BCIS 222. Section 01  
Introduction to Object–Oriented Programming  
Class Meets TR 8:55 a.m. – 10:10 a.m., BC 115

Instructor: Dr. Carlo A. Mora M.  
Office Hours: Tu: 1:30 – 2:30 p.m.  
W: 10:00 – 12:00 noon  
and by appointment  
Office: Guthrie 218  
Phone: 646-5044  
Website: http://salsa.nmsu.edu

Course Scope

In this course, you will be introduced to general principles underlying the practice of Object-Oriented Programming (OOP). Focus will be given to the use of an Object-Oriented approach to 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 paradigm.
- Design principles of graphical user interfaces (GUI).
- Design and implementation of simple business solutions using the Java Programming language.
- Basic concepts of Java error handling.

Required Materials

2. Development environment: A CD-ROM is included with the textbook. The student may choose any of the systems on the CD. You are highly encouraged to read and understand the installation instructions given on the CD. Additionally, you can review the section of the book entitled “Before you Begin” (pages lvii – lxvi).

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 weighted as shown below.

<table>
<thead>
<tr>
<th></th>
<th>Quantity (Estimated)</th>
<th>Points each</th>
<th>Total Points</th>
<th>Percent of total points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Assignments</td>
<td>6</td>
<td>30</td>
<td>180</td>
<td>32%</td>
</tr>
<tr>
<td>Readiness Assessment Tests (RATs)</td>
<td>6</td>
<td>10</td>
<td>60</td>
<td>11%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>6</td>
<td>20</td>
<td>120</td>
<td>21%</td>
</tr>
<tr>
<td>Exams</td>
<td>2</td>
<td>100</td>
<td>200</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>560</strong></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 great programmer is to start programming from day one. As such, you will be asked to do a number of 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 were the class is doing as a whole, and help me keep an adequate pace.

**Readiness Assessment Tests (RATs):** There will be short true-false, multiple choice WebCT 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 is discussed in class and to reinforce relevant material. **RATs are closed book and closed notes.** The grade assigned will be the average of both RATs for a particular chapter/topic.

**Chapter Quizzes:** There will be a WebCT quiz on each chapter of the text. The purpose of these quizzes is to motivate you to read the text and become familiar with the concepts and terms contained in the chapter. The quizzes will be made available at the beginning of each chapter/topic. They will be available for as long as it takes to cover that chapter/topic in class. You can complete the quiz using any computer that has access to the Internet and a browser validated for use with WebCT (visit [http://www.webct.com/tuneup](http://www.webct.com/tuneup) for more information). Quizzes are open book and open notes, **and must be completed outside class time.** You can take a quiz twice. The maximum grade will be stored as your grade for that quiz.
**Exams**: Classroom exams will carry most of the weight of your final grade. They questions will come from in-class exercises and programming assignments. Instructions on the format of the exams will be given later.

**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 Discussion Board on WebCT 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 Quizzes, RATs, and Exams**

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

  - **If it is …**
    - Due to illness: note from doctor
    - Due to business: note from supervisor
    - Death in family: note from family member and obituary
    - Other: on a case-by-case basis

  - **You have to bring a…**

**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 both a hard copy of the assignment as well as upload all files (e.g. documentation, figures, java files) to WebCT.
- Submit a small description of the assignment (problem description), and the approach you followed to solve it (solution approach). In some assignments, you will be required to submit diagrams. Also, submit the Program Listing (code). Delete all unnecessary entries.
- Submit the run-time form image(s) at crucial points if necessary. Use the Alt + Print-Screen and Paste methods to paste the form image into your Word Processor document. Note: It is not wise to save a word processor document with many pictures; your disk will be full very fast.
- Staple your submission.
- Enclose a diskette/zip disk/flash drive with your work. The media disk must be properly labeled and it must only contain your assignment’s file(s) and nothing else. You must also test your completed assignment in a lab system (in a system other than the system in which you have developed your work) to be sure that it will run in a different machine. Keep a copy of your files. You may need it for your future assignments.
- Submit your entire work in a 9 inch by 12 inch (approximately) envelope. Please do not fold your pages.

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:

- Sections of the documentation missing (e.g. problem statement, solution approach, etc.).
- Run-time image not enclosed or program listing (i.e., the printed program) not enclosed.
- Diskette/zip disk/flash drive not labeled.
- Printed papers not organized, not stapled, folder-less submission.
- Poorly documented program: no comments in all the sections of your program. Lack of proper indenting and spacing in the code. Using the JEdit programmer’s editor makes this easy. JEdit is running in the labs, and is easily downloaded and installed on your computer, if you have one.
- Incomplete submission (i.e., failed to upload files, failed to submit hard copy, etc.).

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>Loss of Grade</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 Tuesday, October 16. No faculty or department head signatures are required to drop a class if you drop a class on or before October 16.

Incompletes
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.