Disclaimer
This syllabus is to be used as a guideline only. The information provided is a summary of topics to be covered in the class.
Information contained in this document such as assignments, grading scales, due dates, office hours, required books and materials may be from a previous semester and are subject to change. Please refer to your instructor for the most recent version of the syllabus.

Course Syllabus

Edit

To print: MAC users press "⌘" + "P". PC users press "CTRL" + "P".

Arizona State University

CSE 100: Principles of Programming with C++

Course and Faculty Information

Course Description: Principles of problem solving using C++, algorithm design, structured programming, fundamental algorithms and techniques, and computer systems concepts. Social and ethical responsibility. Lecture, lab.

Credits: 3

Prerequisites: None

Instructor: Muhilan Ramamoorthy

Contact Info: Email: Muhilan.Ramamoorthy@asu.edu

Online Virtual Office Hours: TBD

GSA: TBD

Email: TBD

Online Virtual Office Hours: TBD

Course Overview

This course has been designed to give a solid understanding of programming and C++ language for a beginning programmer. Upon successful completion of this course, you will be equipped with; problem analysis and algorithm design techniques, structured and object oriented programming concepts, and a good understanding of the C++ programming language.

Note: This course is an introductory course to programming using C++. No previous background in programming is required. Only a basic knowledge of using computers - directory structure; copy, move, and rename files and folders are expected. However, dedication and hard work is required to succeed in this course.

Important: The contents of this course, including lectures and other instructional materials, are copyrighted materials. Students may not share outside the class, including uploading, selling or distributing course content or notes taken during the conduct of the course. Any recording of class sessions is authorized only for the use of students enrolled in this course during their enrollment in this course. Recordings and excerpts of recordings may not be distributed to others.

Course Learning Outcomes

At the completion of this course, students will be able to:

1. Type, compile and execute a given C++ program using a suitable IDE such as visual studio and Xcode .
2. Write a simple C++ program that uses data variables
3. Compile a C++ program that uses data variables and correct syntax errors
4. Write a simple C++ program that uses decision making C++ constructs
5. Develop an algorithm to solve a computable problem that requires decision making
6. Trace a given C++ program that uses decision making statements and determine the output
7. Write a simple C++ programs that uses looping (and decision making) C++ constructs
8. Develop an algorithm to solve a computable problem that requires decision making and loops
9. Trace a given C++ program that uses looping and decision making statements and determine the output
10. Use suitable decision making statements, loops, data variables, and constructs in developing a program to a new problem.
11. Write C++ programs that uses functions create a function which uses pass-by-reference create a function which uses pass-by-value create a value returning function
12. Write C++ programs that uses objects and methods describe the difference between a class and an object (instance) of the class design and implement a simple class from pre-defined data types
    create a program which requires the use of one of more simple classes write and
    use one-dimensional and two-dimensional arrays in C++ programs

Textbooks

The title of the textbook is "Starting Out with C++ from Control Structures to Objects", Tony Gaddis, 9th Edition, ISBN-10: 9780134498379 or ISBN-13: 978-0134498379 (printed or eText) NO MyProgrammingLab in this course

Course Access

Your ASU courses can be accessed by both **my.asu.edu (http://my.asu.edu)** and **myasucourses.asu.edu (http://myasucourses.asu.edu)** ; bookmark both in the event that one site is down.

Computer Requirements

This is a fully online course; therefore, it requires a computer with internet access and the following technologies:

Web browsers (**Chrome (https://www.google.com/chrome)** , **Mozilla Firefox (http://www.mozilla.org/en-US/firefox/new/)** , or **Safari (http://www.apple.com/safari/)**)
Adobe Acrobat Reader (http://get.adobe.com/reader/) (free)
Adobe Flash Player (http://get.adobe.com/flashplayer/) (free)
Webcam, microphone, headset/earbuds, and speaker
Microsoft Office (**Microsoft 365 is free (https://myapps.asu.edu/app/microsoft-office-2016-homeusage)** for all currently-enrolled ASU students)
Reliable broadband internet connection (DSL or cable) to stream videos.

