# San José State University
# Computer Science Department
# CS049C, Programming in C, Section 1, Fall 2017

**Course and Contact Information**


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| **Instructor:** | Dr. Faramarz Mortezaie |
| **Office Location:** | MH 215 |
| **Telephone:** | (408) 924-5097 |
| **Email:** | faramarz.mortezaie@sjsu.edu<br>answerneededsoon@gmail.com (Questions) |
| **Office Hours:** | M 9:00 AM - 9:50 AM or by appointment |
| **Class Days/Time:** | MW 7:30 AM - 8:45 AM |
| **Classroom:** | MH 422 |


**Catalog Description**

Beginning course in the C language. Prerequisite: Previous programming experience and completion of math GE.

**Course Description**

*The course consists of an introduction to C programming. We will cover data types, arithmetic expressions, loops, conditions, arrays & structures, functions, strings, pointers, bitwise operations, file I/O processing, dynamic memory usage, and debugging.*

Upon successful completion of this course, students will be able to:

1. SLO 1 Understand C programming syntax.
2. SLO 2 Achieve competence in C programming language
3. SLO 3 Write programs using arrays, pointers, structures in C programming language
4. SLO 4 Write programs for different data structures in C

**Course Learning Outcomes (CLO)**

1. CLO 1 Have a basic knowledge of C programming language.
2. CLO 2 Understand the concepts of functions, procedures and macros.
3. CLO 3 Understand the concept of pointers.
4. CLO 4 Write programs using pointers, arrays and structures.

5. CLO 5 Read and access sequential and random access files.
6. CLO 6 Write recursive programs in C
7. CLO 7 Write programs for different data structures in C

**Required Texts/Readings**

**Textbook**

*Textbook: Title: C How to Program, 8th edition*

*Author: Deitel and Deitel Publisher: Pearson ISBN: 13-978-0-397689-2*

**Course Requirements and Assignments**

*Lectures: Students are strongly encouraged to attend all lectures. Any material presented in any lecture may be tested in any subsequent exam or final exam.*

*Homework: There will be 10 substantial programming assignments. There will be 30% penalty for submitting late homework. No late homework will be accepted after a week of the due date for any reason.*

*Exams: Exams are in-class, closed-book, and comprehensive. Makeup exams will only be given in cases of verifiable emergency.*

*Final Exam: Thursday Dec 14: 7:15 AM – 9:30 AM. Makeup final exams will be only given in cases of verifiable emergencies.*

**Grading**

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|---|---|
| Homework and class work | 20% |
| Exam-1 | 20% |
| Exam-2 | 20% |
| Team Project and written report | 15% |
| Comprehensive Final Exam | 25% |

***Course Grading Standards***

I first try scores of 90, 80, and 70 to cut off letter grades of A-, B-, and C-, respectively. If overall class performance is too low to use these cut offs, I set a cut off of C- to a lower score than the class total average but a higher score than 60 (this number may change), and divide the students' group above the cut off of C- into A+, A, A-, B+, B, B-, C+, C, C-. The rest of students will be given by a grade of D+, D, D-, F or WU depending on their class performance.

Note that "All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades." See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.

## Classroom Protocol

*Students are expected to participate all the lectures. Please turn off your cell phones during the lecture time.*

## University Policies

University Policies Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' Syllabus Information web page at http://www.sjsu.edu/gup/syllabusinfo/

# CS049C / Programming Language Paradigm, Spring 2017, Course Schedule

*The schedule is subject to change with fair notice announced in class.*

| Week | Related SLO | Date | Topics | Reading Assignments and homework | Due Date |
|---|---|---|---|---|---|
| 1 | | 08/23/17 | Introduction to computers | Chapter-1 | |
| 2 | SLO-1 | 08/28/17<br>08/30/17 | Introduction to C programming | Chapter-2<br>Homework-1 | 09/06 |
| 3 | SLO-3 | 09/04/17<br>09/06/17 | No Class<br>Structured Programming in C | Chapter-3<br>Homework-2 | 09/11 |
| 4 | SLO-1 | 09/11/17<br>09/13/17 | Structured Programming in C<br>C programming Control | Chapter-3<br>Chapter-4<br>Homework-3 | 09/18 |
| 5 | | 09/18/17<br>09/20/17 | C Programming Control<br>C Functions | Chapter-4 and 5<br>Homework-4 | 10/02 |
| 6 | | 09/25/17<br>09/27/17 | Review<br>Exam-1 | Chapter-1 to 5 | |
| 7 | SLO-3 | 10/02/17<br>10/04/17 | Arrays<br>Arrays | Chapter-6<br>Homework-5 | 10/09 |
| 8 | SLO-3 | 10/09/17<br>10/11/17 | Pointers<br>Pointers | Chatper-7<br>Chapter-7<br>Homework-6 | 10/16 |
| 9 | | 10/16/17<br>10/18/17 | Strings<br>Strings | Chapter-8<br>Homework-7 | 10/23 |
| 10 | | 10/23/17<br>10/25/17 | Structures | Chapter-10<br>Homework-8 | 10/30 |
| 11 | SLO-4<br>SLO-4 | 10/30/17<br>11/01/17 | Review<br>Exam-2 | Chapter-9<br>Homework-8 | 11/06 |
| 12 | | 11/06/17<br>11/08/17 | Structures<br>Structures | Chapter 10<br>Homework-9 | 11/13 |
| 13 | SLO-2 | 11/13/17<br>11/15/17 | Dynamic memory Allocation | Chapters 12<br>Homework-10 | 11/20 |
| 14 | | 11/20/17<br>11/22/17 | Files<br>No Class | Chapter-11<br>Homework-10 | 12/04 |
| 15 | SLO-2 | 11/27/17<br>11/29/17 | Files<br>Files | Chapter-11<br>Project Formal Report | |
| 16 | | 12/04/17<br>12/06/17 | Review<br>Project Presentation | | |
| 17 | | 12/11/17<br>12/13/17<br>12/14/17 | Project Presentation<br>No Class<br>Final Exam | <br><br>Thursday Dec-14 7:15 – 9:30 AM | |