CS 172 Computer Programming 2 - Syllabus

Term and Credits

Winter 2017-2018
3 Credits

Room and Time

Lectures:

- A - Tuesday 2:00AM-3:50PM Room: TBD

Labs: (TA in Bold is Primary Grader for Lab Section)

- Section 61: Thursday 4:00pm-4:50pm Room: TBD (TAs TBD)
- Section 62: Thursday 11:00am-12:50pm Room: TBD (TAs TBD)
- Section 63: Thursday 1:00pm-2:50pm Room: TBD (TAs TBD)

Who Grades What:

- Reading - TA
- Labs - TA
- Quizzes - Primary Grader for Lab Section
- Assignments - Autograded (I hope!)
- Exam - Professor Burlick

Instructor

Matthew Burlick
Electronic Mail Address: mjb528@drexel.edu
Office: University Crossings 137
Extention: 215-571-4468
Office Hours: TBD

Teaching Assistant(s)

- TBD

Office Hours and Contact Info Through the CLC: https://www.cs.drexel.edu/clc

Course Description

Covers object-oriented design, inheritance hierarchies, information hiding principles, string processing, recursion, good programming style, documentation, debugging, and testing.

Course Objective and Goals

1. Be able to import and use Python modules.
2. Design and Implement Object Oriented Programs.
3. Be familiar with common data structures like lists and stacks.

4. Be able to design tests to determine code quality.
5. Understand how objects are used to improve code development.

Audience and Purpose within Plan of Study

This course is open to all student's interesting in Programming and Computer Science.

This course is the second in a two-term sequence of computer programming courses in C++ (CS 171-2) and is a required course for students majoring in computer science, mathematics, physics, information systems, and digital media. It is also a required course for students pursuing a minor in computer science. The goal is for students completing this sequence to be competent programmers, able to write working C++ program on their own using appropriate constructs when presented with a problem description.

Prerequisites
C or better in CS171.

Textbook

Python 3 Object-Oriented Programming
2nd Edition
Dusty Phillips
ISBN-10: 1784398780
ISBN-13: 978-1784398781
See on Amazon

Python GUI Programming Cookbook - Second Edition
Burkhard A. Meier
ISBN-10: 1787129454
ISBN-13: 978-1787129450
See on Amazon

Grading and Policies

- Homework Assignments: 25%
- Labs: 10%
- Readings: 10%
- Quizzes 25%
- Final Exam 30%

Final grades will be determined by your total points weighted according to this distribution. Grades may be curved but are generally computed via the formula below. It may be modified at the instructor's sole discretion, but letter grades will generally not be lower than those shown here.

- [100-97]A+
- (97-93] A
- (93-90]A-
- (90-87]B+
- (87-83] B
- (83-80]B-
- [80-77]C+
- (77-73] C
- (73-70]C-

- (70-67]D+
- (67-60]D
- (60-0]F

Readings

Each week a selection of short questions will be assigned related to that week's readings.

Reading assignment must be completed by the due date.

Late Submissions will not be accepted for Readings.

The lowest reading grade will be dropped.

Labs

Attendence at labs is required to receive credit. If you cannot attend lab you **MUST** email the TA for your lab and schedule a makeup meeting.

Lab groups will be teams of two. You will use Pair's Programming. One member will act as the **Driver**, who types up the code, and one person will be the **Observer**, who reviews the code and makes suggestions. You are expected to switch positions throughout the lab.

Your lab grade is based upon your attendance in lab, participation in individual and group lab activities, and completion of assigned lab projects. Each lab period you will be given an assignment which must be started in class. During class time you may consult with other students or the TAs if you need help on the lab. Because labs involve group work experiences, you are expected to attend and participate as part of a group, and not work alone outside the lab.

If you cannot make a lab, you must notify the TA or Professor **prior** to Lab. You may complete the lab during any TA's office hours. If you do not notify the TA prior to the missed lab and/or don't work on the lab during his/her office hours then you will receive zero credit for that lab. Makeup labs must be done within one week of the original lab.

All lab assignments will be listed on BBLearn. There you will find instructions for each lab.

If you cannot finish a lab in class, you may complete the lab at home. This requires that you started the lab in class and spent the entire lab working on it but did not finish. To receive credit for the lab, you **MUST** meet with the TA to have your lab grade updated. The TA will review your work and update your grade. This **MUST** be done within one week of the original lab date. (Before the start of the next lab.)

The lowest lab grade for the term will be dropped.

Quizzes

Quizzes will be given during the last 30 minutes of lecture in even weeks.

Quizzes are to be completed individually. Talking to other students or looking at other student's answers is a violation of the academic honesty policy.

The lowest quiz grade for the term will be dropped.

Assignments

All assignments will be posted with a due date. No late material will be accepted. Even if the submission is less than a second overdue. Make sure to submit early.

Your lowest assignment grade will be dropped.

