static/pythonds/index.html)](https://runestone.academy/runestone/static/pythonds/index.html)** is great for the new concepts. It's also free, and includes online exercises built in to the text.

So I need to buy some expensive software, right?

You will need a (free) software package called a *IDE*, or **I**ntegrated **D**evelopment **E**nvironment along with a *Python Interpreter* (which includes a bytecode *Compiler*). I am going to recommend that you use PyCharm. The free version will give you everything you need for this class. I will insist that every assignment meets PEP-8 formatting standards, and if you code in PyCharm it will tell you everything you need to get there.

This is an online CS class. That means I sit at home alone with a Red Bull and get everything done without talking to anyone, right?

Wrong. There are a few places where you can meet and chat with your fellow students. And I think you should!

Public Forums

Questions and comments should be posted to the Discussions Tool which you can reach by clicking on Discussions on the left menu.   I will usually reply within a day. Unless a question is of a private nature (i.e. grades, registration issues), please use the public Discussions.   Also, feel free to answer your fellow students' questions even if you only have a guess as to what the answer is. It's great to engage in conversation with each other in this manner.

Steps needed to post your public questions and comments for this course can be found on the **[Canvas Discussion Instructions Page (https://www.fgamedia.org/faculty/loceff/cs_courses/common/syllabi/cs_all_disc_canvas.html)](https://www.fgamedia.org/faculty/loceff/cs_courses/common/syllabi/cs_all_disc_canvas.html)** .

You must post an introduction in the first week of class or you will be ***dropped as a "no show"*** according to the college requirements. Use the "First Week Introductions" discussion in this Syllabus Module. In following weeks you can file bug reports, share interesting sites or articles you found, or ask and answer questions about the labs.
One thing though - Do Not Post Homework Code

Whether you have a question or suggested answer, **never post homework code** to forums. Create a separate small program to display your issue or illustration.

Private Messages

Please use *public discussions* for any question or comment that involves understanding the modules, tests or assignments. If you have a confidential question (grades or registration) use the Message Tool by first clicking on Inbox at the far left, then selecting this course and your intended recipient (usually me).

Steps needed to post your private questions and comments for this course can be found on the **Canvas Inbox Instructions Page (https://www.fgamedia.org/faculty/loceff/cs_courses/common/syllabi/cs_all_INBOX_canvas.html)** .

Posting Program Code

You can post code to the public discussions that is not directly from your assignment. If you have an assignment question, translate that into a piece of code that does not reveal your answer or submission.

When posting code fragments (i.e., portions of your program) into questions, make sure these code fragments are perfectly indented and that they are properly formatted. For details see the required resource module **Pasting Code into Questions (https://www.fgamedia.org/faculty/loceff/cs_courses/common/compilers/cs_all_posting_code_CANVAS.html)** .

STEM Success Center

If the online forums here are not enough, please visit the **STEM Success Center page (http://foothill.edu/stemcenter)** and click **Schedule and Available Instructors**. They even have **online computer science tutoring**   **(https://foothill.edu/stemcenter/tutoring-schedules/schedule-cs-online.html)** ! These experts are qualified to help you with assignments or modules without giving you an answer that will short-circuit your discovery process. Let them know that you are not to receive actual assignment solution code or even fragments. They probably know this already, but it's your responsibility to avoid submitting something that was written by a tutor or another person.

All about Canvas

Access the various areas of your course by first selecting this course through the *Canvas* Courses choice in the *far left* ...
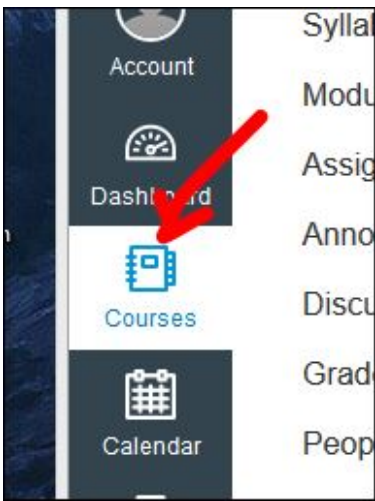
... then examining our *course choices menu*, also on the left side of the screen, but slightly to the right of Courses:
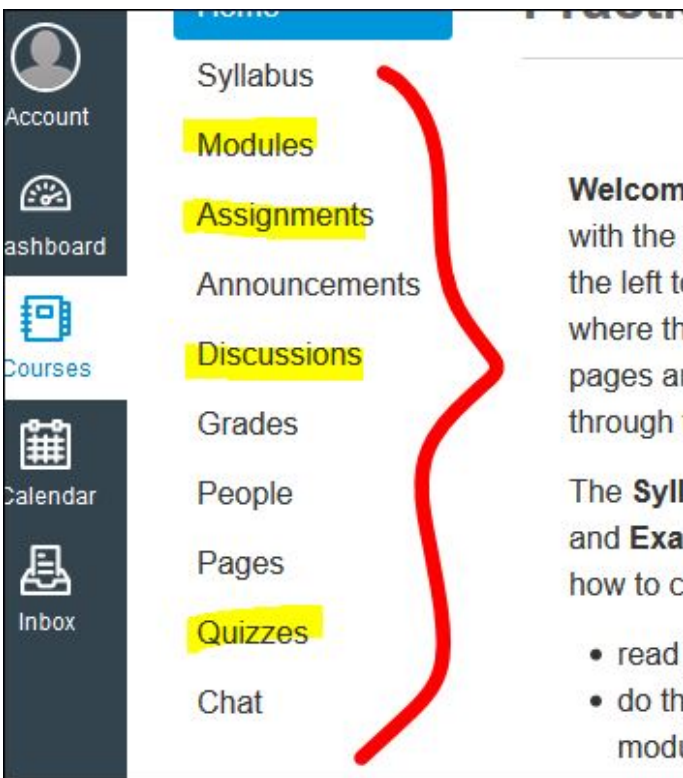
- *Assignments:* submitted through the Assignments Tool.
- *Tests:* taken through the Quizzes Tool.
- *Questions or comments:* posted using the **Discussions Tool**.
- *Other areas*: You'll find the names self-explanatory, and you can investigate them on your own.

