CS100: CPADS

Introduction to CS

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What Computer Science is & is not

- **Computer Science is NOT programming**

- **Computer Science is about identifying problems and determining how to solve those problems algorithmically**

  - Problems may be broken down into smaller tasks

  - Programs are merely a tool to facilitate the process of solving problems

About CPADS I

- **Introduction course to provide everyone a common knowledge base with regards to PC hardware and programming concepts**

- **First part of the semester will include in-class hardware activities designed to help you better understand computer hardware**

- **Second part of the semester will include in-class programming activities designed to teach you problem solving skills and familiarize you with basic programming constructs**

- **Attendance in CPADS is mandatory as there will be daily lab activities that require your presence**

  - Attendance will be taken at the beginning of each class

Hardware Labs

- **Hardware labs will involve working with standard PC hardware**

  - Understanding the various components that make up a standard PC

    - Motherboards, processors, memory, etc.

  - Identifying the various connectors on a standard PC

    - IDE, SATA, PCIe, etc.

  - Working with common PC components

  - Installing/configuring operating systems

  - Setting up networking hardware (wired / wireless)

Programming Assignments

- **All programming assignments will be done in Python (a scripting language)**

- **Programming assignments will focus on concepts, rather than syntax (i.e. program structure necessary to solve problems)**

  - Problem solving

  - Program structure