Course Organization

CPSC 217: Introduction to Computer Science for Multidisciplinary Studies I
Jul 2021 - CBE

Jonathan Hudson, Ph.D.
Instructor
Department of Computer Science
University of Calgary

Wednesday, June 28, 2021

UNIVERSITY OF CALGARY

Welcome!

Jonathan Hudson, Assistant Professor (Teaching)

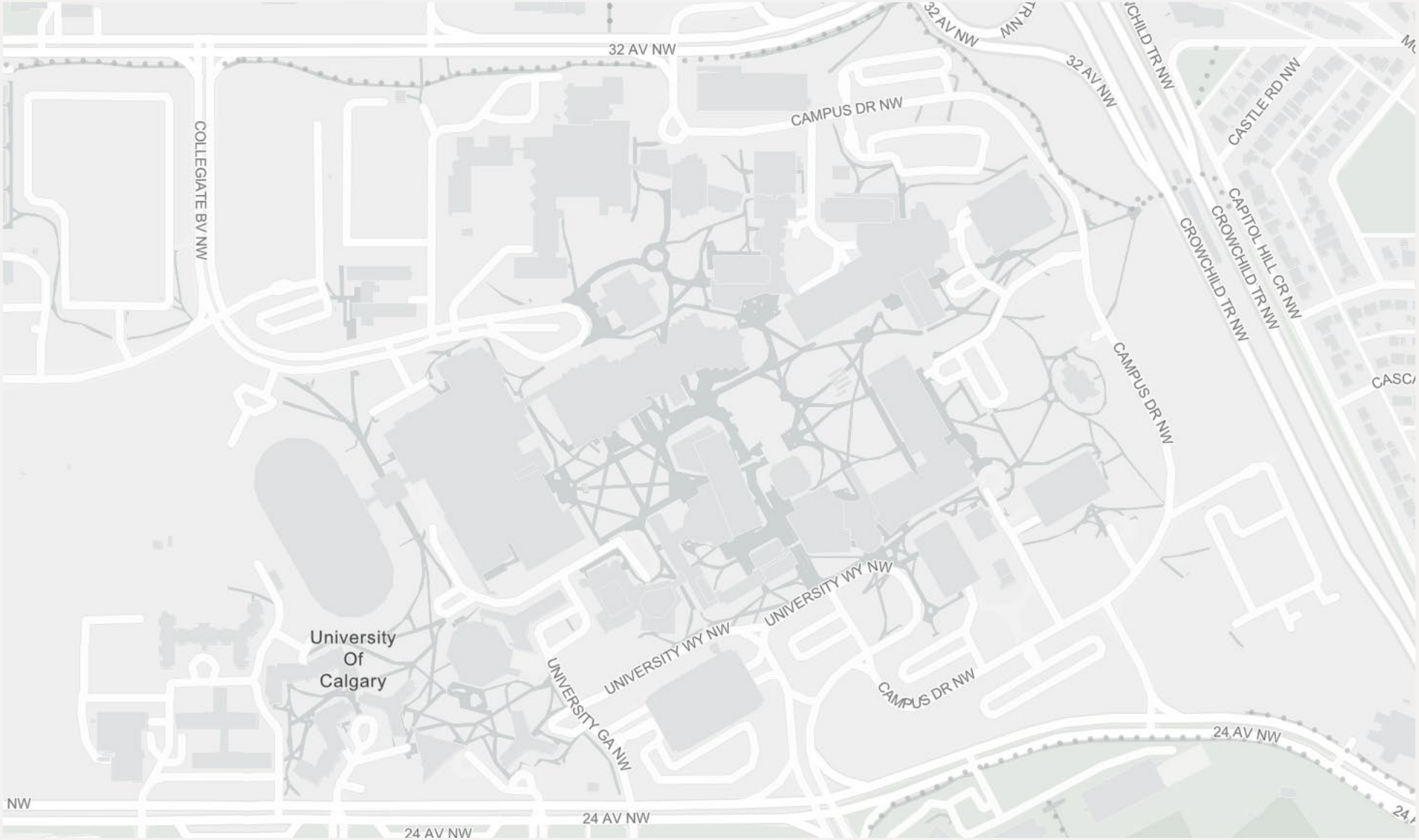
Lectures: MoWeFr 09:00-12:00 MS 325

Office: ICT 712

Office hours: 12:00-12:50 PM Mo/We

jwhudson@ucalgary.ca

https://pages.cpsc.ucalgary.ca/~jwhudson/CPSC217S23/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Calgary
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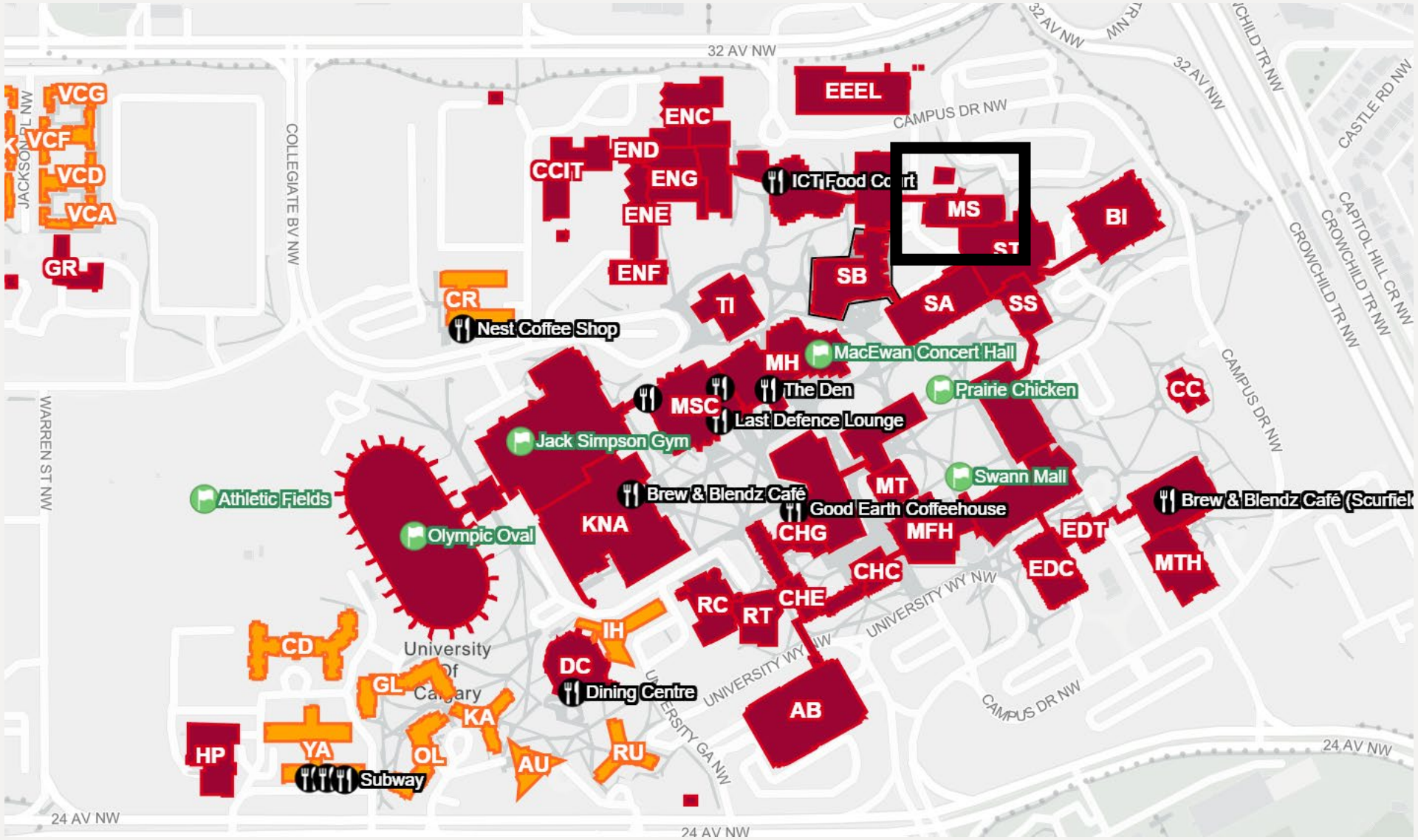
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ICT Food Court
MS
BI
SB
SA
SS
TI
CR
Nest Coffee Shop
MH
MacEwan Concert Hall
MSC
The Den
Last Defence Lounge
Prairie Chicken
CC
Jack Simpson Gym
Swann Mall
Athletic Fields
Brew & Blendz Café
Good Earth Coffeehouse
Brew & Blendz Café (Scurfie
KNA
Olympic Oval
CHG
MT
MFH
EDT
EDC
MTH
CHC
CHE
RC
RT
IH
DC
Dining Centre
CD
GL
KA
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AU
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HP
Subway
AB

Mathematical Sciences (MS) - Floor 01

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Mathematical Sciences (MS) - Floor 03

