Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: IST 132 Introduction to C and C++ – 3 credits

INSTRUCTOR: *SEMESTER/YEAR:* Fall 2017

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: IST 102 and MAT 101. Semesters offered: Fall

TEXTBOOK: *Absolute C++, Student Value Edition Plus MyProgrammingLab with Pearson eText -- Access Card Package,* 6/E, Savitch/Mock

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.

Total Hours of Coursework:
To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute "academic" hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

Assignment/Assessment	Clock Hours
In-class instruction	45
Assigned Readings	20 hours
Chapter Example Questions	20 hours
13 Programming Projects	33.5 hours
	Total hours=118.5 hours

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.