

CS 162 : COMPUTER SCIENCE II

Transcript title

Computer Science II

Credits

4

Grading mode

Standard letter grades

Total contact hours

50

Lecture hours

30

Other hours

20

Prerequisites

CS 161.

Prerequisites with concurrency

MTH 231.

Course Description

Emphasizes the development of data structures, algorithm analysis, recursion, and sorting. Also explores several basic programming constructs, inheritance, interfaces, exceptions, and files/streams. Covers software engineering methods, proper program development, and attention to program planning and documentation.

Course learning outcomes

1. Create proper program documentation.
2. Create and use unit testing.
3. Understand and select appropriate programming STL collections (container) classes.
4. Explore basic data structures.
5. Design OOP software with use of interfaces, abstract classes, inheritance, and polymorphism.
6. Write a simple sorting algorithm.
7. Identify the "Big O" of simple algorithms.

General education/Related instruction lists

- Science not Lab