# COMP 4001-6001: Computer Programming Spring 2018 Bill Baggett, Ph.D.

### **Contact Information:**

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## **Office Hours:**

Monday 10:15am – 11:15am; or by appointment.

### **Course Description:**

### **COMP 4001-6001 – Computer Programming**

The course will include fundamental aspects of computer programming. Incorporates variables, flow control statements, arrays, lists, object-oriented concepts, etc. You will learn how to program using the Python programming language. NOTE: this course may not be used as a COMP elective to fulfill the requirements of the major or minor in Computer Science.

### Why This Course?

This course will teach you the basics of computer programming using Python. The class will include many practical coding exercises, which will help you with developing your computational thinking as well as programming skills. You will be able to apply the knowledge and experience of this course for other programming languages as well.

### **Course Website:**

Class materials (lecture notes, assignments, etc.) and grades will be posted on the eCourseware system at https://elearn.memphis.edu throughout the semester. News and reminders will also be posted here.

## **Requirement:**

Students must bring their own laptop to the class.

## **Required Textbook:**

Starting Out with Python, 4th Edition by TONY GADDIS

https://www.amazon.com/Starting-Out-Python-Tony-Gaddis/dp/0134444329/ref=la\_B001I9Q67I\_1\_2?s=books&ie=UTF8&qid=1516251123&sr=1-2

https://www.pearson.com/us/higher-education/program/Gaddis-Starting-Out-with-Python-Plus-My-Lab-Programmingwith-Pearson-e-Text-Access-Card-Package-4th-Edition/PGM335157.html?tab=order

# **Optional Textbook:**

*Think Python: How to Think like a Computer Scientist* by Allen Downey. <u>http://www.greenteapress.com/thinkpython2/index.html</u> (This is an e-book, also available on eCourseware)

### **Evaluation:**

#### **Grading Scale:**

A+	≥ 96%
А	90–95%
B+	87–89%
В	81–86%
B-	79–80%
C+	77–78%
С	71–76%
C-	69–70%
D+	67–68%
D	60–66%
F	≤ 59%

#### Grading:

- 1. Midterm Thursday, March 1<sup>st</sup>: 20%
- 2. Assignments: 25%
- 3. Project: 10%
- 4. Final Exam Tuesday, May 1<sup>st</sup>, 10:30am 12:30pm: 25%
- 5. Class Work: 10%
- 6. Attendance: 10%

### Late/Makeup Policy:

All assignments are expected to be completed and turned in on schedule. Due dates will be clearly indicated for each assignment. Late assignments are <u>NOT</u> accepted except in extreme circumstances. Likewise, makeup quizzes and exams will be given only under extreme circumstances. <u>If you feel that your circumstances warrant a late work submission or a makeup quiz/exam, get in touch with me as soon as possible. Be prepared to show some kind of documented proof of your situation.</u>

#### eCourseware Dropbox Policy:

All code submissions should be made through the dropbox on eCourseware unless specifically indicated otherwise. The dropbox will automatically cut off submissions precisely at the deadline. It is your responsibility to submit your work with time to spare, and to double check that your submission made it into the dropbox. "I accidentally submitted the wrong file," "The dropbox was having technical issues at the last minute," "I submitted the file but somehow it never made it to the dropbox," "The dropbox wouldn't accept my submission because it was 3 seconds late," and similar statements are NOT valid excuses.

### Email:

Please check your <u>University of Memphis</u> email account at least once a day, as that is my primary means of communicating with you outside of class.

#### Plagiarism/Cheating Policy:

An essential part of learning any skill is getting plenty of practice with it yourself. That said, it's often helpful if you bounce ideas off other people. I don't mind if you discuss general solution approaches with other students. However, the work that you hand in should always be your own. Handing in work that's identical to another student's except minor changes like variable names does <u>NOT</u> count as your own work.

If I determine that you have copied something directly from a book, the Internet, or some other source, you will receive a failing grade on the assignment and (at my discretion) a failing grade in the course. If I determine that you have copied another student's assignment, this will happen to both you and the person from whom you copied. The incident may also be forwarded to the University Judicial Affairs Office for further disciplinary action. <u>Please don't put me in this situation</u>.

Your written work may be submitted to Turnitin.com, or a similar electronic detection method, for an evaluation of the originality of your ideas and proper use and attribution of sources. As part of this process, you may be required to submit electronic as well as hard copies of your written work, or be given other instructions to follow. By taking this course, you agree that all assignments may undergo this review process and that the assignment may be included as a source document in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents. Any assignment not submitted according to the procedures given by the instructor may be penalized or may not be accepted at all.

#### **Getting Help:**

Although I expect your work for this class to be done individually, I encourage you to seek help if you get stuck:

- Come talk to me! I'm very willing to sit down and try to provide hints without giving away the solution.
- The Computer Science Learning Center (<u>http://www.memphis.edu/cs/current\_students/cslc.php</u>) in Dunn Hall 208 will be open throughout the semester if you'd like to get help from upper-level undergraduate students who have done well in similar courses.

#### **Student Disabilities:**

If you have a disability that may require assistance or accommodations, or if you have any questions related to any accommodation for testing, note taking, reading, etc., please speak with me as soon as possible. You must contact Disability Resources for Students (<u>http://www.memphis.edu/drs</u>) to officially request such accommodations / services.

# **Topics (tentative)**

- Week 1. Introduction to Computer Programming
- Week 2 Input, Processing, and Output
- Week 3 Decision Structures and Boolean Logic
- Week 4. Repetition Structures
- Week 5. Functions
- Week 6. Files and Exceptions
- Week 7. Review, Midterm Exam
- Week 8. Spring Break
- Week 9. Lists and Tuples
- Week 10. Dictionaries and Sets
- Week 11. Classes and Object-Oriented Programming
- Week 12. Inheritance
- Week 13. Recursion (if time permits)
- Week 14. GUI Programming (if time permits)