

CSc 15
Programming Concepts and Methodology I
Fall 2019

Instructor: Professor Gita Faroughi

Office: Riverside 5015

Email: faroughg@ecs.csus.edu

Student Hours: T/Th 10:40 -11:00 RVR 1013
T/Th 12:00 – 12: 25 RVR 5015

Services available to you:

1. Tutoring center. Hours TBD
2. Student hours
3. Testing center

The content of this syllabus can be changed if necessary and you will be notified of any modifications.

Grading: If you are not happy with the grades posted on canvas, please discuss it with me during the lab or during my office hours. Please do not send email regarding your grades since your email might be missed.

Required Textbook:

“Building Java Programs”, Reges and Steep, Addison Wesley Inc.,

Canvas: All of the course materials including homework will be posted on canvas; you need to check your canvas on a regular basis

Contact me: The best way to contact me is through email.

Communication: I use your saclink email address to communicate with you throughout the semester. You need to check your email frequently.

Attendance: You are required to attend the lecture and the lab on a regular basis. You will be dropped if not attending the class. Attendance will be taken during the lab and the lecture.

Reading: you are required to read each chapter of the book before coming to class. You might be quizzed on each chapter before I go over each chapter. Without reading the book you will not be able to grasp the concept. You might need to read the book couple of times to make sure that you understand every concept thoroughly.

Catalog Description: Programming concepts using an object-oriented programming language. Introduction to methodologies for program design, development, testing, and documentation. Topics include program design, algorithm design, number systems, classes and objects, methods (functions), control structures, arrays, and interactive input/output. Lecture two hours, technical activity and laboratory, two hours.

Prerequisites: At least a C- grade in CSC 10 or equivalent programming experience in a high-level programming language, and a passing score on the Entry Level Math exam (ELM).

Thorough understanding of:

- The concept of a variable.

Basic understanding of:

- Design of simple algorithms using: sequence, repetition, conditionals; for example, using a loop to compute the sum of n integers.
- Converting those algorithms into executable programs using some programming language.

Exposure to:

- Use of some form of subprogram (e.g., method, procedure, function, subroutine).

Course Goals:

1. To give experience in designing, implementing, testing, and documenting computer programs using an object-based approach, modularity, and stepwise refinement.
2. To provide an introduction to data abstraction through the development and use of classes.
3. To provide an understanding of number systems, data types, control structures, and procedural abstraction.
4. To help students improve problem-solving skills.

Supplies: You will need some form of external storage media. In addition, if you have access to a computer away from school and wish to be able to do the programming assignments on that computer, **you will need to have Sun Microsystems JDK and the IDE software that we are using installed on that computer.** Please visit the following website to download the required software:

<https://www.jgrasp.org/>

ECS account: Computer Science and Computer Engineering students are entitled to an account on one of the ECS (Engineering and Computer Science) computers. During the lab, our lab assistants will help you to create a new account for you.

Disabilities: If you have a disability and require accommodations, Please discuss your accommodation needs with me after class or during my office hours early in the semester. If you need to use the testing center you are responsible to make an appointment with the testing center and inform me at least 2 days in advance.

Lab/lecture Attendance: To be successful in this class you must attend on a regular basis. Attendance will be taken during the lab and the lecture. A signup sheet will be provided for you to sign in and out. **I will drop you from my class if you miss nay class during the first two weeks.**

Electronic devices: You are not allowed to use your mobile phone. Lap top can be used just to take notes.

Attendance at discussion/lecture: During the first few weeks of the semester, any student who misses two consecutive class periods **may be** removed from my rolls (but it is still your responsibility to officially drop). It is important that you attend all classes and that you submit your work on time. Each student is responsible for material presented and announcements made in class. Exams will definitely include information presented in class that is not available from the text. If you are forced to miss a class, please make the effort to obtain notes and announcements from a classmate. If you have any problem understanding the information you receive in such circumstances, please take the time to come to my office hours so that I can help to clear up the problems.

