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 10:00 a.m. – 10:50 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

Textbook: Gaddis, T. (2018). *starting out with C++ From Control Structures through Objects (9th Edition),* Pearson, Book Only: ISBN 9780134498379
Online Subscription: Online zyLabs (a subscription is $30 and will last until December 28, 2019):
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.
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.[1]

Communication

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

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 during 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 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 approximate exam dates and Class Policies for exam policies.

Grades

Your course grade will be based on the following:

Activity	Percentage
Programming Assignments	45%
Quizzes	5%
Exam 1	15%
Exam 2	15%
Final Exam	20%

ASU employs a letter grade system. Grades in this course are determined on a percentage scale:

Grade	Percentage
A	90 – 100
B	80 – 89.99
C	70 – 79.99
D	60 – 69.99
F	0 – 59.99

Course Outline

Weekly tentative schedule

Week	Topics
1	Intro to computers and programming (Module 1)
2	Intro to C++ (Module 2)
3	Intro to C++ (Module 2) cont.
4	Intro to C++ (Module 2) cont.; Expressions and Interactivity (Module 3); **Exam 1**
5	Expressions and Interactivity (Module 3) cont.
6	Expressions and Interactivity (Module 3) cont.
7	Making Decisions (Module 4)
8	Making Decisions (Module 4) cont.
9	Loops and Files (Module 5)
10	Loops and Files (Module 5) cont.; **Exam 2**
11	Loops and Files (Module 5) cont.
12	Functions (Module 6)
13	Functions (Module 6) cont.
14	Arrays (Module 7)
15	Arrays (Module 7) cont.
16	**Final Exam on Monday, 12/9, from 10:30 a.m. – 12:30 p.m.**

Class Policies

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

Angelo State University Student Handbook[2]

Angelo State University Catalog[3]

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

- *Academic Honor Code:* Academic misconduct includes cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, violations of published professional ethics/standards, and any act or attempted act designed to give unfair academic advantage to oneself or another student. See the Angelo State University Student Handbook[4], Part II B: Academic Integrity[5] for more information. Students are responsible for understanding the Academic Honor Code. 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.
- All homework 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. Cheating on an assignment or exam can result in a failing grade for the course. No student shall look towards the work of any other student during an exam, as it shall be construed as cheating.

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.[6] 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[7] for more information.

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 Boone
> Director of Title IX Compliance
> Office of Student Affairs
> 325-486-6357
> michelle.boone@angelo.edu

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/student-handbook/
[3] https://www.angelo.edu/catalogs/
[4] http://www.angelo.edu/student-handbook/
[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