

Syllabus
COMP 151
Introduction to Programming
Remote Learning Edition

Fall 2020

1 Remote Learning Expectations

Due to the ongoing COVID-19 pandemic, this course will be delivered remotely. The plan is to retain most of the regular meetings and opportunities for help and direct instruction but to carry out these activities via online tools. Here's what that means, what you can expect, and what will be expected of you for this mode of delivery.

- Remote contact information for the instructor and Zoom meeting links will be posted to the course Moodle.
- Assignments will be posted and submitted via Moodle or a similar online platform.
- Class and Lab sessions will meet at the usual time but will be carried out via Zoom. *Attendance expectations for these sessions are the same as if the class were meeting in person.*
- Prior to class meetings, students will be given reading assignments and possibly pre-recorded videos to watch. A short reading quiz and homework problems will often accompany the assignment as well. These assignments are expected to be done prior to class and will be the way you can expect to encounter and explore new ideas in the course. Class meetings and lab sessions will be used to clarify these ideas and test our shared understanding of these ideas through additional problems. Class is being organized this way in part to make it easier for individuals or the class as a whole to transition to a more asynchronous setting should the need arise.
- Expect most class sessions to be recorded for the benefit of students that are unable to attend class due to an excused absence or illness. If you do not wish to be recorded, please contact the instructor ASAP to work something out.
- You are not required to use video and audio during the class meetings, but it is, however, encouraged. The chat channel will be monitored and used during class in order to facilitate those without audio. If you choose to use audio, please try to keep microphones muted unless you are speaking. If you choose to use video, please ensure your space and background do not contain inappropriate or offensive material. (Just assume one of my kids is going to see it.)
- Office hours will be carried out via Zoom. Whenever possible, give the instructor a heads up if you need or want to meet. If you log into the Zoom meeting and the session isn't running or nobody is there, then email or text and the instructor will hop right on.

If you have any concerns about getting access to the technology you need to keep up with remote meetings or generally have questions about class exceptions for this semester, then please do not hesitate to ask. The goal here is flexibility and we try to make things work for whatever your situation happens to be.

2 Logistics

- **Where:**
 - Class: Center for Science and Business (CSB), Room 309¹
 - Lab: Center for Science and Business (CSB), Room 309¹
- **When:**
 - Class: MWF 8–8:50am
 - Lab 1: M 2–4:50pm
 - Lab 2: T 2–4:50pm
- **Instructor:** Logan Mayfield
 - *Office:* Center for Science and Business (CSB), Room 344²
 - *Phone:* 309-457-2200
 - *Website:* <http://jlmayfield.github.io/>
 - *Email:* lmayfield at monmouthcollege dot edu
 - *Office Hours:* By appointment.
- **Credits:** 1 course credit

Note: This Syllabus is subject to change based on specific class needs. Significant deviations from the syllabus will be discussed in class.

3 Description, Content, and Learning Goals

Introduction to Programming teaches basic programming skills that are applicable to a variety of disciplines and also acts as a bridge to continued studies in Computer Science. Students will work with the Python programming language in order to solve basic problems involving digital media: images, sound. By the end of the course students will be able to read and develop computer programs utilizing the following programming concepts: basic data types and encoding, variables and scope, array and list data structures, if statements and conditional execution, loops and iteration, functions, and object types.

3.1 Textbook

Guadial, Mark J. & Ericson, Barbara. *Introduction to Computing and Programming in Python: A Multimedia Approach. Fourth Edition.* Pearson. Hoboken, NJ. 2016.

3.2 Software

All programming will be done using *Jython Environment for Students (JES)*. This software is available from any campus computer. It is also free to download and install. A link to the latest version will be posted to Moodle and the instructor is happy to help with getting it installed and setup as needed.

¹This room is reserved for the scheduled class and lab periods, has computers with the software you need for this course, and is available for you to use should you need or want to use it.

²Do not expect this office to be occupied unless things calm down or a face-to-face meeting is essential.

4 Workload

The course workload is as follows:

<u>Category</u>	<u>Number of Assignments</u>
Exams	6
Projects	2
Labs	10
Homework	8

Exams

All exams are weighted equally. There is no midterm or final exam in the sense that the exams are worth more than other exams or that they will necessarily take longer than other exams. Exams will generally focus on material covered since the previous exam but will be in some sense cumulative due to the nature of programming. *Exams during this semester will be administered via Moodle and will have fixed time windows during which they can be completed.*

Projects

Two larger scale programming projects will be undertaken during the semester. These projects will be individual efforts and will require much more effort than the programs written in lab or as part of homework. Students can expect to have two weeks from the time of the project assignment to complete the project. One or more lab periods will be dedicated to work on the project. It is highly recommend that all students make ample use of the time given on these projects.

