BCIS 222. Section 01
Object – Oriented Programming
Class Meets TR 08:50 – 10:10 a.m., GU 303

Instructor: Dr. Carlo A. Mora M.
Office Hours: T: 4:00 – 5:00 p.m.
W: 10:30 – 11:30 a.m.
or by appointment
Office: Guthrie 218
Phone: 646-5044
Website: http://learn.nmsu.edu

Course Scope

In this course, you will be introduced to the principles of Object-Oriented Programming (OOP). The main focus of course will be given to the use of OOP for software development. You will learn to think about computational solutions using classes that model the real world behavior of systems, and that provide for code reuse through inheritance and polymorphic type hierarchies. Java will be used as the primary implementation language. After completing this course, you will be able to explain what constitutes an object-oriented approach to programming, and identify potential benefits of object-oriented programming over other approaches. **You MUST earn a 'C' or better in this course in order to proceed to BCIS 322.**

Prerequisite: Business majors or others who have passed BCIS 122 (or equivalent) with the grade of "C" or better, or instructor’s consent.

Course Objectives

By the end of the semester, each student should be able to understand and apply:
- The Object Oriented Programming paradigm.
- Design principles of graphical user interfaces (GUI).
- Basic concepts of event-handling and error-handling.

Required Materials

2. Development environment. Preference will be given to Netbeans IDE. **You are highly encouraged to read and understand the installation instructions given on the textbook (section Before you Begin").**

Responsibilities

As your **teacher** I have the following responsibilities:
- Come prepared to every class.
- Plan my class so you can accomplish the objectives listed above.
- Treat you as responsible adults.
- Consider that is not always your fault if you don’t understand the material.
- Encourage you to ask and answer questions.

As **students** you have the following responsibilities:
- Come prepared to every class.
- Complete all work on time with proper thought.
- Behave as responsible adults.
- Consider that it is not always my fault if you don’t understand the material.
- Treat others with respect.
Point Distribution and Grades

Scores for each category of points will be approximately weighted as shown below.

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity (Estimated)</th>
<th>Estimated Percentage of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Assignments (PAs)</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>Short Assignments (SAs)</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>Readiness Assessment Tests (RATs)</td>
<td>5</td>
<td>10%</td>
</tr>
<tr>
<td>Exams</td>
<td>3</td>
<td>55%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grades will be assigned as follows:

- 90% through 100%  | A  
- 80% through 89.9% | B  
- 70% through 79.9% | C  
- 60% through 69.9% | D  
- Below 60%         | F  

**Note:** After all the material is graded, letter grades will be assigned as in the table above. I will do some rounding, but in the following manner: 89.444 is a B, no exceptions, but 89.445 will round to an A.

**Programming Assignments:** The key to become a good developer is to start programming from day one. As such, you will be asked to do a number of comprehensive and short programming assignments. These will allow you to apply all the concepts covered in class. These assignments have two objectives:

1. Give you a current indicator of your understanding of the material. Be sure to ask questions and/or get help immediately if you don't understand the homework or its solution, as **catching up is very difficult**.
2. Give me an indicator of how the class is doing as a whole, and help me keep an adequate pace.

**Readiness Assessment Tests (RATs):** There will be short Blackboard based RATs. These will be given **in class at the beginning and at the end of each chapter/topic**. The purpose of the RATs is to motivate you to read the material before it is discussed in class and to reinforce relevant material. **RATs are closed book and closed notes.** The grade assigned will be the highest score of a RAT for a particular chapter/topic.

**Exams:** Classroom exams will carry most of the weight of your final grade. They questions will come from in-class exercises and programming assignments. Format of the exams will vary and might include open vs. closed book, paper vs. computer based exams, among others.

**General Policies**

**Attendance**

You **are expected to attend class.** Although I will not take attendance, you cannot expect to have a thorough grasp of the material if you miss class. You are responsible for all material or assignments that are covered in class.
Getting help outside office hours
The Discussions section of Blackboard is an extension of my office hours. You are to post all technical questions here. **I will not answer questions about homework in private e-mails.** Make sure you use relevant subject headings for your postings. A good, descriptive subject heading will help other students learn from the answers to your questions. A subject heading of “Error” is not relevant. An example of a more relevant subject heading is “Help: How do I implement an interface in my class hierarchy?”

If you are going to start a new topic, or ask a new question, make sure that you start a new thread. Continuing a previous thread with a new question will only ensure that most people miss your question. Be sure to include enough information in your question. For example, if you are getting a compilation error, make sure you list the compile line you used, the entire error message, and at least 10 source lines that precede the line about which the compiler is complaining. This will give me more information and thus, the more likely you will get a helpful answer. **Do not wait until the last minute to post a question.** I strongly encourage other students to post answers to questions they see on the Discussion Board.

