Northern Marianas College

CS 255 – C++ Programming: Course Syllabus, Fall 2005

COURSE DESCRIPTION:

This course introduces programming in the C++ programming language and gives students the skills necessary to use C++ as a tool for writing their own application programs. The course presents such fundamentals of programming as data types, operators, arrays, strings and functions.
Prerequisite: CS 103.
English Placement Level: EN 093/094.
Math Placement Level: 091.

CREDITS: 3

INSTRUCTOR: Robert M. Laurie (Business Department, Office V-216)

OFFICE HOURS:

Mon & Wed	01:00pm to 02:00pm	Room V-216
Mon & Wed	03:30pm to 04:00pm	Room V-216
Mon & Wed	06:30pm to 07:00pm	Room V-216
Tue & Thu	11:00pm to 12:00pm	Room W-3

PHONE: 234-5498 x1825, Fax: 235-4966

EMAIL: RobertL@nmcnet.edu

CLASS TIME: Mon & Wed 02:00pm to 03:25pm Room W-3

REQUIRED MATERIALS:

1. Textbook: C++, A Beginner's Guide, Schildt, Herbert. McGraw-Hill/Osborne, 2002, ISBN: 0-07-2194677
2. Computer Data Storage Device: Memory stick drives, CD-R/W, or diskettes

COURSE OUTLINE:

1. What is computer data (See Handout)
2. C++ programming language fundamentals
   a. Procedural design Methodologies
   b. Program Input and Output
   c. Compiling and linking a program
   d. Arithmetic operators
   e. Simple data types
   f. Type conversions
3. Program Control Statements
   a. Relational and logical operators
   b. The if statement
   c. The switch statement
   d. The for loop
   e. The while loop
   f. The do-while loop

   g. Breaking and exiting a loop
   h. Nested loops
4. Complex data types
   a. One-dimensional arrays
   b. Two-dimensional arrays
   c. Strings as arrays of characters
   d. Pointers
5. Functions
   a. Scope rules
   b. Passing data to functions by value
   c. Passing data to functions by reference
   d. Recursion

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, students will:

1. Write, compile and run a program in the C++ programming language;
2. Debug and eliminate program and syntax errors;
3. Use simple and complex data types to store information;
4. Use logical and arithmetic operators to compare and manipulate data;
5. Control the flow of a program with logical branching and iterative looping;
6. Use pointers as references to variables, and
7. Write functions as reusable and maintainable program components.

METHOD OF EVALUATION:

Students will be evaluated on the basis of class attendance, assignments, and exams. No extra credit is available so do the best job you can on the assigned work.

Evaluated Items	Points	Percent
Assignments	100	50%
Exam 1	30	15%
Exam 2	30	15%
Final Exam	40	20%
Total	200	100%

Grade	Score	Percent
A	200 to 180	100.0 to 90.0%
B	179 to 160	89.9 to 80.0%
C	159 to 140	79.9 to 70.0%
D	139 to120	69.9 to 60.0%
F	< 120	Less then 60%

Exams:
Two 30-point exams will be given during the semester and one comprehensive 40-point Final Exam. I encourage students to study together and will not curve scores.

Assignments:
Weekly assignments will be given throughout the semester of various point values. Assignments must be submitted on the due dates at the beginning of class.
Please submit what you have for partial credit, because late assignments will not be accepted. Grading will be 80% objective (results, explanations, conclusions) and 20% subjective (neatness, clarity, conciseness, extra work).
If any portion of a project is Plagiarized (Using another's work and saying it is your own), then the entire assignment will receive a score of zero.

Attendance:
Class attendance is mandatory. If a student misses more then 3 classes during the semester they will receive a lower letter grade. If a student misses more then five classes they fail the course.

If you miss a class or are late for class, it remains your responsibility to obtain information concerning the material covered and upcoming assignments.
Only students with officially excused absences will be able to make up the exams and assignments, others will receive a grade of zero. You must contact me via email, to authorize a makeup exam time prior to the scheduled exam time. You need to provide documentation verifying the excused absence. Failure to comply with these requirements will result in a score of zero for the assignment or exam.

CLASS POLICIES AND ETIQUETTE:

1. There is no extra credit so do your best on the assignments and exams.
2. Students must turn in all assignments for the class on the due date within the first five minutes of class. Late assignments may not be accepted. Keep copies of all your work until the grades have been posted.
3. You are expected to attend all class sessions, read your text and come to class prepared. I recommend exchanging telephone numbers and email addresses with other students and forming study groups so that you will be able to contact someone about class work if you are unable to attend class.
4. Do not engage in conversation with other students when the instructor or other students are speaking.
5. Unless I specifically allocate time for it, do not do homework while in class. Do not do work for other classes during this class period.
6. If you have a cell phone (or text phone), turn it off while you are in class.
7. I will ask rude and disruptive students to leave and they shall be considered absent.
8. Friends and children are not allowed with you in the classroom.
9. Eating, drinking, and betel nut chewing are not allowed in the classroom. Do not bring food or drink into the computer lab.

STUDENTS WITH DISABILITIES:

Please contact Dr. Celia Lamkin (ext. 1322) at the NMC Counseling Center (Bldg. I) if you have a disability and require adaptation technology in order to fulfill the requirements of the course. All reasonable efforts will be made to accommodate your needs.

STUDENT DISSATISFACTION WITH THE COURSE:

If a student is dissatisfied with any part of this course, he/she is encouraged to discuss it with the instructor. If he/she believes that the instructor is unwilling or unable to help with the concern(s), the student may bring the matter to the attention of the Academic Counselor. If the Academic Counselor can't resolve the issue, the student may bring the matter to the attention of the following, in the order listed:

1. Department Head: Business, Hospitality and Computer Department
2. Dean of Instruction

STUDENT APPEAL:

An NMC student who has a complaint about campus conditions, facilities, policies, rules, or academic matters may file a Notice of Appeal form (available at the Officer of Admissions and Records and the Counseling Center) and follow the procedures on stated in the NMC 2002-2004 General Catalog.

EMERGENCY PHONE NUMBER:

In case of typhoons and other natural disasters that might affect class schedule call 235-NMC1 (235-6621) for up-to-date information.