CS 1336-D10: Computer Science I

Instructor Name: Lopamudra Roychoudhuri
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Instructor email: lroychoudhuri@angelo.edu
Instructor Office: MCS 205E
Class Times: Online.
Course Web Site: Blackboard
Office Hours (on Blackboard Collaborate): MTWR 3:00-5:00pm

Course Description
This course introduces computer systems and computer programming using the concepts of algorithms for solving problems. It covers data representation and development, debugging, and verification of programs. We will use C++ as the programming language.

Course Goals
This is the first course in C++ programming. The goal of this course is to master the basics of computer programming using C++ language.

Learning Outcomes
When you complete this course, you should be able to:
1. Explain the basic syntax of C++ programming language,
2. Create, compile, link, and run a program using the Microsoft Visual Studio integrated development environment and test a program using zyLabs online tool,
3. Construct a program using one or more of the following structures: sequence, selection, and repetition,
4. Demonstrate the use of functions and arrays,
5. Solve problems and create solutions using C++ language.

Required materials

Software: Microsoft Visual Studio Community 2019 - an Integrated Development Environment (IDE) to write, compile, run, debug and test programs in various languages, such as C++, C# and Visual Basic. We will use Visual Studio to write, compile and test our C++ programs.
- You can download it free of cost from visualstudio.com.
- Available on the machines in the MCS computer labs.

Online Subscription of zyLabs
zyLabs is part of zyBooks, an online learning platform. We will use it to test our programs against instructor data, and submit to Blackboard with automated grading.
A subscription is $30. Subscriptions will last until Jul 15, 2020.
1. Click on the zyLabs link in Blackboard (DO NOT go to the zyBooks website and create a new account)
2. Enter your personal information, credit card information, and click Subscribe.
**Posted Material on Blackboard:** You are required to study all the Powerpoint slides and view all lecture videos posted under Blackboard.

**Technology:** You must have an adequate computer and internet connectivity in order to participate fully in the class. A table describing supported browsers can be viewed on Blackboard’s support site.

**Prerequisites**
None.

**Technical skills required**
No prior experience is expected, although it is assumed that you have used a computer, and you must be able to navigate the Web.

**Time spent on this course**
You can expect to spend a minimum of 2 hours every day to
- View lectures (videos, Powerpoint slides) posted under Blackboard,
- Read sections from the textbook and other sources, and
- Work on assignments.

**Communication**
Communication between you and I will be via email or Blackboard Collaborate.

- **Email:** You are required to obtain an e-mail account. You will receive announcement emails from me and occasional direct emails that you are expected to respond promptly. You can email me any time. I shall reply within 24 hours. Please include ‘CS 1336-D10’ in the subject line.
- **Blackboard Collaborate:** I shall be available every weekday during the office hours in the virtual Collaborate classroom under Blackboard. You will be able to text, audio/video chat and share your computer screen with me.
- If you have any question about the course or need assistance, please contact me during office hours, or by e-mail at any time.

**Activities Assessing Learning Outcomes**
There will be various activities that you will complete. These will be graded within two days of submission.

**Assignments**

- **Online Quizzes**
  - You will complete viewing lectures (videos, Powerpoint slides) posted under Blackboard and the required reading from the textbook or other sources. This will be validated by online quizzes. The grade from the quizzes will constitute 20% of the total assignment grade.

- **Programming assignments**
  - The purpose of the programming assignments is to give you individual practice on the topics that you are learning, and to explore some ideas more deeply. Assignments will be given almost every day for you to complete. The grade from the programming assignments will constitute 80% of the total assignment grade.
For your programming assignments, you will write, compile and debug your program in Visual Studio. You will submit the C++ program file directly to Blackboard for some of these assignments. I shall grade them manually.

For most of the programming assignments, you will test your program using zyLabs against instructor data, and submit your program to Blackboard thru zyLabs. zyLabs will give you an automatic grade out of your submission that you will verify by logging into Blackboard. *I shall check your code after the deadline is past and may change your automatic grade based on certain criteria, such as quality of code.*

**Exams**
- There will be three exams in online quiz format on Blackboard. See table below for dates and times, and Class Policies for exam policies. *Please let me know as soon as possible if you need an alternate date and/or time.*

**Grades**
Your course grade will be based on the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
<th>Due</th>
<th>Outcomes Assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Assignments</td>
<td>40%</td>
<td>Daily</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
<td>Daily</td>
<td>1 thru 5</td>
</tr>
<tr>
<td>Exam 1</td>
<td>15%</td>
<td>Wed 6/10/20 (1:00-2:00 pm)</td>
<td>1, 2</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
<td>Mon 6/22/20 (1:00-2:00 pm)</td>
<td>1, 2, 3</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
<td>Wed 7/1/20 (1:00-3:00 pm)</td>
<td>1 thru 5</td>
</tr>
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Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69</td>
</tr>
<tr>
<td>F</td>
<td>0 - 59</td>
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</tbody>
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**Course Outline**

