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.

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.

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

Required Materials


Online Subscription: Online zyLabs (a subscription is $30 and will last until December 28, 2019):
1. Sign in or create an account on the zyBook website using your angelo.edu email address
2. Enter zyBook code: ANGELOCS1336WildeFall2019
3. Subscribe

**Software:** Microsoft Visual Studio 2017
- Available on the machines in the MCS computer labs.
- You can download Microsoft Visual Studio Community 2017 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.

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

**Communication**
You are responsible for checking your ASU email account and Blackboard throughout the duration of this course.

**Activities Assessing Learning Outcomes**

**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.

**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 also be given quizzes during class.

**Exams** There will be three exams in 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 dates and Class Policies for exam policies.

**Grades**
Your course grade will be based on the following:
<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>90-100</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>
</tr>
</tbody>
</table>

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) cont.</td>
</tr>
<tr>
<td>10</td>
<td>Loops and Files (Module 5) cont.; <strong>Exam 2</strong></td>
</tr>
<tr>
<td>11</td>
<td>Loops and Files (Module 5) cont.</td>
</tr>
<tr>
<td>12</td>
<td>Functions (Module 6)</td>
</tr>
<tr>
<td>13</td>
<td>Functions (Module 6) cont.</td>
</tr>
<tr>
<td>14</td>
<td>Arrays (Module 7)</td>
</tr>
<tr>
<td>15</td>
<td>Arrays (Module 7) cont.</td>
</tr>
<tr>
<td>16</td>
<td><strong>Final Exam on Wednesday, 12/11, from 1:00 p.m. - 3:00 p.m.</strong></td>
</tr>
</tbody>
</table>

Course Policies

**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.

**Late work**
- All assignments, unless otherwise specified, must be submitted to Blackboard containing your name, course name, 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.

**Exam Policies**
- 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.

**Student Disability Services**

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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

**Ms. Dallas A. Swafford**
Director of Student Disability Services
- 325-942-2047
- dallas.swafford@angelo.edu
- Houston Harte University Center

**Title IX Statement**

Angelo State University is committed to the safety and security of all students. If you or someone you know experience sexual harassment, sexual assault, domestic or dating violence, stalking, or
discrimination, you may contact ASU’s Title IX Coordinator:

Michelle Nicole Boone, J.D.
Director of Student Disability Services
- 325-486-6357
- Michelle.boone@angelo.edu
- Mayer Administration Building 204

Student Absence for Observance of Religious Holy Days

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.

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.

Student Conduct Policies

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. Visit ASU’s Academic Integrity page for more information.

Plagiarism
Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion
of course readings in printed or electronic form without written permission from the copyright holders or publishers.

**General Policies Related to This Course**

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

- Angelo State University Student Handbook
- Angelo State University Catalog

**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).