

CS 162 : COMPUTER SCIENCE II

Transcript title

Computer Science II

Credits

4

Grade mode

Standard letter grades

Contact hours total

50

Lecture hours

30

Other hours

20

Prerequisites

CS 161.

Prerequisites with concurrency

MTH 231.

Description

CS 162 emphasizes the development of data structures, algorithm analysis, recursion, and sorting. However we will also explore/review several basic programming constructs, Inheritance, Interfaces, Exceptions, and Files/Streams. A strict emphasis will be placed on software engineering methods; proper program development and attention to program planning and documentation.

Learning outcomes

1. Create proper program documentation.
2. Create and use unit testing.
3. Understand and select appropriate C++ 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.
Enter all additional SLO's here
7. Identify the Big O of simple algorithms.

General education/Related instruction lists

- Science not Lab