

CS 1337: Computer Science II  
Fall 2021  
Course syllabus

<b>Class meetings</b>	section 010: MWF 10:00–10:50 in MCS 115
<b>Instructor</b>	Rob LeGrand e-mail: <a href="mailto:rlegrand@angelo.edu">rlegrand@angelo.edu</a> webpage: <a href="http://www.cs.angelo.edu/~rlegrand/">www.cs.angelo.edu/~rlegrand/</a> office phone: 325-486-5422 office location: MCS 205I office hours: online MTWRF 2:00–4:00 and by appointment
<b>Textbook</b>	Tony Gaddis. <i>Starting Out with C++: From Control Structures through Objects</i> . 9th edition. Addison Wesley, 2017. ISBN: 978-0-13-449837-9. Available in the ASU bookstore.
<b>Description</b>	Problem solving and program development techniques emphasizing modular design. Includes advanced programming topics such as class design, structures, strings, pointers and bit manipulation in C++ using a UNIX environment.
<b>Prerequisites</b>	CS 1336 (Computer Science I) is a prerequisite for this course. Please see me if you haven't taken it or if you're unsure about your proficiency in C++ programming.
<b>Grading breakdown</b>	60% assignments (mostly programming) 40% exams (probably four, including final)
<b>Student learning outcomes</b>	Students will <ul style="list-style-type: none"><li>• become familiar with the internal storage of integral data.</li><li>• learn how to create, compile, link and run a program in a UNIX operating environment.</li><li>• learn how to create multi-file source programs.</li><li>• be introduced to bit manipulation, including left and right shift operators and bitwise operators (not, and, or, exclusive or).</li><li>• be introduced to pointers.</li><li>• learn about character data, including its representation and available functions for testing and manipulating characters.</li><li>• be introduced to the string data type and various functions for manipulating strings.</li><li>• be introduced to structured data.</li><li>• be introduced to object-oriented programming using the class concept.</li></ul>

**Class format**

This class meets in a computer lab. Unlike in CS 1336, we will be using the GNU C++ compiler in a UNIX environment. You will be given an account on the `csunix.angelo.edu` server and learn how to use it.

I will take attendance, and you will need to sit in the same place all semester. Class attendance is strongly encouraged. You have a duty to inform me as soon as you know that you'll have to miss a class.

You will generally be asked to work individually on assignments. Discussion and giving and receiving help are generally encouraged when working on assignments, but all work you turn in must be your own; anything you turn in you must understand thoroughly and be prepared to explain in detail. Whenever you work with anyone but me (including tutors) in any way, you *must* write fully detailed comments in your code describing the help: *who* helped, *how* they helped on *which* part(s), etc. Failure to do so is considered taking credit for work not done and thus cheating. I will be glad to help you on assignments and concepts when you need it. Exams must be completed *entirely* independently. There will likely be four exams: three midterms and one final.

Blackboard ([angelo.blackboard.com](http://angelo.blackboard.com)) will be used to keep track of grades and assignments. You should check Blackboard and your ASU e-mail at least once a day to make sure you're not missing anything. In particular, your ASU e-mail is the only reliable way I have of contacting you outside of class, so please don't neglect it.

**Safety**

I strongly recommend and encourage wearing a mask covering both mouth and nose before, during and after class meetings. I also recommend keeping as much distance from others as is reasonably possible.

For safety reasons, I will hold office hours online using Blackboard Collaborate. Please take advantage of face-to-face class meetings to ask questions and get help, but when you need help outside of class just get in touch and I'll do what I can to help.

**Computer requirements**

You may use PCs in the computer labs, but I recommend that you have your own Windows 10 computer ready to use when you can't get to a lab. You may need to download and install free software, such as the Respondus LockDown Browser. It is your responsibility to have and use a reliable Internet connection; for best results, use an Ethernet cable to connect to your Internet source instead of relying on Wi-Fi. You will need a webcam to use Blackboard Collaborate for virtual office hours.

**Semester schedule**

This schedule of topics should be considered approximate and tentative.

week of	topic
August 23rd	number systems
August 30th	number systems
September 8th	internal numerical representation
September 13th	internal numerical representation
September 20th	bitwise operations
September 27th	bitwise operations
October 4th	pointers
October 11th	pointers
October 18th	strings
October 25th	strings
November 1st	structures
November 8th	structures
November 15th	classes
November 22nd	classes
November 29th	classes

**Final exam**

The final exam for this course is scheduled for Monday, December 6th, 10:30–12:30.

**Academic honesty**

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. By remaining enrolled in this course you agree not to commit academic misconduct as defined in section I.B.1 of the Student Handbook, available at [www.angelo.edu/student-handbook](http://www.angelo.edu/student-handbook).

**Important university policies**

- You must contact Student Disability Services in order to request and to implement academic accommodations.
- For ASU's policy on absences due to religious holy days, see OP 10.19 at [www.angelo.edu/opmanual](http://www.angelo.edu/opmanual).
- I am obligated to report any knowledge of sexual misconduct to the Title IX office; see [www.angelo.edu/services/title-ix](http://www.angelo.edu/services/title-ix) for more.

**Modifications**

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.