∞ COMP 115 Problem Solving and Python Programming ∞ May 25 – June 18 Summer Session I

TWRF Lecture/Lab – 9:30-12:00

This course is part of
CONX 20016: Logic and Programming
connecting with
PHIL 125: Logic

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Web: http://cs.wheatoncollege.edu/mgousie/comp115.html

Content:

This course covers the concepts and techniques of problem solving and programming. Python will be used as the programming language. Although we will cover Python specifically, skills learned in this course apply to other general-purpose languages such as Java and C/C++, web-centric JavaScript, and many others. Real-world problems and actual data sets will provide examples for many programming concepts. Class periods will individual exercises, either on paper (!) or on your computer.

This course is the first in the sequence for students wishing to major or minor in computer science. However, all students are welcome, regardless of major. Programming is a skill becoming more and more important in many diverse professions. In any case, no previous programming experience is required or assumed.

Required Text:

Python Programming: An Introduction to Computer Science, $(3^{rd}edition)$, by Zelle (Franklin, Beedle & Associates, 2017).

Grading:

There will be two exams during the term and a comprehensive final exam. The exams are worth 45% of your grade. In order to learn to program, you must practice! Therefore, there will be five (gack!) programming assignments throughout the term, which comprise 50% of your grade. Class participation and possible homework assignments constitute the remaining 5% of your grade.

Grades will be assigned according to the following scale:

$$A = 93-100, A = 90-92, B = 87-89, B = 83-86, B = 80-82, C = 77-79, etc.$$

Exam Schedule:

Exam	Weight	Date
Exam 1	10%	June 3
Exam 2	15%	June 11
Final	20%	June 18

Assignment Schedule:

Program	Weight	Topic	Due Date (tentative)
P1	5%	Intro Python	June 1
P2	8%	Graphics	June 6
P3	10%	Selection	June 11
P4	12%	Repetition, files, more graphics	June 14
P5	15%	Functions, lists	June 18

Course Policies:

- You are responsible for all material covered in class.
- You are responsible for completing all of the reading, noted below.
- Examples and links to videos will be available on the course web page at: http://cs.wheatoncollege.edu/mgousie/comp115.html
- If you must miss a quiz or exam for any reason, you must inform me BEFORE the test. Except in the case of emergency, illness, or you got lost in the Wheaton's original pool, makeup exams or quizzes will not be given.
- You may work on your programming assignments on any platform and any interpreter; however, the final turned-in version must be written in Python 3 and work properly on the Wing IDE used in class.
- Assignment due dates are firm.
 - All assignments must be submitted electronically by 11:59:59 PM on the due date, unless noted otherwise on the specification sheet. Assignments submitted up to a day late will receive a 15% penalty. Anything turned in later will receive a 0.
 - Any written homework must be scanned and submitted electronically by 11:59:59 PM on the due date. There are no provisions for late homework.
 - There will **not** be any individual "extra credit" work. If you did not have time to do a good job on the original assignment, how will you have time to do additional work?
- You are expected to adhere to the Wheaton Honor Code.
 - Although discussion of assignments is encouraged, the final implementation of programs is to be the result of your own work. This means: Do not copy any portion of a program!
 - Collaboration on exams is prohibited.
 - Any violation of the above guidelines will result in a 0 for that assignment or exam, and/or a failing grade for the course.
 - You will be required to write and sign the pledge on all work turned in: I have abided by the Wheaton Honor Code in this work.
- Having difficulty accessing the tech you need? Online-only classes require students to have access to specific technologies in order to complete classwork successfully. Having trouble accessing the learning technologies outlined in this syllabus? Or reliable WiFi or

computer access? First, work with your professors to clarify requirements. Next, reach out to your Student Success Advisor in Academic Advising for help with acquiring material or software. Use this form to report your technology needs - Learning Technology request form: $\frac{1}{1000} \frac{1}{1000} \frac$

• Accommodations for disabilities:

Wheaton is committed to ensuring equitable access to programs and services and to prohibit discrimination in the recruitment, admission, and education of students with disabilities. Individuals with disabilities requiring accommodations or information on accessibility should contact Abigail Cohen, Assistant Dean for Accessibility and Assistive Technology at the Filene Center for Academic Advising and Career Services. \sim cohen_abigail@wheatoncollege.edu or (508) 286-8215 \sim

Course Schedule (Subject to change):

Day	Topic	Reading
May 25	Intro to CS, hardware/software	Chapter 1
May 26	Number systems, problem solving/algorithms	Notes
May 27	Wing IDE, basic Python	Chapter 2
May 28	Numbers	Chapter 3
June 1	Graphics	Chapter 4
June 2	Sequences, intro to lists	Chapter 5
June 3	Files, Exam 1	Chapter 5
June 4	Selection	Chapter 7
June 8	Iteration	Chapter 8
June 9	Putting it all together (so far)	
June 10	Functions	Chapter 6
June 11	More functions, Exam 2	Handouts
June 15	More on lists	Chapter 5
June 16	Top-down design	Chapter 9
June 17	Data collections	Chapter 11
June 18	Final exam	