Version of 10 August 2020
This syllabus is intended to make course expectations and policies clear so that you, the student, have the best chance possible of meeting those expectations. If anything is unclear please let the instructor know so that we can update the syllabus accordingly. This syllabus is likely to be revised throughout the semester.

Course Information

From the UNM catalog: *An introduction to the art of computing. Not intended for Computer Science majors or minors. The objective of the course is an understanding of the relationship between computing and problem solving.*

Course structure for Fall 2020

This course is a freshman-level introduction to computer science, with a view towards applications in science and engineering. Our main tool will be the programming language Python. Topics include programming constructs and the basics of data structures and algorithms.

Prerequisites

None.

Requirements

A computer with an internet connection and a web browser.

Instructors

Lecturer

Prof. Darko Stefanovic, email `darko@cs.unm.edu`

Lectures Attendance required: Mondays, Wednesdays, and Fridays, 1:00-1:50, remote `https://unm.zoom.us/j/93382781181`

Office hours Mondays 11:00-12:00, remote `https://unm.zoom.us/j/94117614994`

Precept Group discussion, optional: Thursdays 11:00-12:00, remote `https://unm.zoom.us/j/96476046492`

Teaching assistant #1

Abby Pribisova, email `apribis@unm.edu`

Precept Group discussion, optional: Mondays, Wednesdays, and Fridays, 8:00-9:00, remote `https://unm.zoom.us/j/99330437173`

Office hours Thursdays, 12:30-13:30, remote `https://unm.zoom.us/j/98982581507`

Teaching assistant #2

Noah Garcia, email `ngarcia715@unm.edu`

Precept Group discussion, optional: Mondays, Wednesdays, Fridays 9:00-10:00, remote `https://unm.zoom.us/j/94156612705`

Office hours Tuesdays, 12:00-1:00, remote `https://unm.zoom.us/j/96555278592`

Communication

UNM uses the Blackboard system, at `learn.unm.edu`. Log in with your UNM credentials and navigate to CS151L. Here we will post announcements, assignments, lecture notes and video recordings, and grades. Here you will also find discussion boards.

Textbooks

Our textbook will be an online textbook called zyBook. In addition to conventional explanations of the various concepts in programming and the language Python, the online textbook includes practice exercises, small homework assignments, and larger lab assignments. You will access the textbook with a web browser. You will submit homework assignments through the textbook.

To get access to the textbook:

1. Sign in or create an account at `learn.zybooks.com`
2. Enter zyBook code: UNMCS151LFrickeFall2020
3. Subscribe

You can find a wealth of material on Python programming online. You may consult this tutorial for quick reference: `https://docs.python.org/3/tutorial/index.html`

Course format and expectations

Because of the present coronavirus contagion, all interactions in the course will be remote. In particular, our labs are closed. The originally scheduled lab sessions (MWF at 8 and 9AM) have been replaced with online precepts (group discussions). All students may attend any and all of these meetings (or parts thereof) regardless of their original course section.

Lecture: We will assign reading from the textbook ahead of class and you are expected to complete the reading, as well as the exercises that accompany it, before each lecture. You are expected to attend lectures regularly. Those students who will be unable to attend throughout the semester should email the instructor (for instance, if you are many time zones away). If you must miss a class, please try to email the instructor.

Lectures will be recorded and the recordings posted in UNM Learn. If you had to miss a lecture, you are expected to view the recording.

Precept: The instructor will hold a weekly precept, which is a group conversation. All students can ask any questions they like. Attendance is not required. Precepts will be recorded and the recordings posted in UNM Learn.

Office hours: The instructor will hold weekly office hours. This time is meant for one-on-one conversations. Students who are unable to make the set time should email the instructor for an appointment.

Likewise, the teaching assistants will hold precepts and office hours.

Homework/labs: All homework assignments will have strict deadlines; late submissions will not be accepted. All assignments will be submitted online. Initially, assignments will be submitted through the online textbook; we may introduce other mechanisms later in the course.

Grading

Your grade will be determined as follows:

- Weekly reading (text and exercises in the online textbook) 30%
- Homework assignments 70%

There will be no timed exams or quizzes.
Final letter grades will be assigned as follows:

A+	100
A	92–99
A-	91
B+	90
B	82–89
B-	81
C+	80
C	72–79
C-	71
D+	70
D	62–69
D-	61
F	0–60

List of topics

Because of the uncertainties with remote teaching, this weekly schedule is only tentative.

1. August 17,19,21: Organizational; Introduction to computing; Language While
2. August 24,26,28: Python scripting; Expressions and types; Control flow
3. September 9,11: Procedural abstraction
4. September 18: Strings, lists, and dictionaries
5. September 21, 23, 25: Strings, lists, and dictionaries
6. September 30, October 2: Modules; Packages
7. October 5, 9: Algorithm design
8. October 14, 16: Algorithm design

9. October 19, 21, 23: Objects and classes
10. October 26, 28, 30: Objects and classes
11. November 2, 4, 6: Plotting and graphics
12. November 9, 11, 13: Plotting and graphics
13. November 16, 18, 20: Numerical computing
14. November 23: Numerical computing
15. November 30, December 2, 4: Scientific models and simulations

UNM statement of compliance with ADA

Every instructor should include an official statement in their course syllabus. The suggested syllabus statement should include the following text:

"In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 for additional information.

If you need an accommodation based on how course requirement[s] interact with the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment we can discuss the course format and requirements, anticipate the need for adjustments and explore potential accommodations. I rely on the Disability Services Office for assistance in developing strategies and verifying accommodation needs. If you have not previously contacted them I encourage you to do so."