



Syllabus-Summer 2023

Title of Course-Section: CS108L - 501 (CS for All)

Name of Department: Mathematics, Engineering, & Computer Science

Instructor: Andisheh Dadashi, Assistant Prof. of Mathematics

> andisheh@unm.edu No scheduled lecture

Credit Hours: 3 credit hours

Class Location: Online (info on UNM CANVAS)

Office Location: Online via Zoom (info on UNM CANVAS)

Office Hours: by appointment

E-Mail:

Class Meeting Days/Times:

Note: The instructor reserves the right to change the syllabus at any point of time during the semester. Get to know your instructor:

Andisheh Dadashi is an Assistant Professor of Mathematics and CS in the Department of Mathematics, Engineering, & Computer Science Division at the University of New Mexico-Valencia Campus. She received her Bachelor's degree in Mathematics and CS in Iran and completed her first Master's degree in Mathematics in India. Andisheh received a second Master's degree in CS from the University of New Mexico (UNM) in 2016 and is currently a Ph.D. candidate in the UNM Computer Science Department. Previously, Andisheh was a visiting Lecturer II at UNM-Gallup where she implemented the Critical Technology Studies Program (CTSP) from the main campus. At UNM-Gallup, Andisheh helped prepare student scholars for careers in the Intelligence Community (IC) and related national security careers. Andisheh now continues this work at UNM-Valencia where she helps interested students develop the knowledge, skills, and relationships necessary to successfully compete for IC careers. Her research interests include computational biology and genetics, and metabolic networks. Currently, Andisheh's research focuses on developing theory, computational approaches, and statistical tools to uncover mechanisms of rapid polygenic adaptation in response to environmental change.

To know Andisheh watch this video https://youtu.be/t4ryQfdrSEo

Contacting your instructor via Email

When emailing me, in the subject of your email, please write down your course name, course number, and section number. For example, the subject of your email to me should be: CS 108L-501 You must only contact me with your **UNM e-mail**. Check your **UNM email frequently**. You are responsible for missing any announcement I send via email or posted on Canvas. Failure to identify your message with the class number, and not using your UNM email will result in no response at all.

Instructor's Availability Via email

- The best way of contacting me will be via email (with proper subject mentioned **Above**).
- In all cases please, Please be patient and give me 24 hours to 48 hours to reach back to you.
- I will be available via email during the weekday until 5 pm.
- I will not be able to respond to any email on Saturday and Sunday.

What is CS for All?

Computer Science for All is an introduction to Computational Science and Modeling. The course is entirely online. Students are required to meet with the instructor once per week to ask questions and get real-time assistance and/or feedback. 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.

How to be successful in a Programming class?

Programming classes tend to be hard. There are a few reasons for this:

Programming is a different way of thinking, which some people find hard.

Students tend to underestimate the time it takes to write and run programs.

This usually has to do with an error or bug.

Students overload their class schedules.

What to do:

Start early, the more time you give yourself to develop, write and test your program increases the amount of time you have to:

Get help from Myself or find a good resource online or if you are stubborn (quite like myself) spend time to figure the bug/error out and fix it.

Come to class or watch all the videos!

The first few assignments will be easy, and you will naturally think that the final project can be done in an hour. Don't make that assumption!

Start your Projects and assignments early.

What not to do:

Starting the homework and projects late.

Not watching the videos. Not reading before class. Note: There are a lot of things to cover, if you read before class you will have a better understanding of the material and will be able to form better questions.

Not reading after class because you didn't read before class.

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Evaluation/Grading Methods	
Your final grade in this class is based on the following components:	
6 Programming Challenges	32~%
7 Quizzes	28~%
Midterm Exam	20~%
Final Exam	20~%
Overall	100 %

Overall Grade and Letter Grade

Passing grade is 70% or better. F is a grade lower than 60%

Overall Grades: pluses and minuses may or may not be added to letter grades at the instructor's discretion. Grades of A+ are not rare and will only be awarded for exceptional work.

