Hagerstown Community College Master Syllabus CSC 232: Advanced C++ Programming

Course Information

CSC 232: Advanced C++ Programming 3 Credits Spring 2019 January 7 through April 29, 2019 Wednesdays 5:30 -- 8:15 P.M. Room: STEM 102

Instructor Information

Instructor: Cole Snyder Phone: 301-331-6751 (email first) Email: <u>icsnyder@hagerstowncc.edu</u> Office: NA Office hours:

Tuesdays 5:00 – 7:00 P.M. Room: TBA

Course Description

This course continues to introduce students to object-oriented programming using C++. It builds on the foundation of IST/CSC 132. Students learn OOP concepts such as classes, friends and templates and use these to build programs designed to compile and run on any machine architecture supported by the GCC. Using a hands-on approach, students will have the opportunity to design, code and test object-oriented applications. Additional time outside of class will be necessary to write programs. Laboratory fee required. Prerequisite: IST/CSC 132. Semester offered: Spring. 3 Credits

Textbook and Course Materials

Absolute C++ 6th Edition. (Savitch 2016). Pearson. ISBN: 978-0-13-397078-4

Student Learning Outcomes

- Understand OOP concepts such as classes, inheritance.
- Understand abstraction concepts such as friends, templates.
- Ability to design, code, and test object-oriented applications
- Gain useful experience in debugging programs.
- Enhance the student's problem-solving skills
- Learn techniques of top-down design of algorithms and structured programming
- Develop syntactically and functionally correct executable programs
- Create appropriate documentation both inline and external.

Definition of Credit Hour: Classroom Courses

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 in 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 complete at least 2 hours of coursework outside of class for each hour of inclass coursework.

Classwork type	Direct Faculty Instruction	Student Work Out of
	In-class	Classroom
	37.5 hours required	75 hours required
In-class lecture and discussion	37.5 hours	
Reading		20 hours
Quizzes/Study		16 hours
Programming Projects		21 hours
Presentation Preparation		8 hours
Cumulative Final Exam		10 hours
Total	37.5 hours	75 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 <u>dss@hagerstowncc.edu</u> or at 240-500-2530.