Homework

Students will be assigned a set of problems from each chapter of the book covered in the course. These problems are meant to guide reading, prepare the student for in class problems, and survey the material covered by the exam. *While we are engaging in remote learning, homework problems will be given submitted via Moodle. Some problems will be administered as Moodle Quizzes where others will require submitting written code.*

Labs

Students will be placed into groups of two or three for each lab. Work will be done using *paired programming*, a programming practice where each member of the group takes turns typing while the other group member helps look for typos, bugs, and otherwise assists in the design of the code. Each group will submit their work at the end of the lab period regardless of the overall completeness of the assignment. The goal is to make good constructive progress on the assignment. Full credit can and will be given on unfinished work so long as it can be executed to complete some portion of the given task, shows evidence of purposeful progress, and the group made full use of the lab period.³

4.1 Course Engagement Expectations

The weekly workload for this course will vary by student but on average should be about 13 hours per week. The follow tables provides a rough estimate of the distribution of this time over different course components.

³We will attempt to maintain this practice using Zoom breakout groups. If it's too awkward we'll find something different. No matter what, labs will be collaborative in nature and you can expect to have a classmate to work with and bounce ideas off of during each lab period.

<u>Assignment Type</u>	<u>Time/week</u>
Lectures+Labs	6 hours/week
Homework	1 hours/week
Exam Study Time	0.5 hours/week
Projects	3 hours/week
Reading	2.5 hours/week
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	13 hours/week

5 Grades

This course uses a standard grading scale where percentage grades translate to letter grades as follows:

<u>Score</u>	<u>Grade</u>
94–100	A
90–93	A-
88–89	B+
82–87	B
80–81	B-
78–79	C+
72–77	C
70–71	C-
68–69	D+
62–67	D
60–61	D-
0–59	F

Students are always welcome to challenge a grade that they feel is unfair or calculated incorrectly. Mistakes made in the student's favor will never be corrected to lower a grade. Mistakes not in the student's favor will be corrected. *Basically, after the initial grading, a score can only go up as the result of a challenge.*

5.1 Grade Weights

The final grade is based on a weighted average of particular assignment categories.

<u>Category</u>	<u>Weight</u>
Exams	36%
Projects	24%
Homework	10%
Labs	15%
Participation	15%

5.2 Participation & Attendance

Participation grades will be determined based largely on the completion of reading quizzes that come along with the daily reading and video assignments. Class and lab attendance will be monitored via Zoom. Repeated unexcused absences will have a negative effect on your participation grade. Whenever possible, let the instructor know of the absence before it occurs. When unexcused absences do occur, it is the student's responsibility to make up for the lost class time and to seek the permission of the instructor to hand-in or complete assignments that are late due to an unexcused absence.

5.3 Late Work

In general, assignments are due at the specified time and no late assignments will be accepted unless an extension was requested prior to the due date. There are, of course, exceptions to this rule and students needing extra time can always contact the instructor for an extension. Do not just give up and eat a zero for the assignment. Ever. There is no penalty in asking for an extension nor is there a limit on extensions. That being said, there is no guarantee an extension will be given without legitimate need.

5.4 Calendar

This calendar is subject to change based on the circumstances of the course. A detailed, day-by-day calendar of reading requirements and expected exam dates can be found on the course website.

<u>Week</u>	<u>Dates</u>	<u>Assignments Due</u>	<u>Chapter(s)</u>
1	8/18–8/21		1
2	8/24–8/28	Lab 1. Hwk 1.	2,4
3	8/31–9/4	Lab 2. Hwk 2. Exam 1.	4
4	9/7–9/11	Lab 3. Hwk 3.	4,5
5	9/14–9/18	Lab 4. Exam 2.	5
6	9/21–9/25	Lab 5. Hwk 4. .	5,6
7	9/28–10/2	Lab 6. Exam 3 .	6
8	10/5–10/9	Lab 7. Hwk 5.	6
9	10/12–10/16	Exam 4	10
10	10/19–10/23	Project 1.	10, 7
11	10/26–10/30	Lab 8. Hwk 6.	7,8
12	11/2–11/6	Lab 9. Hwk 7.	8,9
13	11/9–11/13	Lab 10. Exam 5.	9
14	11/16–11/20		15
15	11/23–11/24	THANKSGIVING (W-F)	
16	11/30–12/4	(EXAMS) Project 2.	