Grade	From	То	Grade	From	То	Grade	From	To
A+	98	100	B+	87	89.99	C+	77	79.99
A	93	97.99	В	83	86.99	С	73	76.99
A-	90	92.99	В-	80	82.99	C-	70	72.99

Learning Objectives and Outcomes

Pre-requisites/Co-requisites: *N/A

Course Description: Computer Science for All is an introduction to Computational Science and Modeling. The course is entirely online.

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
- Students will be able to write and call procedures (subroutines)
- Input arguments
- Documentation (comments)
- Students will be able to execute control structures
- If and ifelse statements
- Repeat loops (similar to for loops)
- While loops

Technology Requirements

Access to a reliable and fast internet connection is required. The primary tool for the course is Canvas https://canvas.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

Information about the many built-in functions in Netlogo can be found in the Netlogo Dictionary: http://ccl.northwestern.edu/netlogo/docs/dictionary.html

Course Structure

There is no certain book assigned to this course. The CS108L course consists of 7 modules, each of which includes:

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

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

- 6 Programming Challenges (32 %)
- Approximately every week

Programming Challenges 1 to 5 are 5 % each

Programming Challenge 6 is 7 % each

Programming Challenge 7 is optional

- 7 Multiple Choice Quizzes (28 %)
- Approximately every week
- -4% each
- Timed (30 minutes)
- Two attempts are allowed
- Midterm Exam (20 %) consists of two parts:
- Part 1. Multiple Choice (10 %)
- Part 1 is Timed (90 minutes) and two attempts are allowed
- Part 2. Coding (10 %)

Part 2 is Not Timed and multiple attempts are allowed

- Final Exam (20 %) consists of two parts:
- Part 1. Multiple Choice (10 %)

Part 1 is Timed (90 minutes) and two attempts are allowed

- Part 2. Coding (10 %)

Part 2 is Not Timed and multiple attempts are allowed

• Total = 100 %

Every programming challenge, quiz, and exam will be submitted online through Canvas.

Late Assignments

The due date for the assignments, quizzes and exams are very firm. Please manage your time wisely in order to prevent any delay. No late assignment is accepted unless in the event of a genuine emergency per the instructor's discretion.

If you must miss an exam, you must contact your instructor a couple of days before the day of the exam in order to discuss a make-up test. Make-up tests will be given solely at your instructor's discretion and only in cases of well-documented excused absences. If you miss an exam and do not contact your instructor immediately, you may be dropped from the course. No early exams will be permitted except in documented emergencies: flight reservations, weddings, vacations, birthdays, non-NCAA sporting events etc. are not considered emergencies.

Teaching Materials

Q. Where can you find the materials for this class?

Canvas https://canvas.unm.edu

Q. Where do you find your assignments?

Canvas

Q. Where do you find your grade?

Canvas (Gradebook)

Course information including this syllabus, and all the necessary materials and links, etc. will be available on Canvas.

Your Responsibility

EXPECTATIONS: Students are expected to conduct themselves in a polite, courteous, professional and collegial manner.

Time required for This Course: Plan to spend a minimum of 9 to 12 hours per week for this class. There is no guarantee you will pass if you dedicate this amount of time, you still need to learn the material and use your time wisely, but those who pass generally are the ones who spend the time needed to do the work to learn the material.

You are responsible for all material covered in this Syllabus and in this course, in assigned readings, and on homework assignments. Not all material on tests will necessarily be covered in class but will be in the assignments. The use of cell phones, headphones, etc. is not permitted in class or exams.

Student Behavior & Collegial Behavior

According to the Code of Conduct as stated in the Policies and Regulations for UNM, student activities that interfere with the rights of others to pursue their education or to conduct their University duties and responsibilities will lead to disciplinary action.

