

CS 1337 – Computer Science II

Spring 2022 Course Syllabus



Instructor: Dr. Mark B. Motl

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Office: MCS 205M

Office Hours: MWF 8:30 a.m. – 10:30 a.m.

TR 2:00 p.m. – 4:00 p.m.

Class Times: Section 010: MWF 11:00 a.m. – 11:50 a.m.

Section 020: MWF 12:00 p.m. – 12:50 p.m.

Classroom: MCS 115

Course Information

Course Description

Continuation of CS 1336. Problem solving and program development techniques emphasizing modular design. Includes advanced programming topics such as class design, records, strings, pointers, and bit manipulation.

Prerequisite and Co-requisite Courses

CS 1336

Prerequisite Skills

A first course in C or C++ programming.

Student Learning Outcomes

Upon completion of this course, students will:

- become familiar with the internal storage of integral data;
- learn how to create, compile, link, and run a program in a Unix operating environment;
- learn how to create multi-file source programs;
- be introduced to bit manipulation, including left and right shift operators and bitwise operators (not, and, or, exclusive or);
- be introduced to pointers;

- learn about character data, including its representation and available functions for testing and manipulating characters;
- be introduced to the string data type and various functions for manipulating strings;
- be introduced to structured data; and
- be introduced to object oriented programming using the class concept.

Course Delivery

This is a face-to-face course with learning resources and supplemental materials posted in Blackboard. Materials posted to Blackboard will take the form of PDF notes, Powerpoint slides, and recorded videos.

Required Texts and Materials

Gaddis, Tony, *Starting Out with C++: From Control Structures Through Objects*, Ninth ed., Boston, MA: Pearson/Addison-Wesley, 2018.

Technology Requirements

Access to exams and quizzes will be through Respondus Lockdown Browser. Respondus requires a desktop computer or laptop (not a Chromebook).

Communication

- **Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.
- **Blackboard Collaborate:** I will be available every weekday during 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.
- **Phone:** I can be contacted via my office telephone during office hours.

Grading

Evaluation and Grades

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Programming Assignments	40%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	15%
Total	100%

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

Grade	Percentage
A	90.00 – 100.00
B	80.00 – 89.99
C	70.00 – 79.99
D	60.00 – 69.99
F	0.00 – 59.99

Please note that grades are **not** rounded up.

Course Outline

This outline should be considered approximate and tentative.

Weeks	Topics
1 – 5	<ul style="list-style-type: none"> • number systems • internal numerical representation • Exam 1
6 – 9	<ul style="list-style-type: none"> • bitwise operators • Exam 2
10 – 13	<ul style="list-style-type: none"> • pointers • characters • strings • Exam 3
14 – 16	<ul style="list-style-type: none"> • structures • classes • Final Exam

Assignment and Activity Descriptions

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. The following guidelines are to be observed concerning the programming assignments (labs):

- No late assignment will be accepted. No e-mail submission is accepted. There are no exceptions to this rule.
- All assignments, unless otherwise specified, must be submitted to Blackboard and contain your name, course discipline and number, and the title of the assignment.
- Assignments are not weighted equally. Each assignment has a designated value. The value of each assignment can be found on the first page of the document describing the assignment.
- Labs are due by the end of the day on the designated due date.
- The labs will be developed on the department's Unix environment.
- All assignments will be submitted electronically, as discussed in class.
- Assignments will be graded on the CS department's Unix environment. If you develop solutions to the programming assignments in a different environment such as Microsoft Visual Studio, it is your responsibility to ensure that these solutions work correctly in the Unix environment also.
- You are responsible for doing your own work. You may be asked to defend/explain your work at any time. You are encouraged to work with your classmates and use the resources of the Internet to understand and complete the assignments; however, when you submit an assignment, you are verifying that it is your own work. Cheating will not be tolerated.

Exams: Four exams will be given throughout the semester (including the final). The following guidelines are to be observed concerning the exams:

- 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 four exams, the final exam grade can replace a lower grade on one of the first three exams if the final exam grade is higher. Only one regular exam grade can be replaced in this way

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](#)¹
- [Angelo State University Catalog](#)²

Attendance

Attendance is expected, but it will not be used in calculating your final grade.

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](#).³

Accommodations for Students with Disabilities

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](#).⁴ 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

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](#)⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁶ 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. Resources to help you understand this policy better are available at the [ASU Writing Center](#).⁷

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](#)⁸ 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 Miller, J.D.
Special Assistant to the President and Title IX Coordinator
Mayer Administration Building, Room 210
325-486-6357
michelle.miller@angelo.edu

You may also file a report online 24/7 at [Title IX at Angelo State University](#).

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 <https://www.angelo.edu/current-students/title-ix/>.

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)⁹ web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

¹ <https://www.angelo.edu/current-students/student-handbook/>

² <https://www.angelo.edu/academics/catalog/>

³ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=96>

⁴ <https://www.angelo.edu/current-students/disability-services/>

⁵ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁶ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

⁷ https://www.angelo.edu/current-students/writing-center/academic_honesty.php

⁸ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>

⁹ <https://www.angelo.edu/covid-19/>