

Hagerstown Community College

Master Syllabus

COURSE: CSC 132 Introduction to C and C++, 3 credits DATE: Spring 2018

INSTRUCTOR:

COURSE DESCRIPTION:

This course provides students with a thorough understanding of the basic principles of C and C++. It covers the basic syntax and structure of the language with an emphasis on problem solving techniques. Students create programs using input/output statements; if, while, do while, and for-loop logic structures; arrays, functions, pointers and reference variables, record structures, header files, file I/O, and basic object-oriented programming techniques. Students will be able to recognize and correct common programming errors. Laboratory fee required. Prerequisite: CSC 102 and MAT 101.

TEXTBOOK:

C++ Programming: From Problem Analysis to Program Design Seventh Edition, Malik, D. S., Course Technology, 2015.

STUDENT LEARNING OUTCOMES:

- Use the fundamentals of C++ programming
- Use selection control structures in programs
- Use repetition structures in programs
- Design programs using value-returning and void functions
- Use value and reference parameters in functions
- Perform manipulations with arrays and strings.
- Enhance the student’s problem solving skills
- Learn techniques of top-down design of algorithms and structured programming
- Develop correct executable programs
- Create appropriate documentation.

MINIMUM CLOCK HOURS REQUIRED FOR THIS COURSE

	DIRECT Faculty Instruction In-class 37.5 h required	Student Work Out of Classroom 75 h required
In-class “lecture”	37.5 h	
Reading chapters		15 h
Quiz/activity for each chapter	Included in lecture time	25 h
Research project		35 h
3 lecture exams		9 h
Total Hours	37.5 h	84h

Services for Students with Disabilities: Students may receive reasonable accommodations if they have a diagnosed disability and present appropriate documentation. Students seeking accommodations are required to contact the Disability Support Services (DSS) office as early as possible. Students may contact a DSS staff member for an appointment at dss@hagerstowncc.edu or at 240-500-2530.