Honors Computer Science (CS1010)

Fall 2013 Syllabus

This is a class that will expose students to the field of computer science. Students will complete ever challenging labs using the ALICE programming language. Students will be exposed to conditional expressions and looping constructs. Also other programming languages may be used to further illustrate programming constructs.

Prerequisites: none

Two sections:

1. MWF 08:00-09:45 am  
   Final exam on Friday Dec 13 @ 7:30am
2. MWF 12:00 (noon) - 12:45 pm  
   Final Exam on Monday Dec 9 @ 12:30

Instructor: Dr Bob Nielson  
Email: ‘nielson at dixie dot edu’

Objectives

At the end of the course, students will be able to:

- Program basic movies using the ALICE programming language
- Understand the use of conditional expressions
- Understand the use of looping structures
- Understand how to break down a problem into pieces and solve them using a computer

Resources

Texts

There are no texts required for this class.

Computer Resources

You are free to use the computers provided in your classroom. In class time will be provided to work on the assigned labs.

Course Website

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on the website. The course website is accessible at http://cit.cs.dixie.edu/cs/1010/.

Assignments and Exams

Labs

Labs will be graded for accuracy of function. It is important that you start early and get each of your assignments done before its due date. Many problems will take much longer to solve in a single sitting than in many shorter sessions. Give yourself time to think; sleep on difficult problems. Finish early so you can go back and refine your initial approach.

Labs are due on the date listed in the schedule, and must be passed off to the instructor for the course. This means that you must reserve time to pass it off at a suitable time before the end of the day it is due.

Quizzes

There will be 2 in-class quizzes. You will be presented with a scene that you have to recreate.
Exams

This course has a comprehensive final exam. You will be presented with a scene that you have to recreate.

Grading

Labs and exams each contribute to your point total. The labs count for one third of your grade, the quizzes for one third, and the final exam for the final third.

Here is the grading scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score</th>
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<tbody>
<tr>
<td>A</td>
<td>&gt;= 94</td>
</tr>
<tr>
<td>A-</td>
<td>&gt;= 90</td>
</tr>
<tr>
<td>B+</td>
<td>&gt;= 87</td>
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<tr>
<td>B</td>
<td>&gt;= 84</td>
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<tr>
<td>B-</td>
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<td>C+</td>
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<td>D</td>
<td>&gt;= 64</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 64</td>
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</table>

Course Policies

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule presented is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and posted to the website. Exams and quizzes cannot be made up unless arrangements are made prior to the scheduled time.

Time

Time will be provided in class to complete the labs. Additional time may be required for some labs.

Late work

Labs are due on the date specified in the schedule. Handing them in or passing them off after the specified time is considered one day late. You may turn them in late with penalties as described below. After five days late, you receive $\frac{1}{2}$ of the points.

For example: if an lab is due at noon on Wednesday:

- Before midnight Thursday the lab is considered 1 day late.
- Before midnight Friday the lab is considered 2 days late.
- After midnight on the following Wednesday the lab will be worth $\frac{1}{2}$ credit.

Saturdays, Sundays, and school holidays do not count as late days. No labs will be accepted beyond the last day of class.

Labs may be submitted late, but a 1 point penalty will be applied for each day late. After the 5 days, labs will receive $\frac{1}{2}$ credit. Note that by this time, students should be working on the next lab.

Quizzes can only be made up if arrangements are made in advance.

Cheating and Collaboration

Limited collaboration with other students in the course is permitted. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. Students are free to discuss strategies for solving programming assignments with each other, but this must not extend to the level of programming code. Each student must code his/her own solution to each assignment. See the section on cheating.
Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student’s own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own work.

You are encouraged to work in groups while studying for tests, discussing class lectures, discussing algorithms for homework solutions, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of copying and pasting is not okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another’s code or written work, either electronically or visually. The line between collaborating and cheating is generally one of language: talking about solutions in English or other natural languages is usually okay, while discussions that take place in programming languages are usually not okay. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.