BCIS 222. Section 01
Object – Oriented Programming
Class Meets TR 1:10 – 2:25 p.m., BC 115

Instructor: Dr. Carlo A. Mora M.
Office Hours: TBA
Office: Guthrie 218
Phone: 646-5044
or by appointment
LMS: 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. C# 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 **exception-handling**.

Required Materials

2. Development environment. We will be using the latest version of Visual Studio 2012. There are multiple versions of VS, some of which are free to download. More details will be given in class.

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>Grade percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Assignments (pa)</td>
<td>23%</td>
</tr>
<tr>
<td>Short Assignments (sa)</td>
<td>5%</td>
</tr>
<tr>
<td>Individual Project (ip)</td>
<td>17%</td>
</tr>
<tr>
<td>Readiness Assessment Tests (rat)</td>
<td>5%</td>
</tr>
<tr>
<td>Exams</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.00%</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 (pas), Short Assignments (sas), and Individual Project (ip):** The key to becoming a good developer is to start programming from day one. As such, you will be asked to do a number of short and comprehensive programming assignments. Additionally, you will be asked to complete a individual programming project during the semester the course. These assignments allow you to apply all the concepts covered in class and have two main 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 an assignment 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 Canvas based rats. These will be taken outside class time and they will be released at the beginning of each 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. You will be allowed to take a RAT twice and the grade assigned will be the highest score obtained for a RAT.

**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/closed book, paper/computer based exams, etc.

**General Policies**

**Attendance**

Students are expected to attend class. Attendance is not required but highly recommended. 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.
Communication

We will be using CANVAS extensively. All the material associated with the course will be available through CANVAS. This LMS offers many ways of communication and I will be using two:

- **Email**: please use the CANVAS email system to communicate with your instructor for personal issues related to the course. Make sure to use proper netiquette when sending emails, including but not limited to:
  - Articulate the content of your message clearly. This means you should not use text message or instant message speak. Proper communication standards also apply for any submitted work. For proper writing standards please refer to [http://business.nmsu.edu/students/survival-kit](http://business.nmsu.edu/students/survival-kit)
  - Before you send an email, review the course’s content on Canvas. It is very likely that you can find an answer to your question(s) by examining this content.
  - Failure to follow these simple rules will generally result in a non-response from the instructor.
  - **You can expect a reply from me within 24 hours.**

- **The Discussions section of CANVAS is an extension of my office hours.** You are to post all technical questions here. **I will not answer questions about labs and/or projects 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. **You can expect a reply from me within 24 hours.**

Late Work Policy

- **No makeup rats will be allowed.**
- **No late submissions** for short assignments (sas) or the individual project (ip) will be allowed.
- **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 Time</th>
<th>Percentage Loss</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>

- **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 to 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.

Short Assignments (sa) and Programming Assignments (pa) Submission Process
- Submit your assignment by uploading all files (normally you will be turning in a zipped file that contains the entire project) to Canvas.
- For Programming Assignments (pa), besides the program(s), you must also include:
  - An executive summary describing the approach you followed to solve it the assignment.
  - 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.
- Keep a copy of your files. You may need it for your future assignments.

Grading the Assignments:
Your instructor will test your work (weight distribution: documentation - 10% program - 90%). To get full grade, your program should provide correct answer. However, points will be deducted for the following:
- 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 might not get full credit.

Add/Drop Policy
Students may add courses thru September 3, 2013 and drop/cancel courses thru September 6, 2013 through MyNMSU self-service, or by Add/drop slip, and no signature is required. Late registration fees will apply for courses added after August 22, 2013. The deadline for withdrawing from a full semester (15 week) course in the fall is October 15, 2013. Students may withdraw from the university (withdraw from all classes) until November 15, 2013.

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 and non-academic misconduct
The Student Code of Conduct defines academic misconduct, non-academic misconduct and the consequences or penalties for each. The Student Code of Conduct is available in the NMSU Student Handbook online: http://deanofstudents.nmsu.edu/student-handbook/1-student-code-of-conduct/
Academic misconduct is explained here: http://deanofstudents.nmsu.edu/student-handbook/1-student-code-of-conduct/3-academic-misconduct.html
Plagiarism. Plagiarism is using another person's work without acknowledgment, making it appear to be one's own. Intentional and unintentional instances of plagiarism are considered instances of academic misconduct and are subject to disciplinary action such as failure on the assignment, failure of the course or dismissal from the university. The NMSU Library has more information and help on how to avoid plagiarism at http://lib.nmsu.edu/plagiarism/. Because of the nature of this class, discussion of principles and approaches to solve a particular problem between class members is encouraged.

Students with Disabilities
Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:

Trudy Luken
Student Accessibility Services (SAS) – Corbett Center, Room 244
Phone: (575) 646-6840
Email: sas@nmsu.edu / Website: www.nmsu.edu/~ssd/

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status. Furthermore, Title IX prohibits sex discrimination to include sexual misconduct, sexual violence, sexual harassment and retaliation. For more information on discrimination issues, Title IX or NMSU’s complaint process contact:

Gerard Nevarez, Executive Director or Agustin Diaz, Associate Director
Office of Institutional Equity (OIE) – O’Loughlin House
Phone: (575) 646-3635 Email: equity@nmsu.edu / Website: www.nmsu.edu/~eeo

Professional Behavior Guidelines
Tardiness: Please arrive on time. If you arrive late, 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. If you are feeling sleepy, please step outside the class for a minute, get a breather, and come back to class.
Inattention: Please do not read other material (chat, browsing the web, etc) 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: While there are a myriad of appropriate times and places to use one’s cell phone, during a class period is not one of them. Therefore, students are prohibited from using their cell phones during class, regardless of whether they are used for calling or for text messaging purposes. Cell phones should be turned off and stowed away at all times in the classroom. Cell phone use is strictly prohibited during Exams.
Laptop Computers: Students are free to use laptop computers for note taking purposes during class. If a student is discovered using his or her laptop for any other purposes, such as surfing the internet, that student will forfeit the opportunity to use his or her laptop for the remainder of the semester. Personal laptops are prohibited during exams.

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.