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in ASU Online courses. While you will be able to access course content with mobile devices, you must use a computer for all assignments, quizzes, and virtual labs.

Help

For technical support, use the Help icon in the black global navigation menu in your Canvas course or call the ASU Help Desk at **+1-(855) 278-5080 (tel:+1-(855)278-5080)** . Representatives are available to assist you 24 hours a day, 7 days a week.

Student Success

To be successful:

check the course daily
read announcements read and respond to course email
messages as needed complete assignments by the due dates
specified communicate regularly with your instructor and peers
create a study and/or assignment schedule to stay on track
access **ASU Online Student Resources (http://goto.asuonline.asu.edu/success/onlineresources.html)**

Proctor for Exams (RPNow)

You need to be proctored by RPNow when you take Midterm exams and Final Exam (For practice, you can access to Practice to use RPNow is available in week 4).
To access the exam, you need to select the exam through RPNow for Students page.
Then, download (first time) and launch RPNow software to access the exam page.
RPNow software gives the password for the exams.

*IMPORTANT: You must access the exams through RPNow software. Otherwise, you will never get the access code to take the exams.

Grading

The final grade percentage = 100 * (Your total score (Max 675) + Bonus points(Max 30)) / 675.

Ex. A student's total score is 460/675 and the student have 25/30 total bonus points, then the final grade percentage =100 * (460+25)/675= 100 * 485/675 = 71.85 (%)

If the percentage is over 100%, the system adjusts the percentage to 100%.

Tasks	Details	Points
Quiz	Quiz 1	20
	Quiz 2	20
	Quiz 3	10
	Quiz 4	10
	Quiz 5	10
	Quiz 6	10
	Quiz 7	10
	Quiz 8	10
	Quiz 9	5
Homework	Homework 1	20
	Homework 2	20
	Homework 3	20
	Homework 4	20
	Homework 5	20

Lab	Lab 1	10
	Lab 2	10
	Lab 3	10
	Lab 4	10
	Lab 5	10
	Lab 6	10
	Lab 7	10
	Lab 8	10
	Lab 9	10
	Lab 10	10
	Lab 11	10
	Lab 12	10
	Lab 13	10
	Lab 14	10
	Lab 15	10
	Lab 16	10
	Lab 17	10
Exam	Midterm 1	100
	Midterm 2	100
	Final	100
Bonus	Extra credit Program Set 1	(10)
	Extra credit in Week 6	(10)
	Extra credit Quiz in Final Week	(10)
Total		675

Grade Breakdown

Your grade will be determined based on the following grading schema:

Grade	Percentage
A+	>= 97%
A	>= 90% and < 97%
B+	>= 87% and < 90%
B	>= 80% and < 87%
C+	>= 77% and < 80%
C	>= 70% and < 77%
D	>= 60% and < 70%
E	<60%

Submitting Assignments

All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas.
Do not submit an assignment via email.

Assignment due dates follow Arizona Standard time. Click the following link to access the **Time Converter (http://www.thetimezoneconverter.com/)** to ensure you account for the difference in Time Zones. Note: Arizona does not observe daylight savings time.

For Mac Users

Visual Studio 2015/2017/2019 does not work on Mac. You NEED to install Xcode If you want to use Xcode, please install Xcode and Command Line Tools. (If you install Xcode version 6 or above, you need not to install Command Line Tools

Grading Procedure

Grades reflect your performance on assignments and adherence to deadlines. Grades on assignments will be available within 72 hours (in most cases) of the due date in the Gradebook.

Late or Missed Assignments

If you need to miss a quiz/test/assignment, you must have a legitimate university approved excuse, such as a severe injury, illness or participation in a legal proceeding that require your presence, etc. You must contact the instructor and provide satisfactory evidence prior or within two days after the absence. A missed quiz/test/assignment without permission or supporting documents is a zero.

Notify the instructor BEFORE an assignment is due if an urgent situation arises and you are unable to submit the assignment on time.

