Syllabus

Course Syllabus

Course

Information

Print the complete syllabus

Course Number:

• CSE 100: Principles of Programming with C++ (3)

Credits:

• 3

Prerequisites

None

Faculty

Name: Devi Archana Paladugu

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Office hours: Schedule via email.

Catalog 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.

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.

Learning Outcomes

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

- Type, compile and execute a given C++ program using visual studio 2012 express
- Write a simple C++ program that uses data variables
- Compile a C++ program uses data variables and correct syntax errors

- Write a simple C++ programs that uses decision making C++ constructs
- Trace a given C++ program that uses decision making statements and determine the output
- Write a simple C++ programs that uses looping (and decision making) C++ constructs
- Trace a given C++ program that uses looping and decision making statements and determine the output
- 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
- 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

Course Topics, Schedule, & Grading

Course Topics, Schedule, & Grading

Activities used for instruction and assessment of learning include: discussion/presentations; textbook and supplemental readings; individual and group activities/assignments; and case scenarios.

WEEK	TOPICS	ACTIVITIES/ASSIGNMENTS	POINTS
		All assignments are due at	
WEEK 1	Introduction to Computers and Programming Basic elements a of C++ program Data representation and reading data from the keyboard	Lab 0 Lecture review programming assignment Quiz #1	• 5 pts • 10 pts • 10 pts
WEEK 2	 Write a simple C++ program that uses different data types and perform arithmetic operations. Write C++ programs that 	 Lab 1 Homework #1 Quiz #2 Extra credit programming set 	• 5 pts • 20 pts • 10 pts • 10 pts (extra credit)

		rogramming with C (2014 Spring - B) - 2/465/2/466	1
WEEK 3	need more than one input from the keyboard. Trace a given C++ program that involves arithmetic operations, operator precedence rules, and type conversions. Understand a simple C++	• Lab 2 • Homework #2	• 5 pts • 20 pts
	program that uses decision making C++ constructs Use appropriate selection statement in writing a C++ program to a new problem Trace a given C++ program that uses decision making statements and determine the output	Wk3_LectureReviewQuiz2 Wk3_LectureReviewQuiz3 Wk3_LectureReviewQuiz3	• 6 pts • 4 pts • 4 pts
WEEK 4	Insert topic Insert topic	Lab 3 Homework #3 Midterm I	• 5 • 20 • 75
WEEK 5	Insert topic Insert topic	Lab 4 Lab 5 Homework 4 w5lecturereviewquiz1 w5lecturereviewauiz2	• 5 • 5 • 20 • 5 • 5

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WEEK 6	Insert topic Insert topic	Midterm II Lab 6	• 80 • 5
		Homework #5	• 20
WEEK	Insert topic	• Lab 7	• 5
7	Insert topic	Homework #6	• 20
FINAL	• Course	Final Exam	• 100
WEEK	Summary		
	• Using objects		
	case-study		

Grading

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Graue	Percentage	Points Range
A	90 - 100%	469 – 422
В	80 - 89%	421 - 375
С	70 – 79%	374 - 328
D	60 - 69%	327 - 281
E/F	Below 60%	280 and below

Grading Procedure

Grades reflect your performance on assignments and adherence to deadlines. Graded assignments will be available within 48 hours of the due date via the Gradebook.

Course Policies & Procedures

Communicating With the Instructor

This course uses a discussion board called "Hallway Conversations" for general questions about the course. Prior to posting a question, please check the syllabus, announcements, and existing posts. If you do not find an answer, post your question. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor or assigned TA. You can expect a response within 48 hours.

Online Course

This is an online course. There are no face-to-face meetings.

Email and Internet

ASU email is an <u>official means of communication</u> 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.

Course Time Commitment

This three-credit course requires approximately 135 hours of work. Please expect to spend around 18 hours each week preparing for and actively participating in this course.

Late or Missed Assignments

Notify the instructor **BEFORE** an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Please follow the appropriate University policies to request an <u>accommodation for religious practices</u> or to accommodate a missed assignment <u>due to University-sanctioned activities</u>.

Submitting Assignments

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

Drop and Add Dates/Withdrawals

This course adheres to a compressed schedule and may be part of a sequenced program, therefore, there is a limited timeline to <u>drop or add the course</u>. Consult with your advisor and notify your instructor to add or drop this course. If you are considering a withdrawal, review the following ASU policies: <u>Withdrawal from Classes</u>, <u>Medical/Compassionate Withdrawal</u>, and a <u>Grade of Incomplete</u>.

Grade Appeals

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the <u>University</u> Policy for Student Appeal Procedures on Grades.

Student Conduct and Academic Integrity

ASU expects and requires its students to act with honesty, integrity, and respect. Required behavior standards are listed in the <u>Student Code of Conduct and Student Disciplinary Procedures</u>, <u>Computer</u>, <u>Internet</u>, <u>and Electronic Communications policy</u>, <u>ASU Student Academic Integrity Policy</u>, and outlined by the <u>Office of Student Rights & Responsibilities</u>. Anyone in violation of these policies is subject to sanctions.

<u>Students are entitled to receive instruction free from interference</u> by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per <u>Instructor Withdrawal of a Student for Disruptive Classroom Behavior</u>.

Appropriate online behavior (also knows as *netiquette*) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

The Office of Student Rights and Responsibilities accepts incident reports from students, faculty, staff,

or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Prohibition of Commercial Note Taking Services

In accordance with <u>ACD 304-06 Commercial Note Taking Services</u>, written permission must be secured from the official instructor of the class in order to sell the instructor's oral communication in the form of notes. Notes must have the notetaker's name as well as the instructor's name, the course number, and the date.

Course Evaluation

Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available.

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. Please remember to check your ASU email and the course site often.

Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act of 1990, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

Qualified students with disabilities may be eligible to receive academic support services and accommodations. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are responsible for requesting accommodations and providing qualifying documentation to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact their campus DRC.

Tempe Campus

http://www.asu.edu/studentaffairs/ed/drc/

480-965-1234 (Voice)

480-965-9000 (TTY)

Polytechnic Campus

http://www.asu.edu/studentaffairs/ed/drc/

480-727-1165 (Voice)

480-727-1009 (TTY)

West Campus

http://www.west.asu.edu/drc/

University Center Building (UCB), Room 130

602-543-8145 (Voice)

Downtown Phoenix Campus and ASU Online

http://campus.asu.edu/downtown/DRC

University Center Building, Suite 160

602-496-4321 (Voice)

602-496-0378 (TTY)

Technical Requirements

Computer Requirements

& Support

This course requires a computer with Internet access and the following:

- A web browser (Chrome, Internet Explorer, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- Adobe Flash Player (free)
- · Microphone (optional) and speaker

Technical Support

This course uses LearningStudio to deliver content. It can be accessed through MyASU at http://my.asu.edu or the LearningStudio home page at http://ecollege.asu.edu.

To monitor the status of campus networks and services, visit the System Health Portal at http://syshealth.asu.edu/.

To contact the help desk you have two options:

- chat/email: http://247support.custhelp.com/
- call toll-free at 1-855-278-5080, option 5, then option 3

Student Success

Student Success

Success

This is an online course. 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