Introduction to Computer Systems

This new course links together different ideas that you have encountered but not covered deeply in other courses. We'll learn about tools used in programming and how they work. The goal of this course is to help you understand how your computer and programming environment work so that you can debug and learn independently more confident.

Course time: TuTh 12:30PM - 1:45PM

To request a permission number complete this google form **you must be signed into your URI google account to access the form**

Why Take this course

1. use and understand git/ GitHub
2. make sense of cryptic compiler messages
3. understand file organization impacts programming

Topics covered

this is a partilal list

- git and other version control
- bash and other shell scripting
- filesystems
- basics of hardware
- what happens when you compile code
- what are the different types of software on your computer

Catalog Description

How the history and context of computing impacts the practice of computing today. Tools used in programming and computational problem solving. How programming works from high level languages to hardware. Survey of computer hardware and representation of information. Pre: CSC110, any 200 level CSC course, or equivalent.

Learning Outcomes

By the end of the semester, students will be able to:

1. Differentiate the different classes of tools used in computer science in terms of their features, roles, and how they interact and justify positions and preferences among popular tools
2. Identify the computational pipeline from hardware to high level programming language
3. Discuss implications of choices across levels of abstraction
4. Describe the context under which essential components of computing systems were developed and explain the impact of that context on the systems.

By Sarah M Brown