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6/1, 6/2</td>
<td>Intro to computers and programming (Ch. 1)</td>
</tr>
<tr>
<td>1</td>
<td>6/3, 6/4, 6/5</td>
<td>Intro to C++ (Ch. 2)</td>
</tr>
<tr>
<td>2</td>
<td>6/8, 6/9, 6/10, 6/11, 6/12</td>
<td><strong>Exam 1 on Wed 6/10/20 (1:00-2:00 pm):</strong> Expressions and Interactivity (Ch. 3)</td>
</tr>
<tr>
<td>3</td>
<td>6/15, 6/16</td>
<td>Making Decisions (Ch. 4)</td>
</tr>
<tr>
<td>3</td>
<td>6/17, 6/18, 6/19</td>
<td>Loops (Ch. 5)</td>
</tr>
<tr>
<td>4</td>
<td>6/22, 6/23, 6/24</td>
<td><strong>Exam 2 on Mon 6/22/20 (1:00-2:00 pm):</strong> Functions (Ch. 6)</td>
</tr>
<tr>
<td>4</td>
<td>6/25, 6/26</td>
<td>Arrays (Ch. 7)</td>
</tr>
<tr>
<td>5</td>
<td>6/29, 6/30</td>
<td>Arrays (Ch. 7) cont.</td>
</tr>
<tr>
<td>5</td>
<td>7/1/20 (Wednesday)</td>
<td><strong>Final Exam (1:00-3:00 pm)</strong></td>
</tr>
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</table>
Class Policies

Policy on absenteeism/non-communication

- Your participatory activities (such as viewing Blackboard lectures, responding to emails) will be monitored as attendance. Failure to participate or communicate on your part will result in an appropriate reduction of your grade and possibly in your failure of this course.

Late work

- All assignments, unless otherwise specified, must be submitted to Blackboard. Many of these assignments will be submitted automatically to Blackboard via zyLabs.
- No late assignment will be accepted. No e-mail submission is accepted. There are no exceptions to this rule.

Academic Integrity

- All homework assignments should be the work product of each individual. Cheating occurs when a student either submits work for a grade that is not entirely due to his/her own effort or allows others to use her/his work. Cheating occurs when a student submits work product that is copied from another student. Cheating on an assignment or exam will result in a failing grade for the course. Looking at another student's exam or talking to another student during an exam will be a serious violation of academic integrity. We will follow an honor system in online exams, as it is hard to impose monitoring on students who may not have a camera.
- Academic Honor Code: Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding the Academic Honor Code, which is available on the web at Academic Honor Code in Student Handbook. You should familiarize yourself with it. If a student violates this policy in any way, the student may receive a sanction of failure on the assignment/exam or failure in the course. If you have questions about appropriate citations, please ask.

Exam Policies

- All students must take all the exams on the scheduled dates. All exams will be online on Blackboard. Please let me know as soon as possible if you need an alternate date and/or time.
- There are no makeup exams. Only exception will be student absence for observance of religious holy day (see Additional Policies below).
- If one exam is missed, the final exam will count double to make up for the missed exam. Only one missed exam can be made up this way. If more than one exam is missed, a grade of zero will be given for the additional missed exam.
- The final exam must be taken on its assigned date. For students taking all three exams, the final exam grade can replace a lower grade on one of the first two exams if the final exam grade is higher. Only one regular exam grade can be replaced in this way.

Email Etiquette

- Apply this to all communication when using email. Please keep these universal netiquette policies in mind: (i) write complete sentences when sending an email message, (ii) do not use all CAPITAL LETTERS, (iii) check your spelling, (iv) be courteous, and never use offensive language, (v) sign your email message.

Incompletes

- The grade “I” is given when the student is unable to complete the course because of illness or personal misfortune. An “I” that is not removed before the end of the next long semester
automatically becomes an "F". Students will be allowed one year to remove a grade of "I" before it automatically becomes an “F”. To graduate from ASU, a student must complete all “I”’s.

**Add/Drop Dates**
- Students may add this course up to Tue June 2, 2020.
- Students may drop this class or withdraw from the university by Fri June 19, 2020, 5 pm.

**Additional Policies**

**Accommodations for Disability**
The Student Life Office, located at room 112, University Center, is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is your responsibility to initiate such a request by contacting the Student Life Office at (325) 942-2191 or (325) 942-2126 (TDD/FAX) or by e-mail at Student.Life@angelo.edu to begin the process. The Student Life Office will establish the particular documentation requirements necessary for the various types of disabilities.

**Student absence for religious holidays**
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

**Modifications to the syllabus**
The instructor and the university reserve the right to modify or change the syllabus (schedule, course requirements, grading policy, etc.) as the curriculum and/or program require(s).

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i [https://help.blackboard.com/en-us/Learn/9.1_SP_14/Student/015_Browser_Support/010_Browser_Support_SP_14](https://help.blackboard.com/en-us/Learn/9.1_SP_14/Student/015_Browser_Support/010_Browser_Support_SP_14)