Participation: I will attempt to stimulate thought, but I can't think for you. My job is not to give you answers -- it is to help you discover answers for yourself. Be inquisitive, ask questions (there are no “dumb” questions, only dumb silences), keep up with the course material on a regular basis, and make an effort to understand the issues. Be an active participant in the learning process. **If students’ participation is low, pop quizzes will be given.**

Class work

- 1. Lab assignment:** A lab will be assigned for each chapter. A deadline for each lab activity will be posted on Canvas.
- 2. Practice-it:** interactive problem solving. You are required to solve some selected problems from each chapter of your book. A schedule is provided. Create an account by visiting the following website: <https://practiceit.cs.washington.edu/>
- 3. Quizzes:** you might take quizzes in class or on Canvas. You will be informed if there is any quiz two days in advance. The quizzes in this class will be taken from lecture, textbook readings, in-lab activities, and the assignments. These quizzes will be short, usually consisting of only a few questions. Under no circumstances may any quiz be made up, although a student could be excused from a quiz for medical or other extreme situations, provided these are documented. **Students will have to take pop quizzes if the participation is low.**
- 4. Exams:** There will be 3 or 4 examinations during the semester including the final exam. There will be no make-up exams except in cases where prior arrangements have been made (prior to the scheduled exam date, that is), and even then only with a letter from your doctor or employer or some similar evidence of overwhelming need to miss the exam. Unless otherwise specified during class, you may be tested on any information presented in the reading assignments in the textbook. Additionally, you may be tested on any material covered in class, lab activities, or assignments.
- 5. Reading:** you are required to read each chapter of the book before coming to class. You might be quizzed on each chapter before I go over each chapter. Without reading the book you will not be able to grasp the concept. You might need to read the book couple of times to make sure that you understand every concept thoroughly. With the exception of week one, you are expected to have already completed the assigned reading for any given week on the first class day of that week, and material from that assigned reading will be included on pop quizzes.

Late work: **No late work will be accepted during the semester.** You will be given plenty of time to work on your homework. **Please do not ask for extensions. Plenty of time will be given to you to work on your assignments.**

Canvas grade: The grade that you see on canvas is what you have earned up to that point. Depending on your performance your final grade on canvas might go up or down.

Getting a good grade: I certainly will try to help you if unforeseen circumstances keep you away from class, but you must understand that, unless you are willing to commit yourself seriously to this class both by participating and by working on it on a regular basis, you might as well not take it. The benefits you get from this class will be in direct proportion to the quality of your effort.

Protect Your Work: Identical homework from two different students will receive **zero** credit. Do not leave program listings or pseudocode where they can be seen or taken by other people. Throw away old work at home. Do not destroy any file associated with an assignment until the graded assignment has been returned to you and you have seen that it has been posted correctly in my grading system. Keep all old assignments until your course final grade has been assigned.

Work-load for CSc15: Please be advised that there is quite a bit of work in this class. There will be work during the scheduled activity/laboratory session every week. However, there will be lab activities and additional programming assignments which cannot be finished during the scheduled activity/laboratory periods. Work done during the technical activity period is NOT considered “homework” – that is, there will be a “normal” load of work outside of activity period and lecture/discussion period -- the expected outside work is two hours outside for every hour in lecture/discussion.

Design Before You Code: During the activity/laboratory session, or during office hours, I will be happy to assist you in your design and coding, but in that order only. If you are having a problem, I will first look at your design (for the most part, that will be represented in pseudocode) to see if the problem is in your algorithm. If it is determined that the algorithm is correct, I may then help with the syntax problems which are preventing you from implementing your algorithm in Java.

Grading Policy: The following grading policies will be followed in this class. To pass the class you must have a passing grade on all the exams including the final exam. **Without passing the final exam you will not be able to pass the class.**

“Passing Grade”: In order to receive a C- or better in this class, you must receive a minimum average score of 70% on the laboratory activities and programming assignments AND a minimum average score of 70% on combined exams and quizzes , participation AND an overall weighted average of 70%.

You must show proficiency to pass the class, and no excuses can earn you a passing grade. Please make sure you have 70% average for chapter exams, final exam,assignmnets, practice-it, labs, and quizzes.

