

CS100: CPADS

Introduction to CS

David Babcock / James Moscola
Department of Physical Sciences
York College of Pennsylvania



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