**College of Engineering and Computer Science**

**Programming Concepts and Methodology I**

CSC 15 Fall 2020 Syllabus

**Part 1: Course Information**

**Instructor Information**

**Instructor:** Gita Faroughi

**Office:** Virtual Office Join at Zoom Personal Meeting Room

**Office Hours:**  See Canvas

**Office Telephone:**

**E-mail:** [sac64498@csus.edu](mailto:sac64498@csus.edu)

## Course 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.

**Prerequisite**

* CSC 10, or programming experience in a high-level programming language.

## Textbook & Course Materials

**Required Text**

* “Building Java Programs”, A Back to Basics Approach, Reges and Stepp, Fourth Edition Pearsons. ISBN 978-0134322766. Electronic

version/rented copy is permissible. The latest version is fifth edition and can be used. Versions earlier than fourth, like third or second may not align with course work.

**Supplemental Materials & Other Readings**

* “Practice-It”, website for programming practice, [http://practiceit.cs.washington.edu](http://practiceit.cs.washington.edu/)
* Other readings will be made available in the Canvas (See Modules).

California State University, Sacramento Page 1

## Course Requirements

* Internet connection (DSL, LAN, or cable connection desirable)
* Access to Canvas
* Access to Microsoft Docs

## Course Structure

This course will be delivered entirely online through the course management system Canvas. You will use your Saclink account to login to the course from your [My Sac State](https://my.csus.edu/) account and click on the Canvas button or login directly through the [Canvas Login Page](https://csus.instructure.com/).

In Canvas, you will access synchronous and asynchronous online lessons, course materials, and resources. At designated times

throughout the semester, we will participate in a blend of self-paced and group-paced activities using Canvas and alternative Internet- based technologies. Activities will consist of discussion forums, email, online labs and any other activity that promotes learning in this

course.

## Canvas Access

This course will be delivered online through a course management system named Canvas.

To access this course on Canvas you will need access to the Internet and a supported Web browser (Chrome, Firefox, Safari). To ensure that you are using a supported browser and have required plug-ins, please visit the “[Which browsers does Canvas support](https://community.canvaslms.com/docs/DOC-10720-which-browsers-does-canvas-support)” website.

## Technical Assistance

If you need technical assistance at any time during the course or to report a problem with Canvas you can:

* [Submit a Ticket](https://csus.service-now.com/service/?id=help) to Report a Problem to the Information Resources and Technology Support Team
* Call the Canvas Support line at Sac State: M-F 8a.m. – 5p.m. (916) 278-2450.
* [Schedule a Consultation](https://www.csus.edu/information-resources-technology/get-support-consultation/consultation.html) to get assistance with Canvas and other Academic technologies
* Visit the [Canvas Instructor Video Guides](https://community.canvaslms.com/community/answers/guides/video-guide#jive_content_id_Instructors)
* Visit the [Canvas Student Video Guides](https://community.canvaslms.com/community/answers/guides/video-guide#jive_content_id_Students)
* Visit the Canvas [Student Web Tutorials](https://community.canvaslms.com/docs/DOC-10701)
* Visit the [Canvas Instructor Web Tutorials](https://community.canvaslms.com/docs/DOC-10460)

**Important Note:** This syllabus, along with course assignments and due dates, are subject to change. It is the student’s responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be clearly noted in course announcement or through Canvas email.

# Part 2: Course Objectives

Students completing this course will be able to

1. CO1. write well-structured computer programs to solve small problems using procedural decomposition and abstraction, selection, iteration, built-in libraries, one-dimensional arrays and text-based input and output;
2. CO2. construct a simple class definition, with one or two fields, including a constructor and methods that perform simple field manipulation; and
3. CO3. practice good programming habits including design with pseudocode, use of a symbolic debugger, iterative enhancement, test- driven design, simple documentation, and conventional programming style.

You will meet the objectives listed above through a combination of the following activities in this course:

* + Attend Synchronous classes and participate in interactive dialogue
  + Participate in Online Peer Programming Lab and use collaborative partnership techniques to solve smaller programming problems on the Practice-it platform
  + Complete larger programming homework assignments
  + Demonstrate mastery of theory and practice by taking periodic quizzes
  + Take regular unit level exams and the final examination

# Part 3: Topic Outline/Schedule

**Important Note:** Refer to the course calendar for specific meeting dates and times. Activity and assignment details will be explained in detail within each week's corresponding module. If you have any questions, please contact your instructor.

|  |  |  |
| --- | --- | --- |
| **Week 1** | Course information |  |
| **2** | Introduction  to Java Programming | 1.1-1.3 |
| **3** | Procedural Decompositio n, Hierarchy charts and Execution  Charts | 1.4-1.5 |
| **4** | Basic Data types, Declarations, Expressions,  Statements | 2.1-2.2 |
| **5** | For loops, problem decompositio  n,class constants | 2.3-2.5 |
| **6** | Parameter passing | 3.1 |
| **7** | Library functions,  Using objects | 3.2-3.3 |
| **8** | If-else statements,  Cumulative Algorithms | 4.1-4.2 |

**CSC 15 – Programming Concepts and Methodology 1** Fall 2020 Syllabus

|  |  |  |
| --- | --- | --- |
| **9** | Text processing, Methods with Conditional  Execution | 4.3-4.4 |
| **10** | While Loop  Fencepost Algorithms | 5.1-5.2 |
| **11** | Boolean Type, User  Errors | 5.3-5.4 |
| **12, 13** | Array Basics File I/O | 6.1,7.1, 7.2 |
| **14,15** | Object Oriented Programming, Object State  and Behavior | 8.1-8.2 |
| **16** | Final Exam |  |

.

