

# Syllabus for CSE021-01: Introduction to Computing II

Spring 2019

Instructor: Santosh Chandrasekhar

**Designation:** CSE21: Introduction to Computing II

**Catalog Description:** CSE21 is intended to continue presenting the basics of programming to the

beginner. Modern topics in computer science such as Object-Oriented

Programming, recursion and data manipulation will be covered, using the Java programming language as a learning and exploration tool. CSE21 is a 2 credit course, which includes 50 minutes of lecture, 2 hours and 50 minutes of lab, and various projects each week. Students in CSE21 are expected to have a firm

command of the topics presented in CSE 20.

**Text Books and Other Required Materials:** 

ZyBooks: Programming in Java

1. Sign in or create an account at learn.zybooks.com using your UC Merced email

address

2. Enter zyBook code UCMERCEDCSE021ChandrasekharSpring2019

3. Subscribe

If you encounter a problem, contact support@zybooks.com to get it resolved.

IMPORTANT NOTES -- Participation grade will be partly evaluated based on the activities within the subscription account.

If you were previously subscribed to CSE 20 within the last year, you should qualify for an automated discount of up to 50%.

If you are retaking CSE 21, you may qualify for a retake subscription pricing, and will need to contact support@zybooks.com to avail this subscription.

For all other students, when you enter the code in zyBooks, you will be given two options. One for the school term (Cheaper), and the other for the school term + 1 year (More expensive). Please note that the extension in the second (more expensive) option is for PERSONAL USE ONLY and cannot be used in this course or any other classes.

Course Objectives/ Student Learning Outcomes: Students will learn how to apply knowledge of computing and mathematics to programming. Students are expected to acquire abilities to analyze a problem and identify the computing requirements appropriate for its solution. Students will also learn to design, implement, and evaluate a computer-based system, process, or program to meet desired needs. In addition, students will learn to recognize the need for an ability to engage in continuing professional development. Students will learn to use current techniques, skills, and tools necessary for computing practice. Students are expected to learn to apply mathematical foundation, algorithmic principles, and computer science theory to the modeling and design of computer-based system in a way that demonstrates comprehension of the trade-off involved in design choices.

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**Program Learning** 

**Outcomes:** 

**Prerequisites by Topic:** Class Prerequisite: CSE 020

Course Policies: DEVICE AND FACILITY POLICIES:

Computers are NOT needed for tests or for any in-lecture activities. Please do not bring laptops or mobile gaming devices to lecture. It is not necessary for you to have your own computer for this course, as all computing resources necessary will be provided in the lab. Projects and lab assignments are designed to be completed within the designated weekly lab sessions. If you do not complete a particular assignment during normal lab hours, you may use any Open Access lab to complete your work. Even though our labs will use the Linux operating system, the Eclipse programming environment we will use is identical for Linux, Windows and macOS.

#### **COLLABORATION POLICIES:**

For LAB ASSIGNMENTS, you may work together with other students if you wish or when assignment asks for explicit collaboration. Giving each other help in finding bugs and in understanding the assignment is encouraged. It is permissible to allow other students to see small portions of your code on-screen during lab, but you may not allow them to copy directly.

For PROJECTS, each student must write their program as an individual or in pairs. You may talk with other students about general approaches to the problem, but you may not allow others to see your code, nor may you ask to see another student's code.

You may, of course, seek assistance from the course TAs and the course instructor for all the assignments.

#### WORK SUBMISSION POLICIES:

Projects and lab assignments will be submitted through CatCourses. To ensure that your submission is graded, you are REQUIRED to demonstrate your code to your TA or instructor BEFORE the submission deadline. Submissions without a demonstration will receive a grade of ZERO.

During demonstration, you will be asked to perform a walkthrough of your code that involves presenting your program in a step-by-step manner to the TA or instructor and answering any assignment-related questions that are posed to you. Questions about your lab assignments or projects can be wide-ranging. For instance, you can be asked to explain portions of your code in detail, provide reasons behind your decisions and choices, predict program behavior when modifications are introduced, etc. These questions will be used to test your knowledge of programming concepts relevant to the lab assignment or project being evaluated.

#### DEADLINE AND LATE POLICIES:

The posted deadline on CatCourses will be the official deadline for each assignment. In general, the deadline for submission of a LAB ASSIGNMENT will

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be ONE WEEK, and of a PROJECT will be TWO WEEKS after it is posted on CatCourses; however, you will be given a grace period of THREE days to complete your submission. The instructor has the discretion to change this grace period on a per-assignment or per-project basis.

No late work past the grace period will be accepted. Exceptions to this policy can only be made for valid reasons, with documentation. If you know before an assignment or project begins that you will not be able to make a deadline, please make arrangements with the instructor ahead of time. Similarly, make-up exams will NOT be provided unless arrangements are made beforehand.

#### LAB ATTENDANCE POLICIES:

You are expected to attend the lab session for which you are enrolled, unless you make explicit arrangements with the instructor. Lab sections are where you will get most of the information and learn so it is important to be there physically every week. Your participation grade will be a direct reflection of your lab attendance, in addition to textbook activities.

# Academic Dishonesty Statement:

- a. Each student in this course is expected to abide by the University of California, Merced's Academic Honesty Policy. Any work submitted by a student in this course for academic credit will be the student's own work.
- b. You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e mail, an e mail attachment file, a diskette, or a hard copy. Should copying occur, both the student who copied work from another student and the student who gave material to be copied will both automatically receive a zero for the assignment. Penalty for violation of this Policy can also be extended to include failure of the course and University disciplinary action.
- c. During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

## **Disability Statement:**

Accommodations for Students with Disabilities: The University of California Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities based on the principles of independent living, accessible universal design and diversity. I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first three weeks of the semester, except for unusual circumstances. Students are encouraged to register with Disability Services Center to verify their eligibility for appropriate accommodations.

## **Topics:**

Methods

Classes and Objects

Strings
2D Arrays
ArrayLists
Advanced I/O
Inheritance

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Recursion Polymorphism

Class/laboratory

Lecture: M 3:30-4:20pm, CLSSRM 102; Lab: See class schedule for time and

Schedule:

location

Midterm/Final Exam

This schedule is subject to change, but is tentatively set as follows:

**Schedule:** 

Midterm: 11-MAR, M 3:30-4:20pm, CLSSRM 102 Final: 14-MAY, T 11:30-2:30pm, CLSSRM 102

**Course Calendar:** 

Assessment/Grading

**Professional Component:** 

Grading will be based on written tests, computer programs, weekly

**Policy:** 

computer-based lab assignments, and lab/reading participation. All tests will be open-book and open-notes. Your final grade will be calculated based on the

following:

Participation (Lab and Reading): 15%

2 Projects: 15% 1 Midterm: 20% Lab assignments: 25%

Final exam (comprehensive): 25%

**Coordinator:** Santosh Chandrasekhar

Contact Information: Email: schandrasekhar@ucmerced.edu

I will try to answer your emails within 48 hours. However, I may not be able to

answer emails after 5:00 p.m. or during weekends/holidays. Please plan

accordingly.

**Office Hours:** TR 10:00-1:00pm, AOA 143

or by appointment