# CS 108L, Section 553, Fall 2021 Computer Science for All SODA Dual Credit

Facilitator: Soni Buda, SODA Instructor: Greg Barnett, UNM-Valencia Division Chair: Elaine Clark (ewclark@unm.edu)

Office LRC 107 gregbarnett@unm.edu (505) 925-8620 Tutoring Hours
MW 10:30-11:30 AM in office
MW 5:00-7:00 PM in Zoom
or by appointment

### 1 Course Description

Computer Science for All is an introduction to Computational Science and Modeling. The course is entirely online. Students are required to meet with the facilitator each week during regular class time, to ask questions and get real-time assistance.

**Goals:** Students will gain experience not only in computer science and programming but also in designing, building, testing, debugging, and running experiments with computer models. Students will develop computational thinking skills and learn about complex adaptive systems.

By the end of the course the student will be comfortable organizing complex modeling tasks into a collection of procedures, and executing those procedures using the Netlogo programming language. Students will be able to:

- Define, update, and make use of variables
  - Local
  - Global
  - Agent
- Write and call **procedures** (subroutines)
  - Input arguments
  - Documentation (comments)
- Execute control structures
  - If and ifelse statements
  - Repeat loops (similar to for loops)
  - While loops

Note: This syllabus is subject to change, if needed.

## 2 Technology Requirements

Access to a reliable and fast internet connection is required. The primary tool for the course is UNM Blackboard Learn (https://learn.unm.edu), but students must also be able to navigate and use other online resources.

Students are required to download and install NetLogo on their computer: https://ccl.northwestern.edu/netlogo/download.shtml

#### 3 Course Structure

The CS108L course consists of a total of 8 weeks. There are 7 modules, each of which includes

- (a) A set of materials to read (documents) and watch (videos) in UNM Learn
- (b) A programming challenge to be completed in Netlogo and submitted in UNM Learn
- (c) An online quiz or test

A student's grade is determined by points earned out of 550. The following sections give a breakdown of points; any changes in points or assignments will be based on class needs and communicated early.

- Weekly Participation during class time at SODA (80 points)
- 7 Programming Challenges (150 points)
  - Approximately every two weeks
  - 30 points each
  - The two lowest scores are dropped. Only work on the programming challenges from modules 6 and 7 if you have achieved good scores on the programming challenges from modules 1-5.
- 6 Multiple Choice Quizzes (100 points)
  - Approximately every two weeks
  - 20 points each
  - Timed (30 minutes)
  - Two attempts are allowed
  - The lowest score is dropped. Try to complete all of the quizzes, since the questions provide a good study guide for the multiple choice section of the midterm and final exams.
- Midterm Exam (100 points)
  - Multiple Choice
    - \* 60 points
    - \* Timed (90 minutes)
    - \* Two attempts are allowed
  - Coding
    - \* 40 points

- Final Exam (120 points)
  - Multiple Choice
    - \* 60 points
    - \* Timed (90 minutes)
    - \* Two attempts are allowed
  - Coding
    - \* 60 points
- Total = 550 points

Every programming challenge, quiz, and exam will be submitted online through UNM Blackboard Learn.

## 4 Grading Policy

Your grade will be determined as follows.

Point Total	Grade
[539,550]	A+
[506, 539)	A
[495,506)	A-
[484,495)	B+
[451,484)	В
[440,451)	B-
[429,440)	C+
[385,429)	C
[374,385)	D+
[341,374)	D
[330,341)	D-
[0,330)	F

# 5 Late Assignments

It is recommended that students try their best to turn in assignments by the due date, but there are times when unexpected circumstances occur. To account for this, you have two late passes that you may use without penalty on any two programming challenges. If you use both of your late passes, then additional late programming challenges will only be accepted with instructor permission for genuine emergencies. If you are struggling with a programming challenge, then please attend the Zoom tutoring hours and email me with additional questions.

Quiz and exam due dates are firm. These will only be accepted late in the event of a genuine emergency. The programming portion of your midterm and final exam are not timed, so start working on these early in the week, and ask me for hints if you get stuck.

#### 6 Netiquette

One of the overriding principles in online conversations is to "craft your responses effectively." It is sometimes difficult to remember that there are real people reading posted messages. This is especially true of online communication where others do not have the opportunity to see body language or hear tone of voice; therefore, misunderstandings are more likely.

Please, follow these guidelines in all of your online responses and discussion postings.

- Honor everyone's right to an opinion.
- Respect the right of each person to disagree with others.
- Respond honestly but thoughtfully and respectfully; use language which others will not consider foul or abusive. You may also use emoticons to convey a lighter tone.
- Respect your own privacy and the privacy of others by not revealing information which you deem private and which you feel might embarrass you or others
- Be prepared to clarify statements which might be misunderstood or misinterpreted by others.

#### A Special Note About Anger

- Do not send messages that you have written when you are angry, even anonymous ones. In the online world, angry messages are known as "flaming" and are considered bad behavior. Venting and flaming are two different things. It is possible to vent without becoming "ugly." Stick to the facts of what is causing you frustration.
- Do not send messages that are written all in upper case; this is the visual equivalent of SHOUTING. It is considered aggressive and is considered bad behavior. If you ever feel like shouting a message, take a deep breath and wait until you have calmed down before responding. Then, respond in a calm and factual manner.

**UNM Netiquette Document** 

# 7 Academic Integrity

We will follow university policy on academic integrity.

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy: <a href="https://policy.unm.edu/regents-policies/section-4/4-8.html">https://policy.unm.edu/regents-policies/section-4/4-8.html</a>. The policy states:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

"Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

#### 8 Students with Disabilities

If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided in a timely manner.

## 9 EQUAL OPPORTUNITY AND NON-DISCRIMINATION:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees"). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html