

Course Introduction

August 25, 2025

Computer Simulation

CSCI 423



Your homework is here: (write this down or bookmark it)

<https://cs.mcprogramming.com/sim>

Click on "Schedule" in the Wiki tab bar.

You do not (yet) need a login, and trying to “log in” will get you nowhere.

Next Event and Monte Carlo Simulations

Software Architecture for NES

Proper Modeling of Input Events and Distributions

Statistical Analysis of Simulation Results

Pseudo Random Number Generators (pRNGs)

Formal Learning Groups

(“...and what are these?” you wonder)

What Your Peers Think

1. What aspects of instruction did you find effective for promoting your learning in this course?

I have grown to like the Learning Groups, because we can sometimes learn better from our peers than the Instructor,

I have grown to like the learning groups, because we can sometimes learn better from our peers than the instructor.

What Your Peers Think

1. What aspects of instruction did you find effective for promoting your learning in this course?

I enjoyed the learning groups and I believe they helped me pay attention better as well as provided incentive to keep up with work so as to not let my group down.

I enjoyed the learning groups and I believe they helped me pay attention better as well as provided incentive to keep up with the work so as to not let my group down.

More recent thoughts from your peers

(Fall '24 Canvas Course Evaluations)

15 - What, if anything, could you have done differently to learn more in this course?

Response Rate 4/19 (21.05%)

- I'd read the textbook more to help compliment the lectures
- I probably could have taken better notes, and also noted stuff while reading the book.
- I think that I could have read the textbook a bit more carefully.
- I could have allocated more time to studying for this course, but it ended up somewhat on the back burner for me. The course content was very interesting and I learned a lot, but courses like Theory of Computation are of course going to take up more of my time and attention. I could also have done more to refresh my memory on probability and statistics topics. I'm terrible at these subjects, and this course did a bit more with them than I had expected coming in to it.

Course Overview (things you should know)

Course Wiki & Syllabus & Schedule
& Collaboration Policy

Course Overview (things you should know)

Course Wiki & Syllabus & Schedule
& Collaboration Policy

Canvas courses **will not** be used, I'll use direct Email **not** Canvas posts.

Course Overview (things you should know)

Course Wiki & Syllabus & Schedule
& Collaboration Policy

Canvas courses **will not** be used, I'll use direct Email **not** Canvas posts.

Announcements via Email to your
mines.edu address.

Course Overview (things you should know)

Course Wiki & Syllabus & Schedule
& Collaboration Policy

Canvas courses **will not** be used, I'll use direct Email **not** Canvas posts.

Announcements via Email to your
`mines.edu` address.

Why are my projects so ... “challenging”? The downside of choosing your preferred coding language is that you don't get boilerplates. You're expected to write your simulations **in whole and from scratch**.

Q & A

Got some?

Articles for Next Lecture (choose one)

Emergent Health Care

Multi-Scale Traffic Simulation

Policies for the Prevention of Infectious Disease

Malware Spread through Wireless Networks

The Self-Assembly of Multi-Tile Shapes

Introduce Yourself



Name (First and **Last**)

Major & Level (Jr, Sr, Grad, ...)

Complete the sentence “(I | I’ m a) ??????”