This includes any activities that are disruptive to the class and any acts of academic dishonesty. Students are expected to behave in a courteous and respectful manner toward the instructor and their fellow students. Students may be dropped from a class for inappropriate behavior. For more information: https://pathfinder.unm.edu/code-of-conduct.html

Since we assume you are all adults, we will expect from you, respectful adult behavior. Engaging in disruptive or unruly behavior could result in your being asked to leave, at which time you will be counted absent and a referral will be sent to the Dean of Instruction. Continuing to behave in this way could result in your being dropped from the course. Disruptive or unruly behavior includes but is not limited to:

- texting or talking on your cell phone or Laptop at any time during class,
- continually talking with your neighbor when we are not working on a group activity,
- working on homework from another class,
- reading material or watching media on a mobile device not related to this course or at a time that is inappropriate,
- refusing to participate in the class activities.

Support!

If you have a documented disability, the Equal Access Services office will provide me with a letter outlining your accommodations. I will then discuss the accommodations with you to determine the best learning environment. 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.

If you are struggling in this course, do not be afraid to ask for help!

- Office Hours: See my office hours listed at the beginning of this syllabus. "Office Hours" Feel free to come by or log in for online office hours, or make an appointment to get help.
- Form study groups: You may work together with other members of our class on Canvas discussion board.
- Free Tutoring: The Math Center at Valencia campus has free tutoring and open labs. Call 505-925-8907 for more information. CAPS on main campus also provides tutoring for which I can get documentation. "LRC"
- Student Services: There are various services provided in our Student Services Department. Read about Office of Equal Access. Also, we have a testing center, advising, and career placement available: Valencia Student Services

Academic Dishonesty

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: https://policy.unm.edu/regents-policies/section-4/4-8.html. 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.

Cheating students will be prosecuted according to University guidelines. Students should get acquainted with their rights and responsibilities as explained in the Student Code of Conduct https://grad.unm.edu/aire/academic-integrity.html

UNM Valencia Title IX Representative

Title IX (9) Statement: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg. 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). 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

Disabilities Policy: Office of Equal Access

Contact Office of Equal Access at 925-8560 to schedule an appoint-ment.https://valencia.unm.edu/students/advisement/equal-access-faqs.html

The Center for Academic Learning

The Learning Center is open Monday – Friday with evening hours Monday – Thursday To schedule an appointment or for additional information call (505)-925-8907 https://valencia.unm.edu/campus-resources/learning-commons/index.html

UNM Valencia Registrar's Office

Contact Registration Office by calling 925-8580 http://valencia.unm.edu

UNM Deadlines & Academic Calendar

 $\begin{tabular}{ll} \bf UNM\ Deadlines: https://registrar.unm.edu/semester-deadline-dates/index.html And.... Academic Calendar: https://hr.unm.edu/calendars \\ \end{tabular}$

Library

We have a library at UNM-Valencia. You should already know where the library is!

CS 108L Schedule Summer 2023

CS 108L Schedule (subject to change if necessary)

First day of semester: Jun 5^{th} & Last day of semester: Aug 1^{st}

Note: PC stands for Programming Challenge and Q stands for Quiz

Module 1: Introduction to NetLogo

PC1 / Q1 Due on Friday June 9^{th} at 11:59 PM

Module 2: Introduction to Abstraction

PC2 / Q2 Due on Friday June 16^{th} at 11:59 PM

Module 3: Introduction to Modeling

PC3 / Q3 Due on Friday June 23^{rd} at 11:59 PM

Module 4: Boolean Logic

PC4 / Q4 Due on Thursday June 29^{th} at 11:59 PM

Midterm exam Due on Monday July 3^{rd} at 11:59 PM

Module 5: Variables, Scope, Computer Models

 $\mathrm{PC5}$ / Q5 Due on Monday July 10^{th} at 11:59 PM

Module 6: Algorithms

PC6 / Q6 Due on Monday July 17^{th} at 11:59 PM

Module 7: Epidemic Modeling

PC7 / Q7 Due on Monday July 24th at 11:59 PM

Final exam Due on Friday July 28^{st} at 11:59 PM