All written material (non-code) must be prepared on a word processor, converted to pdf, and submitted electronically via BBLearn.

Although labs are designed to be collaborative, readings and assignments are meant to be done individually. Copying from others (online sources or classmates) results in an automatic zero for the assignment and additional penalties (including a drop of one letter grade or failure for the class).

Assignments will be submitted to learning.drexel.edu by 11:59PM on the date they are due. Grades will be reported via learning.drexel.edu.

Assignments and exams will be returned on a regular basis to provide feedback to students.

Late Submissions will not be accepted without written proof (see special exceptions below). Dropping the lowest grade allows you to miss an assignment.

Special Circumstances: If you have a documented reason why you cannot submit a homework by the cut-off deadline, a special exception may be made. The Professor may also wave the late submission policy for documented special exceptions.

Additional Policies

- Your lowest Quiz, Lab, Reading, and Assignment grades for the term will be dropped.
- You, your instructor, and the TA are bound by the Academic Honesty policy. Students are responsible for reading and understanding the course policies in this syllabus and for announcements made in class and in the course discussion board. See the academic policy linked to in this syllabus.
- During lecture and recitation sessions please refrain from using mobile phones or otherwise being impolite.
- Any dispute about an assignment grade must be made and resolved within 5 days of receiving your grade. After this period your grade cannot be adjusted.
- If you are seeking help with an assignment you must contact the Professor or a TA prior to Friday close-of-business hours. We cannot guarantee a timely response of that. This policy is to ensure that you get started early on your assignments.

Plagiarism Detection System

To ensure that assignments are done independently, in addition to human observation, we will be running all assignments through a plagiarism detection system. This program uses compiler techniques which are invariant of syntax and style. It has a very high accuracy rate.

Academic Honesty Policy

The CCI Academic Honesty policy is in effect for this course. Please see the policy at http://drexel.edu/cci/resources/current-students/undergraduate/policies/cs-academic-integrity/.

In the event of an Academic Honesty Violation, punishments include but are not limited to

- Failure for Class
- Deduction of One Letter Grade
- Zero for Offending Assignment
- Report Submitted to University Student Coduct Department

Computer/Software Help
iCommons: http://drexel.edu/cci/about/our-facilities/rush-building/iCommons/

University Policies
In addition to the course policies listed on this syllabus, course assignments or course website, the following University policies are in effect:

- Academic Honesty: http://www.drexel.edu/provost/policies/academic_dishonesty.asp
- Judicial Affairs Academic Integrity: http://drexel.edu/studentlife/community_standards/facultystaff/integrity/
- Official Final Exam Schedule: http://www.drexel.edu/registrar/scheduling/exams/
- Students with Disability Statement: http://drexel.edu/oed/disabilityResources/overview/
- Course Drop Policy: http://www.drexel.edu/provost/policies/course_drop.asp
- Drexel Student Learning Priorities: http://www.drexel.edu/provost/irae/assessment/outcomes/dslp/
- The instructor may, at his/her/their discretion, change any part of the course during the term, including assignments, grade breakkdowns, due-dates, and the schedule. Such changes will be communicated to students via the course web site Announcements page. This page should be checked regularly and frequently for such changes and announcements. Other announcements, although rare, may include class cancellations and other urgent announcements.

Software and Hardware Requirements

All Drexel students are required to have individual access to a dedicated computer which meets minimum specifications, including: processor speed, memory and secondary storage requirements, connectivity via high-speed or direct connection to campus network, and a CD/DVD drive.

The Official Language is Python 3. You must have Python 3 installed on your computer. It is available for free from https://www.python.org

Tentative Course Schedule

Please see the appropriate assignment webpages for a detailed description of course deliverables.

Week	Topic	Reading	Notes
1	Object Oriented Design	Phillips Chapter 1 & 2 Pages 1-32	
2	Objects in Python	Phillips Chapter 2 Pages 33-62	HW 1 Due Friday at 11:59PM Quiz 1 in Lecture
3	When are Objects Alike	Phillips Chapter 3 Pages 63-94	
4	Expecting the Unexpected	Phillips Chapter 4 pages 95-123	HW 2 Due Friday at 11:59PM Quiz 2 in Lecture
5	When to use Object-oriented Programming	Meier Chapter 5 pages 125-156	

6	Python Data Structures	Phillips Chapter 6 Pages 155-197	HW 3 Due Friday at 11:59PM Quiz 3 in Lecture
7	Pretty User Interfaces	Phillips Chapter 12 pages 353-361	
8	User Interfaces Part 2	Ceating the GUI and Adding Widges from Meirer Layout Management from Meirer	HW 4 Due Friday at 11:59PM Quiz 4 in Lecture
9	Objects in User Interfaces	Data and Classes from Meirer	
10	Testing	Phillips Chapter 12 Pages 357-392	HW 5 Due Friday at 11:59PM Quiz 5 in Lecture
11	Final Exam Time and Location TBD		