Missing RATs and Exams
- No makeup RATs will be allowed.
- Makeup Exams will be given only under extraordinary circumstances and the student must submit a legitimate excuse. Examples of legitimate excuses:

<table>
<thead>
<tr>
<th>If it is …</th>
<th>You have to bring a…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to illness:</td>
<td>note from doctor</td>
</tr>
<tr>
<td>Due to business:</td>
<td>note from supervisor</td>
</tr>
<tr>
<td>Death in family:</td>
<td>note from family member and obituary</td>
</tr>
<tr>
<td>Other</td>
<td>on a case-by-case basis</td>
</tr>
</tbody>
</table>

**Read carefully:** I must be informed prior the exam to count as a legitimate excuse. **If you cannot reach me, leave a message at the department’s office (646-4901) indicating time and date.** Notifying me by email will not be sufficient. Notifying me after the exam will result in a grade of zero for that exam. Your excuse must be submitted to me and it must contain a telephone number so that your absence can be verified. **Failure to follow the guidelines will mean that you forfeit the excused absence option.**

If a student misses an exam **without a legitimate excuse**, s(he) will receive a grade of zero for that exam.
Assignment Submission

- Submit your assignment by uploading all files (normally you will be turning in a zipped file that contains the entire project) to Blackboard. Besides the program(s), you must include:
  - A two page report of the assignment where you will complete a template provided indicating among other things: name, PA number, completion status, comments, and screenshots of your application. Use the Alt + Print-Screen and Paste methods to paste the form image into your Word Processor document
  - Comments. Your project should contain javadocs comments throughout your code explaining all the components of your program. We will discuss in class how to create javadocs comments.
- Keep a copy of your files. You may need it for your future assignments.

Grading the Assignments:

Your instructor or GA will check your work. To get full grade, your program should provide correct answer. However, points will be deducted for the following:

- Weight distribution: 30% ➔ documentation; 70% ➔ program.
- Incomplete submission.
- Poorly documented program: no comments in all the sections of your program. Lack of proper indenting and spacing in the code.
- NOTE: You must make sure you are uploading all the proper files for me to grade the assignments. If you fail to upload all the necessary files, you will be penalized and not get full credit for the assignment.

Late Assignments: programming assignments may be turned in late, but they lose a percentage of their graded point values each class period that they are late according to schedule shown below (weekday = Monday through Friday):

<table>
<thead>
<tr>
<th>Late Period</th>
<th>Grade Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time</td>
<td>0%</td>
</tr>
<tr>
<td>Up to 1 weekday late</td>
<td>10%</td>
</tr>
<tr>
<td>Up to 2 weekdays late</td>
<td>30%</td>
</tr>
<tr>
<td>Up to 3 weekdays late</td>
<td>60%</td>
</tr>
<tr>
<td>More than 3 weekdays late</td>
<td>100%</td>
</tr>
</tbody>
</table>

Withdrawal Policy

Last day to Withdraw is Wednesday, October 14. No faculty or department head signatures are required to drop a class if you drop a class on or before this date.

Incomplete

A grade of "I" (Incomplete) will be assigned only in circumstances in agreement with the current NMSU Undergraduate Catalog (http://www.nmsu.edu/Academic_Progs/Undergraduate_Catalog/ch1/regulations.html). Incomplete grades are to be given only if a student has passed the first half of the course and is unable to complete the course due to circumstances beyond the student's control. (If the circumstances develop during the first half of the course, the student has the opportunity to drop the class). Examples of appropriate circumstances are documented illness, documented death or crisis in the student's immediate family and similar circumstances. The catalog states that job related circumstances are generally not appropriate grounds for assigning an "I" grade and that this grade is not to be used to avoid assigning a D, F, or U grade.
Academic Misconduct

All work submitted must be your original work. Any work done by groups of more than one (i.e., the work of two or more students is remarkably similar), or too similar to work of previous students will be construed as cheating. Your work must be kept private from others; should your work appear in the work of another student, both parties will be considered to have cheated, both will receive a failing grade for the course. Please refer to the Student Handbook (http://www.nmsu.edu/~vpss/SCOC/student_hand_book.html) for a full description of the NMSU Policy. However, discussion of principles and approaches between class members is encouraged.

Disabilities Statement

If you have or believe you have a disability and would benefit from any accommodations, you may wish to self-identify by contacting the Services for Students with Disabilities (SSD) Office (phone: 646-6840). If you have already registered, please make sure that your instructor receives a copy of the accommodation memorandum from SSD within the first two weeks of classes. It is your responsibility to inform either your instructor or SSD representative in a timely manner if services/accommodations provided are not meeting your needs.

If you have a condition which may affect your ability to exit safely from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss any concerns with the instructor and/or Michael Armendariz, SSD Coordinator. Feel free to call Mr. Gerard Nevarez, Director of Institutional Equity and EEO/ADA Office at 646-3635 with any questions about the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.

Professional Behavior Guidelines

**Tardiness:** Please arrive on time. If you are later than the start of the class, please quietly take a seat nearest the entrance.

**Side Conversations:** Side conversations make it difficult for your classmates to actively listen and learn.

**Sleeping:** Falling asleep in class is not considered professional behavior.

**Inattention:** Please do not read other material (chat, browsing the web, books) or study for other courses during the class. It is not polite. Please pay attention and join in the individual and group discussions. It will help you master the material.

**Cell Phone:** Please turn off your cell phone or set it to silent mode while you are in the class. Cell rings can disturb your classmates as well as me.

Miscellaneous Policies

- Although I will try to maintain the class schedule and objectives, I may need to make adjustments.
- I do not give additional projects to increase one’s grade before or after the exam(s).
- No food or drinks allowed in the lab.