SCHOOL OF STEM SYLLABUS

TERM:

INSTRUCTOR:

COURSE CODE: CSC-115

OFFICE HOURS:

COURSE TITLE: Programming in C++

OFFICE LOCATION:

DAY(S) AND TIME(S):

EMAIL:

LOCATION:

PHONE:

COURSE PREREQUISITE: MAT-100, MAT-106, MAT-107 OR MAT-110

CREDITS: 3

COURSE DESCRIPTION:
This course introduces the student to object-oriented programming through a study of the concepts of program specification and design, algorithm development, and coding and testing using a modern software development environment. Topics covered include fundamentals of algorithms, problem solving, programming concepts, loops, functions, decision statements, control structures, arrays, and strings. Throughout the semester, problem solving skills will be stressed and applied to solving computing problems. Daily laboratory experiments will provide hands-on experience in topics covered in this course.

STUDENT LEARNING OUTCOMES:

Upon completion of this course, students will be able to:

1. Understand and use the basic programming constructs of C/C++
2. Manipulate various C/C++ datatypes, such as arrays, strings, and pointers
3. Isolate and fix common errors in C++ programs
4. Use memory appropriately, including proper allocation/deallocation procedures
5. Apply object-oriented approaches to software problems in C++
6. Write small-scale C++ programs using the above skills

TEXTBOOK AND SUPPLEMENTAL MATERIALS:

Starting out with C++, 9th Edition, by Gadis

GRADING POLICY:

Item	Weight
Four Exams	**60%**
Programming Project	**40%**

SAMPLE COURSE SCHEDULE:

Week 1	Input/output Statements
Week 2	Data types Identifiers Arithmatic Operations
Week 3	If-else statements Logical Expressions
Week 4	Nested if Switch Statements
Week 5	Test 1
Week 6	For and While Loops
Week 7	Do While Loop Nested Loops
Week 8	Data Files
Week 9	Test 2
Week 10	Functions
Week 11	Function Continues
Week 12	Test 3
Week 13	Arrays
Week 14	Arrays Continues
Week 15	Test 4

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