YOU MUST PASS EVERY SINGLE EXAM TO PASS THIS CLASS. YOU MUST ALSO HAVE A PASSING GRADE ON ALL THE ASSIGNMENTS.

If you plan to continue in the Computer Science curriculum, you are required to have a C- or higher in CSc 15. So what this set of considerations says is that, while you may “pass” CSc 15 (with a D-, D, or D+) you will not be permitted to take the next courses in the program.

Assuming you have met the 70% thresholds described above, your total percentage will be based on the following weighting factors:

3 Chapter exams	42%(14% each exam)
Final exam	30%
Assignments	12%
Practice-it	5%
Participation	3%
labs	8%

ADD POLICY:

- Students are expected to add courses by using “My Sac State” (<https://www.my.csus.edu>) until the end of the second week of the semester. Course adds that require instructor permission must be added using an add permit available from the academic department.
- Adds in weeks three and four of the semester are processed through the academic department and require approval by the instructor and department chair.
- Adds are not approved after week four (the census date) unless students present evidence of University error that prevented their timely registration. University error does not include failure to meet all payment deadlines. State your reasons for a late add request on a separate page and attach to this petition along with verification of the circumstances. Obtain signatures of the instructor, department chair, and college dean.
 - Submit petition to the Registrar’s Office, Lassen Hall 2000, for consideration by the vice president (or designee). A late fee of \$10 will be collected (check/money order only). Check back with the Registrar’s Office two business days after submitting the petition. If the add is not approved, the fee will be returned to you. If approved, the Registrar’s Office will add the course to your schedule.
- Adds for audit must be noted on the petition, and the petition must be submitted to the Registrar’s Office. No adds for audit are permitted after the census date.

DROP POLICY: Although instructors may exercise their authority to administratively remove any student who fails to attend during the first two weeks of instruction, students should not assume they will be dropped. Students will receive a final grade of “F” or “WU” in courses they fail to drop officially.

- Students wishing to withdraw from all courses, should fill out the Semester Withdrawal Form.
- Until the end of the second week of instruction of the semester, students are expected to drop courses by using “My Sac State” (<https://www.my.csus.edu>). Students will be charged registration fees for all courses not dropped prior to the first day of instruction. The drop in units refund deadline is the end of the second week of instruction.
- Drops during the third and fourth weeks of instruction are processed in the academic department offering the course and require instructor and department chair approval.

WITHDRAWAL POLICY: Drops after the fourth week of the semester (census date) are called withdrawals. The approved Add/Drop/Withdraw petition must be submitted to the Registrar’s Office (Lassen Hall) after the fourth week. • Students may withdraw from no more than 18 units in their undergraduate career, unless an exception is granted (any “W” grades received prior to the Fall 2010 semester do not count towards the 18 unit maximum).

- If you are seeking to drop/withdraw from an individual course(s) after the fourth week of the semester and have reached the University maximum of 18 units of “W” grades allowable, then you must submit this approved Add/Drop/Withdraw petition as a supplement to your Petition for Exception: Withdrawal in Excess of 18 Units.

- **Withdrawals after the fourth week of the semester are granted only for “serious and compelling” reasons.**

- o **Withdrawal during the 5th and 6th week of the semester requires the signature of the course instructor and the department chair. Reasons for dropping in during this period include medical, carrying an excessive course load, student’s inadequate academic preparation for the course, or the student having significant job or career changes.**

- o **Withdrawal during the 7th through the 12th week requires the signature of the course instructor, the department chair, and the college dean. Reasons for withdrawal during this period include only medical or work related reasons clearly beyond the control of the student; a student initiated job change, carrying an excessive course load or inadequate preparation does not qualify.**

- o Withdrawal is allowed after the 12th week of instruction only in exceptional cases, such as in cases of accident or serious illness where the cause is due to circumstances beyond the student’s control. All

signatures are required and the student must meet with an Academic Advisor in the Academic Advising Center. Withdrawals approved during the last three weeks of the semester will not count towards the 18 unit maximum; however, a grade of “W” is still recorded on the transcript.