

Northern Marianas College

CS 227 – Introduction to Programming

Credits: 3

Prerequisites: CS222, MA132, English Placement Level - EN 093/EN 094

Monday and Wednesday 2:00pm to 3:25pm Building W - Room 2

Instructor: Robert M. Laurie

Office: Building V - Room 201, Business Department

Telephone: (670) 234-5498, ext. 1814

Email: boblaurie@yahoo.com

Web Site: <http://www.islandman.org>

Required Materials:

1. Internet & World Wide Web: How to Program, 3rd Edition, Authors: Harvey Deitel, Paul Deitel, and Andrew Goldberg, 2004, ISBN: 0-13-145091-3
2. Computer Data Storage Device: USB Thumb Drive, 128MB minimum, U3 preferred

COURSE DESCRIPTION:

This is an introductory programming course covering the concepts of variable data types, arithmetic operators, selection and repetition control structures, arrays, and object based programming. The student will apply problem solving techniques and develop program applications.

COURSE OUTLINE:

1. Programming Introduction, Variables and Arithmetic Operators (Chapter 7)
2. Selection control structures (Chapter 8)
3. Repetition control structures (Chapter 8)
4. Advanced control structures and operators (Chapter 9)
5. Programming Functions (Chapter 10)
6. Arrays (Chapter 11)
7. Objects (Chapter 12)
8. Forms (Chapter 5.4 and 5.5)
9. Document Object Model (Chapter 13)
10. Event Model (Chapter 14)

STUDENT LEARNING OUTCOMES:

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

1. Identify the phases of the program development life cycle that includes problem solving, implementation, and use phases.
2. Analyze problem descriptions and apply problem-solving techniques to create solutions that include both mathematical algorithms and program algorithms.
3. Declare and initialize program variables utilizing the programming language syntax.
4. Identify and apply programming language syntax operators in programs.

5. Create procedural style programs that utilize input and output.
6. Analyze problems that require decisions, create selection control structure algorithms.
7. Analyze problems that require repetition control structure algorithms and program.
8. Create user-defined functions that modularize a program.
9. Declare array objects and access array elements in a repetition control structure.
10. Create objects of various object-types and access their properties.
11. Create valid forms and access form elements using the Document Object Model.
12. Generate form element events to call to create Event Driven GUI Programs.

METHOD OF EVALUATION:

Students will be evaluated on the basis of class attendance, assignments, and exams.

Evaluated Items	Points	Percent
Exams and Quizzes	150	37.5%
Assignments	230	57.5%
Attendance	20	5%
Total	400	100.0%

Grade	Percent
A	100.0 to 90.0%
B	89.9 to 80.0%
C	79.9 to 70.0%
D	69.9 to 60.0%
F	Less then 60%

Exams:

Two 50 point exams and five 10point quizzes will be given during the semester. The exams and quizzes are closed book. However, you are allowed to bring in one single sided 8 ½” x 11 sheet of handwritten notes for the two exams.

Assignments:

Assignments will be given throughout the semester of various point values. Assignments must be submitted on the due dates at the beginning of class. Late assignments will be reduced 50% for each class period late. If any portion of a project is Plagiarized (Using another’s work and representing it is your own), then all students with copied work will receive a score of zero.

Attendance:

Class attendance is mandatory. If a student does not attend a class they will loose 4 points. If they are tardy they will loose 2 points. 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 the instructor via email, to authorize a makeup exam time prior to the missed class. 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 will be reduced 50% for each class period late. 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. Please don't be rude.
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. You must take the test at the scheduled date and time. There will be no make-ups.
8. Smoking, eating, drinking, and betel nut chewing are not allowed in the classroom. Do not bring food or drink into the classroom.

STUDENTS WITH DISABILITIES:

The Northern Marianas College is committed to ensuring, through a variety of services, facility and program access to students with either permanent or temporary disabilities. The Disability Support Services Program coordinates NMC's accommodations for students with documented disabilities. Accommodations are determined on a case-by-case basis at the request of the student. Please contact Counseling Programs and Services (Bldg. I) for disability information and services.

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 2004-2006 General Catalog.