Grades

Your grades are based on programming **lab assignments** (Nine assignments for a total of 180 points), **exams** (15 + 15 = 30 points), and **participation** (20 points). There is a tenth extra credit assignment.

To earn full participation points, you must provide meaningful contribution to the discussions at least once every three calendar weeks (Sunday through Saturday, weeks 1-3, 4-6, 7-9 and 10-12). This may be asking a "good" question, providing a helpful, non-duplicating answer to another student,

posting a bug report, or just bringing in some relevant information from outside the class. For the first week it is sufficient to post a nice introduction (what's your name, why are you here, what coding experience do you have, etc).

Each lab assignment has its own rubric. Every assignment, though, has the following basic requirements:

- You must follow the PEP-8 style guidelines (PyCharm should not identify any PEP-8 violations in your code)
- Your code should be simple and elegant, without redundant code
- You must include a sample run that is exactly what is output by the program you submit

Following is a grading scale for your final grade:

Absolute Grading Scale

% needed for	this grade
97	A+
91	A
88	A-
86	B+
80	B
78	B-
75	C+
67	C
60	D
< 60	F

No Ghosting!

For a complete reference of all withdrawal dates and deadlines refer to the **Foothill College registration page** **(https://foothill.edu/calendar/spring2019.html)** at the college web site.

To stay enrolled in this class, you must participate regularly in your lab assignments and exams. This is part of the class participation that online classes must possess in order to maintain their transferability and accreditation.

You may be dropped for any of the following:

- Missing a scheduled test without prior notice may result in an automatic drop.
- If you do not login for **nine (9)** consecutive days I may drop you. (See exception below.)
- If you receive a zero on any two lab assignments, I may drop you. (See exception below.)
- If you do not post an introduction in the first week, you may be dropped for non-participation.

You will notice that I wrote "may" instead of "will." If you do not wish to continue with the course, it is your responsibility to drop yourself. Do not count on me dropping you, even if you are not participating.

Exception to Above Policies:

If the non-participation that has just been described occurs partially beyond the last date to drop, I may not be able to drop you, and you may receive whatever grade that your points dictate. Therefore don't assume that you can simply stop participating late in the quarter and you will be dropped. If you intend to drop please do so yourself, so you don't accidentally end up with an unintended "F."

Sharing is caring? Not always...

I think you will find me to be kind, supportive and patient. But, my patience is very short when it comes to cheating. **Your FIRST violation will result in a referral to the Dean of Academic Affairs.**
I strongly encourage you to help each other - on the discussion board, in the STEM Center, through Skype, wherever you happen to be. You can do flow charts together and strategize how you might logically complete the assignment. However - all the CODE you submit MUST be 100% your own. Therefore, never share any code from your assignments with anyone else. MANY MANY MANY times I have heard a student upset because someone else used their code in a computer science class and both students got a zero. Any variation of collaborating or copying programming lab assignments is prohibited. The assignment must be 100% your own work.
Please familiarize yourself with Foothill's **Academic Integrity Policy.**
(http://www.foothill.edu/services/documents/Z-Card.pdf)

For those of you wishing to give help, please do not give away the answer. Either tell the person where they can look to find the solution, give them a general idea or ask them to ask me. Don't post actual assignment code.

The assignments on this site were created by me and I retain all rights. If you post the material online you are not only violating my copyright, you are also short-circuiting your own learning and the learning of other students. If you believe this is the only way to pass the class (despite the fact that I am available to you online, we have tutors in the STEM Center and online, and your fellow classmates are very generous with their help) then you should drop and try something else.

My strong advice to you is to completely avoid sites like Chegg or CourseHero. If you post assignments or use code there, you will receive a zero for the assignment, and a referral to the dean. Please read the terms and conditions for these sites, the sites will reveal the user information of a student (i.e. name on your credit card or bank account) if they are asked by an academic dean.

StackExchange is a legitimate place to ask small questions about how a particular function works (or why it's not working the way you think it should). Be very careful, though, not to post assignments or copy code even from StackExchange.

Think first, then ask constructive questions

It is easy to make sure your question is constructive and productive. Instead of writing *"My program doesn't work. Here it is. Would you please see if you can tell me what I am doing wrong?"* try something like, *"My program doesn't work. Through trial and error I have determined that the problem lies in the following five lines, but I can't seem to narrow it down any further. Can you help?"* This shows an attempt to organize and isolate the problem prior to asking for help.

If you have (or think you may have) a learning challenge:

... please contact **Disability Resource Center** (DRC) at the start of the quarter.   To contact **DRC**, you may:

- Visit **DRC** in Room 5400
- Email **DRC** at adaptivelearningdrc@foothill.edu
- Call **DRC** at 650-949-7017 to make an appointment