CS 160 : COMPUTER SCIENCE ORIENTATION

Transcript title

Computer Science Orientation

Credits

4

Grading mode

Standard letter grades

Total contact hours

50

Lecture hours

30

Other hours

20

Prerequisites with concurrency

MTH 111 or higher.

Recommended preparation

CIS 120 or CIS 124.

Course Description

Provides a broad overview of the discipline of computer science. Learn the foundations of computer science such as problem solving and algorithms, programming concepts, and computer hardware. Research careers available in computer science, pathways to computer careers, and reflect on some of the influences computers have had and continue to have on society. Write programs in a variety of programming languages.

Course learning outcomes

1. Describe computer science degree pathways of at least two graduate degree granting educational institutions with sufficient detail.
2. Demonstrate knowledge of introductory programming concepts in at least three programming environments.
3. Demonstrate knowledge of computer careers available to computer science majors and the programming roles presented in Dreaming in Code.
4. Demonstrate understanding of software engineering challenges as presented in The Mythical Man-Month and Dreaming in Code.

Content outline

- Educational paths in CS
- Working in CS
- Programming concepts
- Challenges of software engineering

Required materials

Students will need regular and reliable access to the Internet.

General education/Related instruction lists

- Science not Lab