Advising students interested in Computers and Programming

Both classes have no pre-reqs and assume no prior knowledge of programming. Any student may take them.

CSCI 1101
Introduction to Computer Science

Introduction to problem solving and algorithmic thinking using computer programming. Provides tools and skills that can be used in any discipline. (Note: class is required for CSCI majors and minors, unless they place out).

Topics:
- Problem solving
- Algorithm design
- Fundamentals of programming

High-level questions:
- How do we design an algorithm to solve a problem?
- What kinds of problems can we solve with an algorithm?
- How can we use a computer to code and run an algorithm?

Example activities:
- Build interactive games like Pong and 2048
- Animate scenes and pictures
- Encrypt text messages
- Build a spell checker

Technology used:
- Programming in Java (or Python)

INTD 1100
Introduction to Digital and Computational Studies

A survey of an emerging discipline: the study of the cultural output, values, behaviors, and technologies associated with digital and computational environments. Prepares for future study in a variety of disciplines including CSCI.

Topics:
- Text analysis, Spatial analysis
- Social network analysis
- Physicality of digital environments
- New labor and behaviors provoked by digital and computational environments

High-level questions:
- How are digital and computational methods being applied and studied in different fields?
- How are they catalyzing change in our daily life?

Example activities:
- Use digital and computational tools to:
  - better understand what Joshua Chamberlain could see at the battle of Gettysburg
  - define identity in the age of social media

Technology used:
- Basic Python programming, ArcGIS, Gephi, web-based apps