Follow the appropriate University policies to request an **accommodation for religious practices (http://www.asu.edu/aad/manuals/acd/acd304-04.html)** or to accommodate a missed assignment **due to University-sanctioned activities (http://www.asu.edu/aad/manuals/acd/acd304-02.html)** .

Communicating With the Instructor

Community Forum

This course uses a discussion topic called "Community Forum" for general questions and comments about the course. Prior to posting a question or comment, check the syllabus, announcements, and existing posts to ensure it's not redundant. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor. You can expect a response within 72 hours.

Chat

The Chat tool in Canvas allows students and teachers to interact in real time. Use Chat only for informal course-related conversations unless your instructor informs you otherwise. Chat is not ideal for questions about assignments; instructors are not required to monitor it and conversations may be buried or lost.

Email

ASU email is an official means of communication (http://www.asu.edu/aad/manuals/ssm/ssm107-03.html) among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

ASU Online Course Policies

View the ASU Online Course Policies (https://asuonline-dev.asu.edu/qm-template/CanvasQM/qmpolicies.html)

Other Important Information

Late Submission Policy: Please note that we do not accept late submissions.

Withdraw: if you wish to withdraw from the class, submitting a completed withdraw form to the registrar office is the only guaranteed way to officially withdrawing from the class. Logon to the following website to see detailed withdraw policies. http://www.asu.edu/aad/manuals/usi/usi201-08.html (http://www.asu.edu/aad/manuals/usi/usi201-08.html)

(http://www.asu.edu/aad/manuals/usi/usi201-08.html) Incomplete grade will NOT be given for this course. Please check the university policy on this at http://www.asu.edu/aad/manuals/usi/usi203-09.html (http://www.asu.edu/aad/manuals/usi/usi203-09.html) . Please do not come to me during or at the end of the semester and ask for an "I" grade simply because you have fallen behind.

Fulton Schools of Engineering (FSE) Academic Integrity Policy

Students in this class must adhere to ASU's academic integrity policy, which can be found athttps://provost.asu.edu/academic-integrity/policy (https://provost.asu.edu/academic-integrity/policy)). Students must review this policy and become familiar with each of the areas in which academic dishonesty can occur. All academic integrity violations will be reported to the Fulton Schools of Engineering Academic Integrity Office. The Academic Integrity Office (AIO) maintains record of all violations and has access to academic integrity violations committed in all other ASU college/schools. Course content, including lectures, are copyrighted materials. In addition to ASU's academic integrity policy, students may not share outside the class, upload, sell, or distribute course content or notes taken during the conduct of the course (see ACD 304–06 (https://www.asu.edu/aad/manuals/acd/acd304-06.html) , "Commercial Note Taking Services" for more information).

students must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the student first complies with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement

Collaboration for Assignments

Unless otherwise instructed, you can discuss the assignments with other students and exchange ideas about how to solve them. However, there is a thin line between collaboration and plagiarizing the work of others, i.e.

cheating. In order that you not cross that line, you are required to compose your own unique solution to each of the problems. You cannot use any code or solution written by any of your classmates.

Some obvious acts of cheating are:

* Turning in work/code done by someone else.

* Copying work/code done by someone else.

* Writing one code/solution together with someone else (it should be individual work).

All instances of cheating will be handled by the Dean's office according to the *FSE Academic Integrity Policy listed above*.

DRC Service: Students requesting classroom accommodations or modifications because of a documented disability must contact the Disability Resource Center. The phone number is (480)9654732. For additional information concerning the services provided by the center, please visit their web site at **http://www.asu.edu/studentaffairs/ed/drc/ (http://www.asu.edu/studentaffairs/ed/drc/)**

Accessibility Statements

View the **ASU Online Student Accessibility (https://asuonline-dev.asu.edu/qm-template/CanvasQM/qmaccessibility.html)** page to review accessibility statements for common tools and resources used in ASU Online courses.

If any other tools are used in this course, links to the accessibility statements will be listed below this sentence.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check your ASU email and the course site often.