Instructor: Martha O. Perez-Arriaga, PhD (marperez@unm.edu)

**Phone number:** (505) 925-8600

Office Hours Thursday 5:00-6:00 PM in Zoom or by appointment

### 1 Course Description

Computer Science for All is an introduction to programming concepts and computer modeling. The main goal is to learn concepts of computer science and apply them to the steps of computer modeling. This is an entirely online course with relevant information and programming activities for students to acquire skills on computational thinking, design, debug, development, test, and execution of computer models. The models will represent complex adaptive systems. By the end of the course, students will understand and organize computer modeling tasks for complex adaptive systems using different procedures in the interactive Netlogo programming language.

NOTE: For any email communication, students **should use their UNM email**. Even though students can complete class work on their own pace, there are specific deadlines to fulfill. Enjoy your learning!

## 2 Requirements

Students must have access to a reliable and fast internet connection to complete course work. The Learning Management System (LMS) for this course is Canvas at <a href="https://canvas.unm.edu">https://canvas.unm.edu</a>. During the course work, students should be able to use other online resources.

In addition, students **must download and install NetLogo** (<a href="https://ccl.northwestern.edu/netlogo/download.shtml">https://ccl.northwestern.edu/netlogo/download.shtml</a>) on their computer.

#### **3 Course Structure**

The CS108L course contains seven modules in the LMS Canvas to be completed during eight weeks. Each module contains 1) links with materials to read and videos to watch, 2) an online quiz or test, 3) a programming assignment to complete using NetLogo, and 4) discussions. To promote class participation, most modules will have a discussion (question) where students can comment and interact with each other. In addition, there will be a survey and programming activities that count as extra credit. The topics per module are the following:

Module/Week	Topic
1	Introduction to NetLogo

2	Introduction to Abstraction
3	Introduction to Modeling
4	Boolean Logic
5	Variables, Scope and Running Experiments with Computer Models
6	Algorithms
7 and 8	Modeling with the Scientific Method

# **4 Grading Policy**

Each activity completed in Canvas counts towards your grade. Extra credit: 20 pts.

Activity	Points
Quizzes	60
Midterm test	30
Final test	30
Programming assignments	180
Discussion	60
TOTAL	360

The total of points accumulated by a student will help calculate her/his grade.

Percentage	Grade
>= 97%	A+
93% - <97%	A
90% - <93%	A-
87% – <90%	B+
83% - <87%	В
80% - <83%	B-
77% - <80%	C+
73% – <77%	С

70% – <73%	C-
67% – <70%	D+
63% – <67%	D
60% - <63%	D-
<60%	F

### **5 Late Assignments**

Quizzes and tests must be done by the deadline specified in Canvas. Students may have an extra week to complete one programming assignment of their choice, except the last one. If there is an unexpected situation to complete your assignments, attend Zoom office hours, call and/or email me for academic guidance. Canvas will not allow students to submit any assignment after the due day. The last day of the term is December 17, 2022.

## 6 Netiquette

When posting online or writing emails, please be mindful and respect others, including their opinions, ideas, and privacy. When writing comments on others' posts, be positive, choose non offensive or abusive words, and focus on the course material to avoid misunderstandings. Emoji icons allow us to show some emotions without writing words, use them as appropriate.

Writing a message all in upper case may indicate anger, avoid using this style and fonts in red color. For further information read UNM Netiquette Document at <a href="https://valencia.unm.edu/academics/online-learning/t-netiquette.pdf">https://valencia.unm.edu/academics/online-learning/t-netiquette.pdf</a>.

# 7 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. The UNM Academic Dishonesty Policy can be found at <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 is defined as:

"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

Students with a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible. To send this letter by email, make sure the email is encrypted or document is redacted when it contains sensitive information. I will then discuss the accommodations with you to determine the best learning environment. This will help provide accommodations in a timely manner. If you feel that you need accommodations, but have not documented your disability, please contact Cheryl Dilger, the coordinator for Equal Access Services at 925-8910 or cdilger@unm.edu.

#### 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: <a href="https://policy.unm.edu/university-policies/2000/2740.html">https://policy.unm.edu/university-policies/2000/2740.html</a>.

#### 10 CITIZENSHIP AND/OR IMMIGRATION STATUS

All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: <a href="http://undocumented.unm.edu/">http://undocumented.unm.edu/</a>.