Instructor: Mrs. Beth Niehues  
E-mail Address: bniehues@angelo.edu  
Office Phone: 325-486-5429  
Office: MCS 205C  
Office Hours: MTWRF 1:00 p.m. – 3:00 p.m. and by appointment  
Class Times: MWF 11:00 a.m. – 11:50 a.m.  
Classroom: MCS 114

Course Description  
The concepts and properties of algorithms for solving numerical and non-numerical problems. Introduction to computer and programming systems, including the development, debugging, and verification of programs, representation of data, computer characteristics and organization.

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

Student 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,  
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.

Course Delivery  
This is a face-to-face course with learning resources and supplemental materials posted in Blackboard.

Required Materials  
Online Subscription: Online zyLabs (a subscription is $30 and will last until Jun 08, 2020):  
   1. Click on your zyBooks link in your learning management system  
   (Do not go to the zyBooks website and create a new account)  
   2. Subscribe  
Software: Microsoft Visual Studio 2019  
   - Available on the machines in the MCS computer labs.  
   - You can download Microsoft Visual Studio Community 2019 free of cost from Microsoft. Details will follow when class starts.
Blackboard: You are required to study all the PowerPoint slides and view all lectures posted on Blackboard.  
Technology: You must have access to an adequate computer and Internet connectivity to participate fully in the class. ASU computer labs are available for your use. A table describing supported browsers can be viewed on the Blackboard support site.
Communication
You are responsible for frequently checking your ASU email account and Blackboard throughout the duration of this course. Email communication will be done exclusively through your ASU email address. Please include your course name and section number in the subject line of your email. I will respond to email messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Activities Assessing Learning Outcomes
Assignments
- **Quizzes**
  You will be assigned textbook material, videos, and PowerPoint slides on Blackboard. This material will help you build the knowledge and skills needed to complete the programming assignments. You will be given quizzes at the beginning of class over the assigned material.
- **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 frequently for you to complete.

Exams
There will be three exams. Be prepared for an online format on Blackboard using Respondus Lockdown browser. All students must take all the exams on the scheduled dates. See table under Course Outline for approximate exam dates and Class Policies for exam policies.

Grades
Your course grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming Assignments</td>
<td>45%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>5%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
</tbody>
</table>

ASU 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>90.00 – 100</td>
</tr>
<tr>
<td>B</td>
<td>80.00 – 89.99</td>
</tr>
<tr>
<td>C</td>
<td>70.00 – 79.99</td>
</tr>
<tr>
<td>D</td>
<td>60.00 – 69.99</td>
</tr>
<tr>
<td>F</td>
<td>0 – 59.99</td>
</tr>
</tbody>
</table>

Incomplete Grade Policy
It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.
Course Outline
Weekly tentative schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intro to computers and programming (Module 1)</td>
</tr>
<tr>
<td>2</td>
<td>Intro to C++ (Module 2)</td>
</tr>
<tr>
<td>3</td>
<td>Intro to C++ (Module 2) cont.</td>
</tr>
<tr>
<td>4</td>
<td>Intro to C++ (Module 2) cont.; Expressions and Interactivity (Module 3); <strong>Exam 1</strong></td>
</tr>
<tr>
<td>5</td>
<td>Expressions and Interactivity (Module 3) cont.</td>
</tr>
<tr>
<td>6</td>
<td>Expressions and Interactivity (Module 3) cont.</td>
</tr>
<tr>
<td>7</td>
<td>Making Decisions (Module 4)</td>
</tr>
<tr>
<td>8</td>
<td>Making Decisions (Module 4) cont.</td>
</tr>
<tr>
<td>9</td>
<td>Loops and Files (Module 5); <strong>Exam 2</strong></td>
</tr>
<tr>
<td>10</td>
<td>Loops and Files (Module 5) cont.</td>
</tr>
<tr>
<td>11</td>
<td>Functions (Module 6)</td>
</tr>
<tr>
<td>12</td>
<td>Functions (Module 6) cont.</td>
</tr>
<tr>
<td>13</td>
<td>Arrays (Module 7)</td>
</tr>
<tr>
<td>14</td>
<td>Arrays, Vectors (Module 7) cont.</td>
</tr>
<tr>
<td>15</td>
<td>Arrays, Vectors (Module 7) cont.</td>
</tr>
<tr>
<td>16</td>
<td><strong>Final Exam on Wednesday, 05/06, from 10:30 a.m. – 12:30 p.m.</strong></td>
</tr>
</tbody>
</table>

Class Policies
All students are required to follow the policies and procedures presented in these documents:

Angelo State University Student Handbook³
Angelo State University Catalog⁴

**Policy on Absenteeism/Non-communication**
Attendance will be taken every day in the beginning of class. In-class quizzes and programming assignments will be given, so absenteeism will negatively impact your grade. 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.

**Submissions/Late Work**
- All assignments, unless otherwise specified, must be submitted to Blackboard and contain your name, course name/section, the title of the assignment, and the due date.
- *No late assignment will be accepted. No e-mail submission is accepted.* There are no exceptions to this rule.

**Academic Integrity**
- Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.
- The College of Science and Engineering adheres to the university’s [Statement of Academic Integrity]⁵.
- All assignments should be the product of the student alone. 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 his/her work.

**Exam Policies**
- There are no makeup exams. The only exception will be an absence for observance of a 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.
Additional Policies

Accommodations for Disability
ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

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. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

Title IX at Angelo State University
The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

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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1 https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support
2 https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
3 https://www.angelo.edu/student-handbook/
4 https://www.angelo.edu/catalogs/
5 http://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
6 https://www.angelo.edu/services/disability-services/
7 https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of
8 www.angelo.edu/incident-form
9 www.angelo.edu/title-ix