#### First day announcements

- 495 Students
- This is the Covid Semester, I might have to change everything on this page and intro video next week......please be flexible and try not to get frustrated......I will do my best to do the same.

# CSCI 305: Concepts of Programming Languages

**Catalog Data** 

Fall, Spring, 3 cr.

An examination of several programming paradigms, and languages, as well as their application and underlying execution model. Paradigms examined include imperative, object-oriented, functional, logic and string based. Students will gain exposure to a variety of languages such as <del>C, C++</del> Scala, <del>Scheme</del> Haskell, Prolog, and <del>Perl</del> Python.

#### **Textbook**

Required:

Robert Sebesta, Concepts of Programming Languages (12th Edition)

It's an e-text only, Get it here:

I put the link on the D2L announcements

### **Instructor**

Hunter Lloyd

Office: EPS 354

Phone: 406.994.5959 (Not a great way to get a hold of me)

Email: looneytherobot@gmail.com

#### Office Hours:

https://www.cs.montana.edu/office-hours.html

# **Prerequisites**

- CSCI 132–Basic Data Structures and Algorithms:
- CSCI 246-Discrete Structures:
- CSCI 112–Programming with C: (Strongly recommended)

# **Objectives**

#### Students will:

- Understand the history of programming and the development of languages
- Understand different models for programming
- Understand the relationship between system architecture and programming languages
- Understand how language designers take different design approaches based on language goals
- Gain practical experience with several new programming languages

### **Learning Outcomes**

After successfully completing this course, students will be able to:

- Learn a new programming language on their own
- Identify an appropriate programming language for a new project
- Explain why a programming languages model is appropriate for a task.
- Take a course on Compilers

# **Grading**

• Quiz one	10%
• Quiz two	10%
<ul> <li>Assignments from book</li> </ul>	25%
<ul> <li>Programming Language Assignments</li> </ul>	40%

• Final Exam 15%

# Language Friday:

# Programming Languages we will use (subject to change as trends change):

- Go
- Rust
- Pascal
- Fortran
- Lisp
- Prolog
- Dart
- Kotlin
- C#
- And a few more.....

#### Tools we will USE:

- Linux VM (Scott set up)
- Many compilers (Not even sure what's all on there)
- Mostly SSH in and everything will be old school command line
- And some more....

## Policy on Collaboration and Academic Misconduct

Collaboration IS encouraged, however, all submitted individual work must be your own and you must acknowledge your collaborators at the beginning of the submission.

I don't anticipate any group or team assignments, but just in case...... On any group assignments, every team member is expected to make a substantial contribution. The distribution of the work, however, is up to the team.

By participating in this class, you agree to abide by the <u>student code of conduct</u>

#### **Policy on Assignments**

All assignments will have due date with a time associated. All times will be in Mountain Standard Time. **Late assignments will not be accepted**.

#### **Classroom Etiquette**

Except for note taking, please keep phones off during class. Talking during in this lecture room is heard by all, you can't whisper low enough that this new room doesn't pick it up.

Each student will have one of the two lecture days to attend, based on last name. Live lectures will be recorded for those that do not wish to come to campus.

#### **Special needs information**

Students with special needs or requiring special accommodations should contact the instructor and the Disabled Student Services Office at the earliest opportunity.

Blue card holders will get a code to take the quiz/exams in Testing Services if needed.