CS 10A
Spring 2021
CRN 5569
Santa Rosa Junior College

Instructor

Professor Geri Lamble

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Contacting Your Instructor

The best way to reach me is by Inbox.

I will respond within 24 hours during weekdays. I do check questions in the forum several times a day Monday - Friday. I am not available weekends.

Office Hour

I am ***online*** via Zoom Mondays 2:30 - 3:30 PM.

Course Details

Lectures: Online Labs: Online

This is a fully online asynchronous class, allowing the student to work according to their schedule to meet the weekly requirements outlined by the course instructor.

Lessons are delivered weekly online in Canvas. Lesson modules will **OPEN** Mondays at 8:00 AM. Assessments will be due Tuesdays at 11:59 PM (starting 2nd week of class).

Prerequisite

Prerequisite: The ability to work with computers and access to the internet.

Recommended: Math equivalency to Algebra II (i.e. MATH 155 at SRJC).

Course Description

This is an introductory course on programming using the C++ language. Students will learn how to specify, design, implement, test debug, maintain and document well-structured computer programs.

Specific topics include software engineering, control structures, functions, and arrays. Intended for both computer science majors and for those seeking a general introduction to computer programming.

Text

Starting Out with C++: From Control Structures to Objects (9th Edition) by Tony Gaddis.

Software

ANSI compatible C++ compiler

In this class I will be using the Gnu C++ compiler (Linux). You may want to use Microsoft Visual Studio/C++ for Windows users and Xcode for Mac users. If you are facile on another Integrated Development Environment (IDE), you are welcome to use that instead.

Course Objectives

1. Understand universal Computer Science programming concepts and methodologies using the C++ language.
2. Be able to use basic C++ features such as control structures, functions and arrays.
3. Build C++ classes using appropriate encapsulation and design principles.
4. Apply programming techniques to solve scalable computing problems.
5. Use standard C++ developer and testing tools.

Learning Objectives

Upon completion, students will be able to:

1. Apply a systematic approach to the design, construction and management of computer programs, emphasizing programming style, documentation, and debugging techniques.
2. Use principles of software design to analyze programming problems and develop solutions.
3. Create and test computer programs that incorporate control structures, functions and arrays.

Grades

Your grade is determined by:

- Assignments 75%
- Exams 25%

Activity	Points	Percentage
Programming labs (10 @ 24 points)	240	75%
Midterm Exams (2 @ 20 points)	40	12.5%
Final Exam (1 @ 40 points)	40	12.5%
Total Points	320	100%

Lab Assignments

There will be ten required lab assignments. There is an optional eleventh lab assignment that can be used to replace a low lab score. Labs will be turned in online.

Exams

There will be two timed 1 hour midterm exams and a timed 2 hour comprehensive final exam. Exams will be administered online.

Grading Scale

Percentage needed	for this Grade
90%	A

80%	B
70%	C
60%	D
<60%	F

Course Expectations

Attendance Policy

Regular attendance is required. Students will be dropped for non-participation for the following:

- Not posting a first week Introduction
- Not submitting the first assignment
- Missing two consecutive lab submissions
- Missing the midterm exam
- Missing three total lab submissions

Late Work

Late labs are accepted up to 2 days late with a two-point penalty for each day late. This is a way to help keep you on track to meet our course learning objectives.

Late lab work is not accepted for the optional bonus lab.

Late exams are not accepted so please plan accordingly.

Course Logistics

Course material will be provided in Canvas including announcements, discussions, lecture notes, lab assignments, and exams.

Course material will be provided in Canvas including announcements, discussions, lecture notes, video links, lab assignments, and exams. There are no required on- campus meetings. Starting the 2nd week, assessments (lab or exam) are due weekly.

Communication

Active online forum topic and lab discussions are available weekly. I am available daily weekdays via the Canvas discussion forums and Canvas Inbox Private message.

Private Messages

Please use *public* Discussions for any question or comment that relates to the class – this helps everyone to learn. If you have a confidential question (grades or registration) use the Canvas Inbox Private Message Tool.

Checking my Messages

The best way to get a hold of me is through sending a "private message" via the Canvas Conversation Inbox tool.

Disability

This course is designed to be welcoming to, accessible to, and usable by everyone, including students who have a variety of learning styles, have disabilities, or are new to online learning. To obtain disability-related accommodations, new students entering college who need assistance should contact the Disability Resource CenterLinks to an external site. for a pre-enrollment interview to determine support services needed.

Equity

The faculty at Santa Rosa Junior College affirm that students are entitled to an equitable learning environment that celebrates their voice, fosters their agency, and develops their capacity for self-advocacy, and that is free of unfair practices. If you feel you are in an environment that is not conducive to your learning or you want to learn more about educational equity, please contact me. You may also contact the college Office of Student EquityLinks to an external site. to explore your options.

Integrity

Academic Honesty

Your lab and exam submissions must be your own work.

The following guidelines apply:

You are encouraged to discuss in the forum about course questions but you may not examine nor reuse any other student's code. You are not allowed to copy code from **any** source — other students, the Web, etc.

If you have any questions and / or need further clarification please feel free to reach out to me or view the college Academic IntegrityLinks to an external site. page.

Computer Science Support

SRJC Tutorial CentersLinks to an external site.

- Drop-In Live Tutoring - Will connect you with a tutor
- Virtual Front Desk - Will connect you with tutorial center staff available for questions during our hours of operations

- **NetTutor** (Links to an external site.) - Students needing academic assistance outside of the SRJC Tutorial Center hours, will continue to have access to NetTutor online tutoring 24-7.
- **Step-by-step guide** Links to an external site.on how to access.

- **Online Tutoring at SRJC video** (Links to an external site.)

Course Outline

Week	Reading Assignment (Textbook)	Lecture Topic	Tasks (Assignments/Exams) DUE Tuesdays 11:59 PM
1/20 - 1/24	Handouts	Course Introduction Compiler Installation	*Welcome!*
1/25 - 1/31	1	Introduction to Computers and Programming	Introduction Post due 1/26
2/01 – 2/07	2	C++ basics	C/NC Lab 0 due 2/2
2/08 – 2/14	3	Expressions	Lab 1 due 2/9

2/15 - 2/21	3	Interactivity	Lab 2 due 2/16
2/22 - 2/28	1-3	Review Chapters 1-3	Lab 3 due 2/23
3/01 - 3/07	4	Introduction to Making Decisions	**Midterm 1 due 3/2**
3/8 - 3/14	4	Making Decisions in more depth	Lab 4 due 3/9
3/15 - 3/21	5	Loops	Lab 5 due 3/16
3/22 - 3/28		**Spring Break**	
3/29 - 4/4	5	Loops cont'd; Files	Lab 6 due 3/30
4/5 - 4/11	4-5	Review Chapters 4 - 5	Lab 7 due 4/6
4/12 - 4/18	6	Introduction to Functions	**Midterm 2 due 4/13**
4/19 - 4/25	6	User Defined Functions	Lab 8 due 4/20
4/26 -	7	Introduction to Arrays	Lab 9 due 4/27

5/2			
5/3- 5/9	7	2 Dimensional Arrays	Lab 10 due 5/4
5/10 - 5/16	1-7	Review	Optional Lab 11 due 5/11
5/17 - 5/21			**Final Exam due 5/18**

Changes: This syllabus is subject to changes, additions, deletions, and/or corrections.

Last modified: Jan. 17th, 2021 7:29 AM.