



Course Information

Division	Business
Contact Hours	4
Total Credits	4

Prerequisites MATH 092, or higher, or qualifying score on accepted placement tests.

Course Description

This course focuses on the design stage of computer program development and coding of programs using an object oriented programming language such as C++. Students will design solutions to a variety of computer problems. Documentation will be created using standard methods. Program solutions will be coded, executed and tested.

This course is a required core course for students pursuing an AAS in Computer Science.

Program Outcomes Addressed by this Course

Upon successful completion of this course, students should be able to meet the program outcomes listed below:

- Demonstrate and utilize necessary technical knowledge and skills both in breadth and depth, to pursue the practice or advanced study of computer science.
- Understand the importance of life-long learning, and be prepared to learn and understand new technological developments in their field.
- Understand the ethical and technical context of their computer science contributions and their obligations therein.

Course Outcomes

In order to evidence success in this course, the students will be able to:

- Create a complete functioning program that solves a problem.
Applies to Program Outcome
 - Demonstrate and utilize necessary technical knowledge and skills both in breadth and depth, to pursue the practice or advanced study of computer science.
- Describe the advantages of using object oriented programming for program development.
Applies to Program Outcome
 - Understand the importance of life-long learning, and be prepared to learn and understand new technological developments in their field.
- Describe the importance of program design as it relates to information assurance and security.
Applies to Program Outcome
 - Understand the ethical and technical context of their computer science contributions and their obligations therein.