Master Syllabus

COURSE: IST 232 Advanced C++, 3 credits **DATE: Spring 2018**

INSTRUCTOR:

COURSE DESCRIPTION:
This course continues to introduce students to object-oriented programming using C++ and Visual 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 a program designed to run under a Microsoft Windows environment. Using a hands-on approach, students 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: CSC 132

TEXTBOOK:
C++ Programming: From Problem Analysis to Program Design Seventh Edition, Malik, D. S., Course Technology, 2015, ISBN #978-1-285-85274-4

STUDENT LEARNING OUTCOMES:
- Understand OOP concepts such as classes, inheritance.
- Understand other concepts such as friends, templates.
- Ability to build a program under Microsoft Windows.
- Ability to design, code and test object oriented applications
- More experience in debugging programs.
- 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	30 h prep
Programming projects		30 h
5 lecture exams		30 h
Total Hours	**37.5 h**	**105 h**

If the course is offered in different formats such as hybrid, on-line, face-to-face a separate "Minimum clock hours" table is required for each format.

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.