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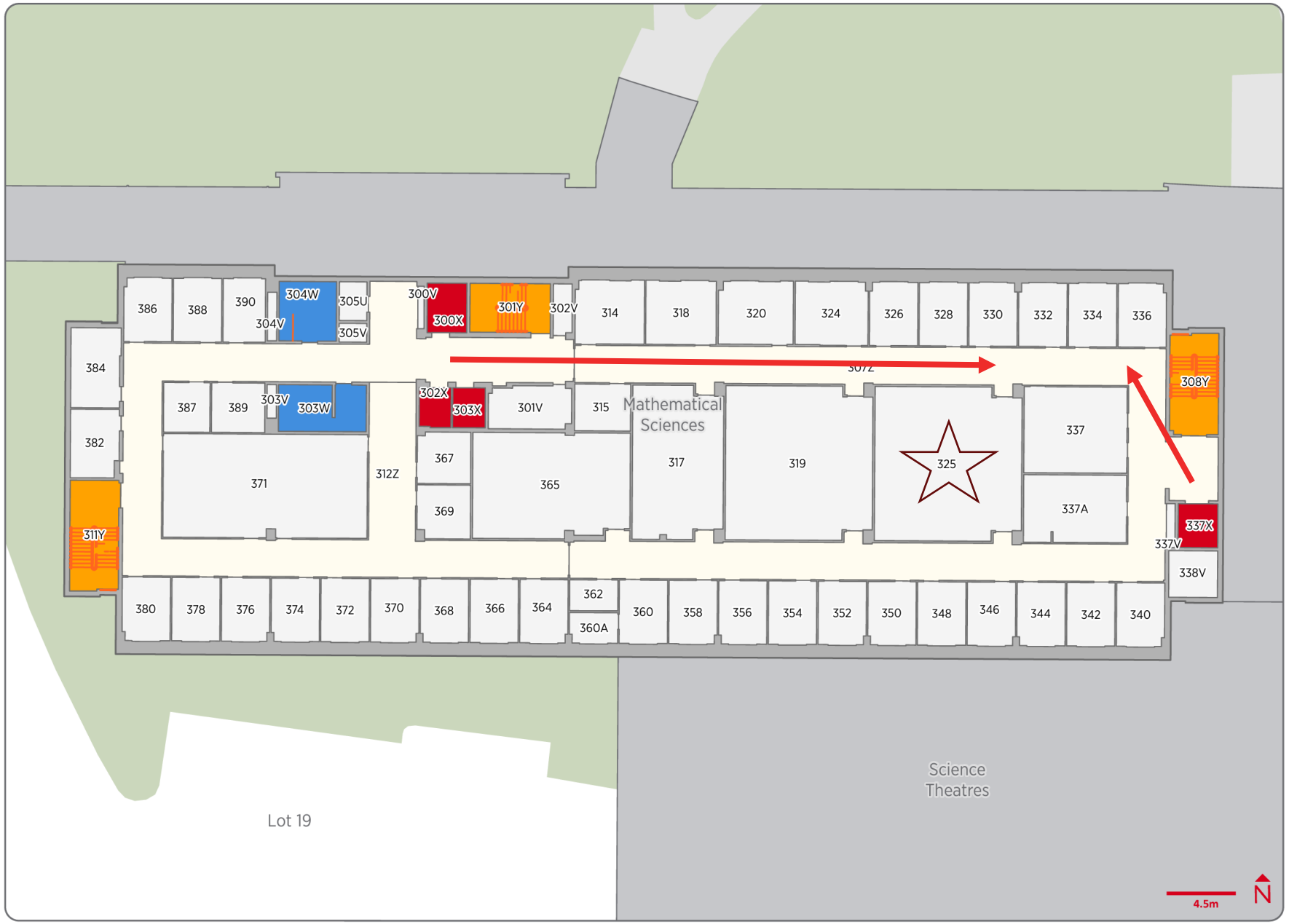