California State University, Sacramento Page 6

**College of Engineering and Computer Science**

**Programming Concepts and Methodology I**

CSC 15 Fall 2020 Syllabus

**Part 4: Grading Policy**

**Graded Course Activities**

|  |  |
| --- | --- |
| **Points** | **Description** |
| **10%** | Exam 1 |
| **10%** | Exam 2 |
| **10%** | Exam 3 |
| **30%** | Final Exam |
| **25%** | Weekly Programming assignments |
| **5%** | Weekly Quiz |
| **10%** | Discussion Board |

Visit the **Assignments** link in Canvas for details about each assignment. Click on **Quizzes** to access quizzes and exams. (See Part 4 for more information about accessing tools and activities.

**Passing the course:** To pass this course you must have met the 60% policy. This policy states that you must have earned 60% in each category of the course activities shown in the above table. To meet the 60% policy, you must have gained minimum 9% of the exam 1, minimum 9% of the exam 2, minimum 9% of the exam 3, minimum 15% of the final exam, minimum 15% of the programming assignment and minimum 3% of the quizzes.

**Letter Grade**: Having met the 60% policy mentioned above your final letter grade will be based on the following table. Earning an overall 60% but not meeting the 60% policy will not earn you a passing grade.

|  |  |
| --- | --- |
| Percentage | Letter Grade |
| 90-100 | A |
| 85- 89 | A- |
| 80- 84 | B+ |
| 75-79 | B |
| 70-74 | B- |
| 65-69 | C+ |
| 60 - 64 | C |
| < 60 | F |

**Late Work Policy**

There will be no makeup for any assignments, quizzes and exams. No late work accepted without a serious and compelling reason and your instructor approval.

**Viewing Grades in Canvas**

Points you receive for graded activities will be posted to the Canvas Grade Book. From a computer or mobile device, select the Grades option from course navigation to view your grades.

Grades will be updated each time a grading session has been complete—typically one week following the completion of an activity. You will see a visual indication of new grades posted on your Canvas home page under Recent Feedback and/or next to the Grades link on course menu.

There is a total column that shows your percentage on canvas. This column will change dynamically based on the grades that you receive. Your total percentage might go up or down based on the grade you received.

California State University, Sacramento Page 8

**College of Engineering and Computer Science**

**Programming Concepts and Methodology I**

CSC 15 Fall 2020 Syllabus

**Part 5: Course Policies**

**Participation**

Students are expected to participate in all online activities as listed on the course calendar. I will be using Canvas Course Analytics, Access Report, discussions, attendance in synchronous zoom classes, chat

sessions, and group work, to monitor your participation in the course. You will need to allocate at least 10 -15 hours per week to participate in and complete activities in the course.

## Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as possible. As you will find, building rapport and effective

relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

## Complete Assignments

**All assignments for this course will be submitted electronically through Canvas unless otherwise instructed.** Assignments must be submitted by the given deadline or special permission must be

requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme

circumstances.

All discussion assignments must be completed by the assignment due date and time. Late or missing discussion assignments will affect the student’s grade.

## Understand When You May Drop This Course

It is the student’s responsibility to understand when they need to consider disenrolling from a course. Refer to the Sac State Course

Schedule for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course.

California State University, Sacramento Page 9

Serious and compelling reasons includes: (1) documented and

significant change in work hours, leaving student unable to attend

class, or (2) documented and severe physical/mental illness/injury to the student or student’s family.

## Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the [Office of](http://www.csus.edu/sswd/)

[Services for Students with Disabilities](http://www.csus.edu/sswd/) (SSWD), and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student’s responsibility to provide documentation of

disability to SSWD and meet with a SSWD counselor to request special accommodation *before* classes start.

SSWD is located in Lassen Hall 1008 and can be contacted by phone at (916) 278-6955 (Voice) (916) 278-7239 (TDD only) or via email at

[sswd@csus.edu](mailto:sswd@csus.edu).

## Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active

learning and participation in this class and also integrity in your behavior in and out of the classroom.

**Sac State's Academic Honesty Policy & Procedures**

“The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University,

Sacramento expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades.”

Read more about Sac State's [Academic Honesty Policy & Procedures](https://www.csus.edu/umanual/student/stu-0100.htm)

**Definitions**

At Sac State, “**cheating** is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means.”

**“Plagiarism** is a form of cheating. At Sac State, “plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person’s contribution.”

**Source:** Sacramento State University Library

**Important Note:** Any form of academic dishonesty, including cheating and plagiarism, may be reported to the office of student affairs.

**Course policies are subject to change.** It is the student’s responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be posted in Canvas.