# Northern Marianas College

# CS 229 – Java Programming

Credits: 3 .

Prerequisites: CS103, MA091, English Placement Level - EN 093/EN 094 Tuesday and Thursday 6:30pm to 7:55pm Building W - Room 3

#### Instructor: Robert M. Laurie

Office: Building V - Room 216, Business Department Telephone: (670) 234-5498, ext. 1825, Fax: 235-4966 Email: RobertL@nmcnet.edu Web Site: http://www.islandman.org Office Hours: Monday and Wednesday 12:30pm to 2:00pm (V-216) Tuesday and Thursday 3:30pm to 5:00pm (V-216) and 6:30pm to 7:00pm (W-3)

#### **Required Materials:**

- Textbook: <u>Obect-Oriented Program Development using JAVA,</u> <u>A Class Centered Approach, Enhanced Edition</u>, Gary Bronson, Course Technology, Thomson Learning, Inc., 2006, ISBN: 0-619-21720-0
- 2. Computer Data Storage Device: <u>USB Thumb Drive</u>, 128MB minimum

# **COURSE DESCRIPTION:**

This is an introductory programming course covering the techniques of object-oriented computer programming in the Java programming language. Strict data-types will be covered and problem-solving using the object-oriented paradigm. The student will develop program applications using command line and event driven graphical user interfaces.

# **COURSE OUTLINE:**

- 1. Introduction to Programming Languages and Java (pp. 1 to 47)
- 2. Data Values and Arithmetic Operations (pp. 60 to 123)
- 3. Developing Class Methods (pp. 126 to 178)
- 4. Input and Formatting Class Methods (pp. 179 to 240)
- 5. Selection Control Structure (pp. 241 to 296)
- 6. Repetition Control Structure (pp. 297 to 360)
- 7. Reference Data Types and Strings (pp. 364 to 398)
- 8. Collection Data Types and Arrays (pp. 399 to 459)
- 9. Visual Programming using Swing GUIs (pp. 479 to 576)
- 10. Files and Streams (pp. 617 to 644)

# **STUDENT LEARNING OUTCOMES:**

Upon successful completion of this course, students will:

- 1. Discuss the history of programming languages.
- 2. Apply algorithm design and development techniques.
- 3. Apply sequence, selection, and iteration control structures to program development.
- 4. Construct executable and reusable program modules.
- 5. Apply various programming paradigms, such as event-driven and object-oriented.
- 6. Construct program code using problem-solving techniques and tools.
- 7. Create specifications for testing and debugging.
- 8. Apply standard debugging tools to problem solutions.
- 9. Construct program solutions using various data forms and basic data structures.

# **METHOD OF EVALUATION:**

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

Evaluated Items	Points	Percent
3 x 50 pt. Exams	150	37.5%
Assignments	230	57.5%
Attendance	20	5%
Total	400	100.0%

Grade	Percent
А	100.0 to 90.0%
В	89.9 to 80.0%
С	79.9 to 70.0%
D	69.9 to 60.0%
F	Less then 60%

#### Exams:

Three 50 point exams will be given during the semester. The exams will be closed book. However, you are permitted to use one half page  $(8.5" \times 5.5")$  of notes for each exam.

#### 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. Late assignments will not be accepted, so please submit what you have completed for partial credit. If any portion of a project is Plagiarized (Using another's work and saying 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 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. 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. Friends and children are not allowed with you in the classroom.
- 9. 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:**

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 2004-2006 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.