Tutorials

Tue/Thur 09-00-12:00

MS 119

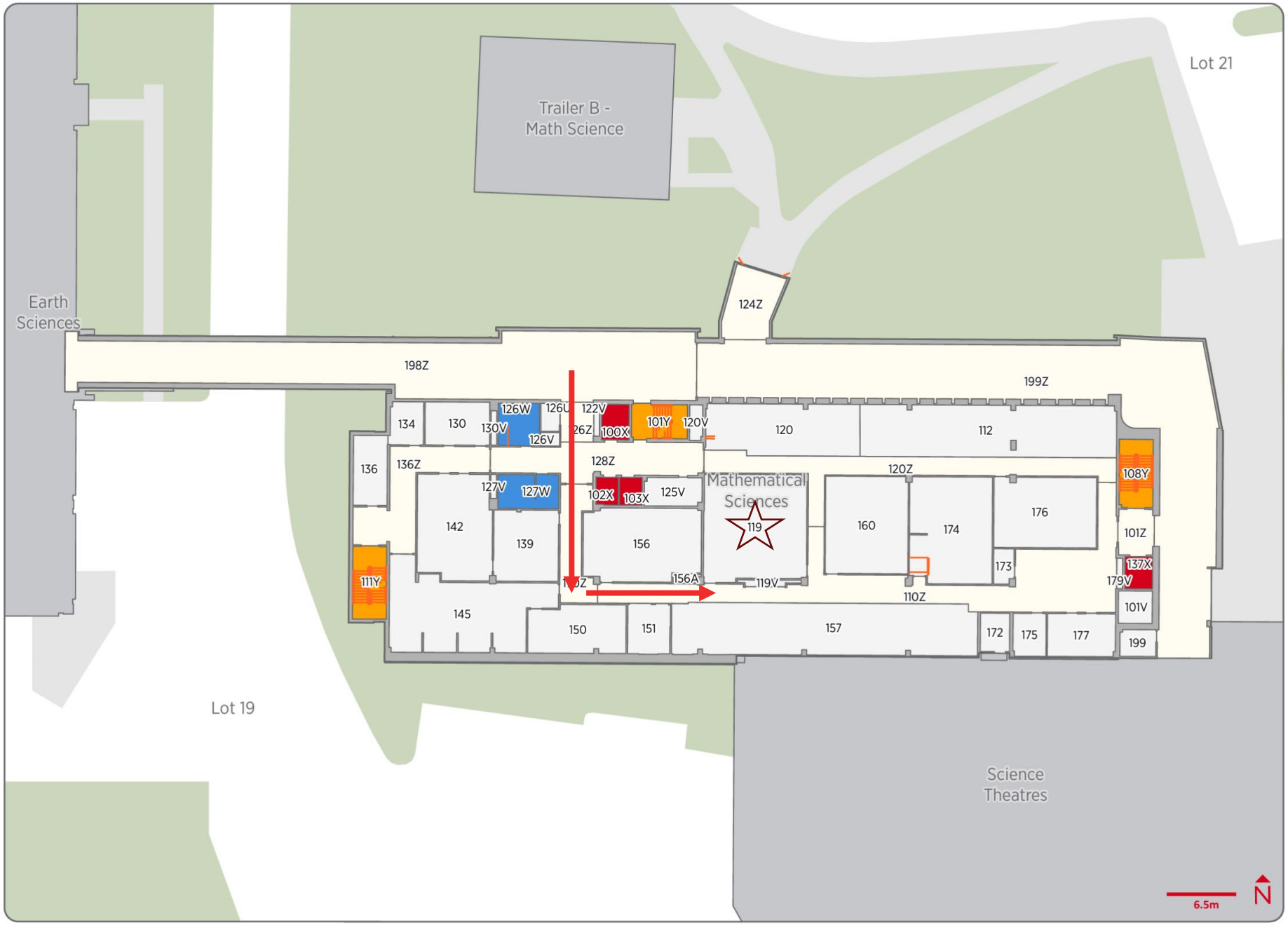
Liam Goheen - CBE

Math/Science Teacher

Lord Beaverbrook High School

lkgoheen@cbe.ab.ca

Mathematical Sciences (MS) - Floor 01



Why Computer Science?

- All sciences are impacted by computer science
- Opportunities for multidisciplinary study, work, and research
- Exciting innovations and discoveries that change our lives
- Fascinating subject with fun experiences and an extraordinary potential

- You will learn cool ways to solve problems
- You can enjoy being extremely creative

Course Goal

From the calendar:

- “Introduction to problem solving, the analysis and design of small-scale computational systems, and implementation using a procedural programming language.”

Goals:

- Design solutions to solve small scale and realistic problems
- Write programs based on a given design
- Debug and test programs
- Analyze your solution and the quality of your programs

Lectures

We will learn fundamentals of programming using Python

We will cover:

- Variables
- Arithmetic operations
- Conditions and Loops
- Functions
- Strings, Lists, ,Tuples, Sets, Dictionaries
- Files, Exceptions, Command Line Arguments
- Recursion

Why Python 3?

- Python is a widely used high-level programming language for general-purpose programming

- Design philosophy emphasizes code readability
  - Whitespace indentation
  - Code blocks
- Efficient syntax
  - Allows programmers to express concepts in fewer lines of code

Technology?

- Coding is a new skill!!!
- Pen and Paper Studies have shown that the process of taking notes on a lecture by hand help improve recall of the material over taking notes electronically.
- Working many of the problems we will experience in this course by hand will also help change your mental process and prepare you better for the exams

Assignments

- Four individual assignment (30%) consists of programming questions
- Each assignment is due at 11:59 pm on the Thursday due date.

Assignments	Due at 23:59
Assignment 1	July 6
Assignment 2	July 13
Midterm (in-class)	**July 14**
Assignment 3	July 21
Assignment 4	July 28
Final (in-class)	**July 31**

Grading

Component	Weighting %
Assignments (4)	6%,8%,8%,8%
Midterm	30%
Final	40%

- Each of the above components will be given a letter grade using the official University grading system. The final grade will be calculated using the grade point equivalents weighted by the percentages given above and then converted to a final letter grade using the official University grade point equivalents. (A+ are 4.3 for in-class component weighting)
- Must obtain a C- or better average on the exams to receive a C- or better in the course