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:

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>DIRECT Faculty Instruction</th>
<th>Student Work Out of Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-class “lecture”</td>
<td>37.5 h required</td>
<td></td>
</tr>
<tr>
<td>Reading chapters</td>
<td>15 h</td>
<td></td>
</tr>
<tr>
<td>Quiz/activity for each chapter</td>
<td>Included in lecture time</td>
<td>25 h</td>
</tr>
<tr>
<td>Research project</td>
<td></td>
<td>35 h</td>
</tr>
<tr>
<td>3 lecture exams</td>
<td></td>
<td>9 h</td>
</tr>
<tr>
<td>Total Hours</td>
<td>37.5 h</td>
<td>84 h</td>
</tr>
</tbody>
</table>

Revised 12/8/2017
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.