BCIS 122. Section M70
Introduction to Information Systems Programming (Online)

Instructor: Dr. Carlo A. Mora M.  Office: Guthrie 218
Email: Use Canvas for all communications  Phone: 575-646-5044
Class Duration: January 17th – May 10th
Office Hours: TBA

Course Scope

This course introduces the basic concepts of computer programming in a visual environment (Alice). Emphasis will be given to algorithm development, data description, control structures, and object oriented principles. Besides being exposed to the visual programming environment Alice, students will be also introduced to a third generation programming language. At the end of the course, students are expected to have a solid understanding of the basic programming concepts necessary to proceed to BCIS 222.

Please note that you MUST earn a 'C' or better in this course in order to proceed to BCIS 222.

Prerequisite: C or better in BCIS 110 or CS 110; and MATH 120.

Course Objectives

By the end of the course, each student should be able to:
• Create an animation using Alice
• Create an interactive program using Alice
• Identify and use:
  - Planning tools such as storyboards, pseudocode, and algorithms.
  - Classes, objects, methods, and parameters.
  - Events and event handlers.
  - Variables and control structures (functions, if/else, loops).
• Relate concepts from the visual environment of Alice to a third generation programming language.
• Understand the purpose of an Integrated Development Environment

Required Materials

2. Alice 2.x Software (free). We will be using version 2.3. You can download the software from http://www.alice.org/index.php?page=downloads/download_alice2.3
3. Integrated Development Environment (IDE). Towards the end of the course, you will be introduced to a professional IDE. Details will be given later.
Point Distribution and Grades

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight in Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs (LABs)</td>
<td>25%</td>
</tr>
<tr>
<td>Projects (PROs)</td>
<td>20%</td>
</tr>
<tr>
<td>Readiness Assessment Tests (RATs)</td>
<td>5%</td>
</tr>
<tr>
<td>Exams (EXAs)</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.

Course Requirements

Readings and Labs

You are responsible to read the chapters as described in the schedule and complete the respective lab 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 lab assignments. These will allow you to apply the concepts covered in a particular chapter. **All labs must be completed to pass the course.**

Projects

There will be a number of projects to be completed during the semester. These are open ended assignments where you can display your knowledge. As with labs, the purpose of the projects is to allow you to apply the concepts covered in a comprehensive project. These projects 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 project description 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.

Projects details will be given later. **All projects must be completed to pass the course.**

Readiness Assessment Tests

There will be short Canvas based RATs. The purpose of the RATs is to motivate you to read the assigned material (chapter readings, additional materials) to reinforce relevant topics. You will be allowed to take a RAT twice and the grade assigned will be the highest score obtained for a RAT.

Exams

Exams will carry most of the weight of your final grade. The format and the contents of each exam will vary and details about the format will be given later.
General Policies

Communication
Since this is an online course, we will rely heavily on CANVAS. 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:
  - Use adequate subject line (e.g. lab -01 part 3 question).
  - Use standard written English - capitalization, punctuation and paragraphing. This means you should not use text message or instant message speak. Proper communication standards also apply for any submitted work. For proper presentations and writing standards please refer to [http://business.nmsu.edu/students/survival-kit/](http://business.nmsu.edu/students/survival-kit/)
  - Use a closing that indicates your real name or use signature block.
  - When replying to an e-mail, start your reply at the top of the email.

  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 (Labs and/or Projects)
You will be allowed to submit labs or projects 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 by</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On time</td>
<td>0%</td>
</tr>
<tr>
<td>Up to 1 weekday</td>
<td>10%</td>
</tr>
<tr>
<td>Up to 2 weekdays</td>
<td>30%</td>
</tr>
<tr>
<td>Up to 3 weekdays</td>
<td>60%</td>
</tr>
<tr>
<td>More than 3</td>
<td>100%</td>
</tr>
</tbody>
</table>

Missing RATs and Exams
No makeup RATs or Exams will be allowed.

Withdrawal Policy
The deadline for withdrawing from course is **March 12, 2013**. In the case of a withdrawal, the course remains on the student’s transcript and the grade is listed as “W”. Students in the College of Business may withdraw from a class by presenting an add/drop slip to the staff in the Advising Center for processing, if it is received prior to the deadline. Until **February 1, 2013**, students may drop courses, in
which case the course does not appear on their transcripts and there is no tuition charge. No faculty or department head signatures are required to drop a class. Students may drop a class on the web only until the last day to drop; they may also drop by taking a drop slip to the Advising Center.

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/~vpsa/handbook.html) for a full description of the NMSU Policy. However, discussion of principles and approaches between class members is encouraged, as alternate explanations can be helpful.

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

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).