

Syllabus TL;DR

CMSC 140: Introduction to programming

Fall 2020

Section 1: MWF 1:10, Rotunda 115 (and via Zoom)
Section 2: MWF 2:15, Rotunda 354 (and via Zoom)
Website: <https://canvas.longwood.edu/courses/1298254>
Professor: Don Blaheta, Ruffner 334, blahetadp@longwood.edu
Office hours: Mondays 3:30–4:30pm; Tuesdays 2–3:15pm;
Wednesdays and Thursdays 11am–noon

Textbook and resources

A Practical Introduction to Python Programming, by Brian Heinold.

https://www.brianheinold.net/python/python_book.html

Python 3 editor/classroom support: Repl.it

<https://repl.it/>

Things you must have: a laptop (which you bring on designated lab days); a device with video support (for Zoom attendance, and to record/upload video); internet access (for Zoom attendance, homework, and to record video); a suitable mask (following university guidelines).

Zoom attendance quick links

These can also be found on the Canvas page for the course.



Content

Engagement. You need to be an active participant in this class: engaged during class time (whether in-person or via zoom) and on the discussion boards, and participating in the Canvas-based participation stuff that I post. 10% of the grade is for all of that.

Lab work (and homework). The central goal of the course is that you learn to Collaborative program, so the bulk of the work you do will be “lab” work before, during, and after our assigned class periods. This work will make up 25% of the grade.

Course project. Your course project will involve working with a data set in your Collaborative area, building a program to process that data, and writing up your results. Evaluation will be based on the program code itself as well as your written and verbal proposals and conclusions based on the results; all that together will be worth a total of 25% of the final grade.

Exams. There will be two exams, one in early October and one in late November. Non-collaborative
You are not permitted to discuss the exams *at all*, with anyone other than me. Each exam is worth 20% of the grade (total of 40%).

Grading scale

I tend to grade hard on individual assignments, but compensate for this in the final grades. The grading scale will be approximately as follows:

A–	[85, 90)	A	[90, 95)	A+	[95, 100]
B–	[70, 75)	B	[75, 80)	B+	[80, 85)
C–	[55, 60)	C	[60, 65)	C+	[65, 70)
D–	[40, 45)	D	[45, 50)	D+	[50, 55)

While there will be no “curve” in the statistical sense, I may slightly adjust the scale at the end of the term if it turns out some of the assignments were too difficult. Final grades of A+ are recorded as an A in the grading system. Final grades below the minimum for D– are recorded as an F.

Calendar

A/B days indicate which attendance group is allowed to attend in person; others should attend via Zoom those days.

Days marked **-L** mean you should bring your laptop that day, as we will be doing lab work.

Wk	M	W	F
	August		
1	24 A — Introduction The idea of an algorithm How to read/use a textbook	26 B-L [video on Canvas] Hello world	28 A Ch. 1 Mad Libs
2	31 B* Ch. 2 for loops range	September	
		2 A-L — (continued)	4 B — Quantitative Reasoning
3	7 A [reading TBA] What makes a workable quantitative question?	9 B Ch. 3 Arithmetic Order of operations	11 A-L — Random, Math
4	14 B [reading TBA] Limitations of a QR process	16 A Ch. 4 if and blocks Comparisons and booleans and or not	18 B-L — else, elif Flowcharts
5	21 A [reading TBA] Interpreting results of a quant question	23 B Ch. 6 Strings	25 A-L — (continued)
6	28 B [reading TBA] Checking results for reasonability Resolving limitations	30 A Ch. 7 Lists List operations Looping over lists	October
			2 B-L** — Adding and removing items
7	5 A — Review	7 — Exam 1	9 B [reading TBA] Test cases: checking your work

* **31 August:** Deadline to add/drop classes (5pm)

** **2 October:** Deadline to elect pass/fail option (5pm)

Wk	M	W	F
	October		
8	12 A Ch. 5 Standard list-loop algorithms	14 B — (continued) Multiple assignment Random choice	16 A [reading TBA] Writing the quant program Project overview
9	19 B Ch. 12 Text files	21 A [reading TBA] CSV files	23 B Ch. 8 split, join
10	26 A 8.4 List comprehensions Project proposal due	28 B 8.5 2D lists	30 A* Ch. 11 Dictionaries
	November		
11	2 B Ch. 13 Function basics	4 A–L — Scope More function practice	6 B–L — Elevator speeches Speech debrief Project work day
12	9 A–L — Elevator speeches Speech debrief Project work day	11 B Ch. 9 while loops break, continue	13 A–L — Lightning talks Speech debrief Project work day
13	16 B — Lightning talks Speech debrief Project work day	18 — Exam 2	20 A — Elevator speeches
14	23 B — Elevator speeches		

December

Project writeup due Tue 8 Dec 10:30am

Exam times reserved for (online) speech overflow if needed:

Sec 1: Wed 2 Dec, 3–5:30pm Sec 2: Tue 8 Dec, 8–10:30am

* **30 October**: Deadline to withdraw from a class (5pm)