

Salem Community College Syllabus

Section I

Course Title: Computer Programming

Course Code: CSC140

Lecture Hours: 3

Lab Hours: 2

Credits: 4

Course Description:

This course introduces programming from an object-oriented perspective. Students will specify, design, write, debug, and execute assigned programming projects. Topics include simple data types, control structures, and array and string and file data structures. Sorting and search algorithms will be examined to further develop understanding and skills in programming with a variety of data structures. The course emphasizes good software engineering principles and developing fundamental programming skills in the context of a language that supports the object-oriented paradigm.

Pre-requisites: CSC 127 Programming Fundamentals, or MAT 231 Calculus I

Co-requisites: None

Place in College Curriculum: This course is required for the Mathematics and Physics/Engineering programs. It may be taken as a four-credit Open Elective in other programs.

Date of Last Revisions: March 2018

Section II

Course Content Outline:

- I. Introduction to Computers, Problem Solving, and Programming
- II. Top-Down Design with Functions and Classes
- III. Selection Structures: if and switch Statements
- IV. Repetition and Loop Statements
- V. Modular Programming;
- VI. Simple Data Types
- VII. Streams and Files
- VIII. Data Structures
- IX. User-Defined Classes
- X. Data Abstraction and Object-Oriented Design
- XI. Introduction to Recursion

Section III:

Section IV

General Education Requirements:

The General Education Goals covered in CSC140 are:

- **Competency 2: Quantitative Knowledge and Skills:** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
- **Competency 4: Technological Competency:** Students will use computer systems and other appropriate forms of technology to achieve educational and personal goals.

Section V

Outcomes Assessment:

A college-wide outcomes assessment program has been put into place to enhance the quality and effectiveness of the curriculum and programs at Salem Community College. As part of this assessment program, the learning outcomes for this course will be assessed. Assessment methods may include tests, quizzes, papers, reports, projects and other instruments. Copies of all outcomes assessments are available in an electronic assessment bank maintained by the Institutional Research and Planning Office.

Section VI

Course Activities:

Course Requirements and Means of Evaluation:

Students should refer to their instructor's syllabus addendum (to be distributed in class) for specific information regarding the course requirements and means of evaluation for CSC140.

Attendance Policy

Students are expected to attend all scheduled classes and labs. Each instructor will set and express his or her clearly stated and carefully followed attendance policy. The policy will appear on the syllabus the instructor gives to the students.

Academic Honesty Policy

Students found to have committed an act of academic dishonesty are subject to failure in the course, academic probation, and/or suspension from the college. See the Student Handbook for additional details.

ADA Statement:

If you have a 504 Accommodation Plan, please discuss it with your instructor. If you have any disability but have not documented it with the Disability Support coordinator at Salem Community college, you must do so to be eligible for accommodations. To contact the Disability Support Coordinator, call 856-351-2773, or email disabilitysupport@salemcc.edu to set up an appointment. To find out more information about disability support services at Salem Community College, visit www.salemcc.edu/students/student-success-programs/disability-support.

Section VII

Required Texts: For textbook information, please see the SCC Bookstore website.

Materials/Supplies: Refer to instructor's syllabus addendum for specific information regarding additional materials/supplies

Additional Costs: As necessitated by purchase of materials/supplies