SAN JUAN COLLEGE

COSC **218 Comp Programming Fund II section name section credit hours**
Credits
Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: Intermediate level object-oriented programming course with emphasis on the underpinnings of objected-oriented design. The fundamental tenets of object-oriented program such as inheritance, polymorphism, pointers, templates, and dynamic memory management are covered in depth. The Standard Template Library is presented as an introduction to data structures.

Prerequisites: COSC-118

Terms offered: Spring Only

Section-specific Course Description:

Course Level Objectives

Implementing classes including data members and member functions given the class definition
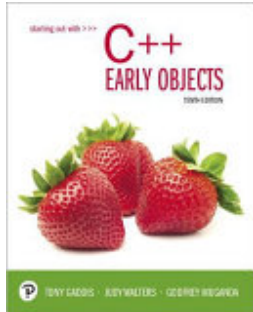
Demonstrate encapsulation and how to hide implementation inside C++ classes

Describe the concepts and syntax related to C++ implementation of inheritance

Apply object-oriented design heuristics for inheritance 9.

Derive new classes from old ones employing inheritance

Required Texts and/or Materials

Starting Out with C++
9780135235003
Tony Gaddis, Judy Walters, Godfrey Muganda
Pearson Higher Education
2019-02-18
10th

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at San Juan College Help Desk.

For tickets and password reset: San Juan College Help Desk

For Canvas support information: Canvas Support

Accessibility/Privacy Policies for all Technology Tools Used

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Course Requirements

Students will do the following activities: The course covers programming in C++. We will cover the textbook material in chapters 10-16 of the textbook as listed on the Assignment Sheet. This course will include classroom lectures, program demonstrations, and "hands-on" experience programming in C++ in the WINDOWS environment using Intel processor microcomputers. Assignments will be made to read the text, answer questions in the text, and complete lab exercises and programs assigned by the instructor. You are responsible for completing assignments on time. Homework

assignments made in lecture classes are due at the next lecture. Laboratory assignments are due at the next scheduled lab (typically about a week later).

COVID Safe Practices for Being on Campus

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services: disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please "wash in, wash out"--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

Student Support

Student Services and Support

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

Student Support

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

Academic Support

Participation and Attendance Policy

You are expected to attend each class and be on time. If you are late for any classes you will miss lots of important material which will cost you many points on exams and will reduce your chances of passing the course.

Other Classroom Policies and Expectations

You will need a flash drive. You need some backup system to keep an extra copy of the computer programs you will write in this course. You are RESPONSIBLE for keeping a backup copy of all your work so you "aren't wiped out" by a hard disk failure, etc. You need to keep 2 copies of all important files, one file on one drive, the other file on a different drive (put one on the H: student drive and one on your flash drive is probably the easiest plan). IT IS CRITICAL TO KEEP TWO COPIES ON SEPARATE DRIVES.

Canvas Participation and Expectations

Once Again, Class attendance is the MOST important way you can improve your success in this class. If you do not come to class, you will not do well. You are expected to log into Canvas at least once a day to check course announcements for updates.

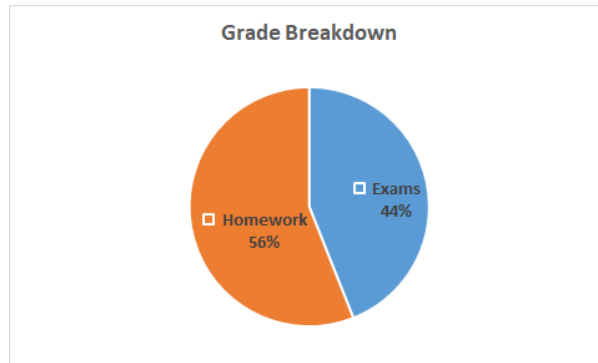## Instructor Response Time

Emails will typically have a 24-hour turnaround. SJC email is the preferred means of communication.

Course Time Commitment

The standard is 6-9 hours outside of class for a 3-credit face to face course.

Grading

Final grades are calculated based on the following...

Grade Breakdown

Category	Weight
Exams	44
Homework	56

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

COSC 218-1010 Programming Fundamentals Ii with C++ Schedule, Spring 2021

MW 11:30 Am – 12:45 pm			Online via Zoom	Dr. Cameron I. Cooper
WEEK	**DAY**	**MW**	**TOPIC**	
Week 1	M	Jan 18	Martin Luther King Day (No classes held)	
	W	Jan 20	Lab 0 - Review COSC 118 program assigned	
Week 2	M	Jan 25	Ch 7 - Intro to Classes & Objects	
	W	Jan 27	Lab 1 - Program 1 assigned	
Week 3	M	Feb 01	Ch 7 - Intro to Classes & Objects	
	W	Feb 03	Ch 10 – Pointers	
Week 4	M	Feb 08	Chapter 11 - Part I	
	W	Feb 10	Chapter 11 - Part II	
Week 5	M	**Feb 15**	**PRESIDENT'S DAY – NO CLASS – CAMPUS CLOSED**	
	W	Feb 17	Chapter 11 - Part III	
Week 6	M	Feb 22	Review for Exam 1	
	W	**Feb 24**	**Exam 1 - covers ch 7, 8, 9, 10**	
Week 7	M	Mar 01	Ch 11 - More about Classes, OOP, and the chars & strings	
	W	Mar 03	Lab 3 Program 3 assigned	
Week 8	M	Mar 08	Ch 12 - More about Characters, Strings, and the string Class	
	W	Mar 10	Ch 13 - Advanced File, I/O Operations, with Structures	
Week 9	M	**Mar 15**	**SPRING BREAK - NO CLASSES**	
	W	**Mar 17**		
Week 10	M	Mar 22	**Exam 2 - covers ch 10, 11, 12**	
	W	Mar 24	**Lab 4 - Program 4 assigned**	
Week 11	M	Mar 29	Ch 14 – Recursion I	
	W	Mar 31	Lab 6 – Program 5 assigned	
Week 12	M	Apr 05	Ch 15- Polymorphism,Virtual Functions, Multiple Inheritance I	
	W	Apr 07	Ch 15 - Polymorphism, Virtual Functions, and Multiple Inheritance II	
Week 13	M	Apr 12	Lab 7 - Program 6 assigned	
	W	Apr 14	**Exam 3 - chapters 13, 14, 15**	
Week 14	M	Apr 19	Ch 16 - Exceptions and the Standard Template Library (STL) I	
	W	Apr 21	Ch 16 - Exceptions and the Standard Template Library (STL) II	
Week 15	M	Apr 26	Lab 9 – Program 7 STL Program assigned	
Week 16	M	May 03	Get out of jail free workday	
Week 17	M	May 10	FINAL EXAM REVIEW	
			FINAL EXAM - chapters 8 – 16, 11:30am - 1:20 pm	

Your instructor reserves the right to amend this schedule as necessary

College Policies

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. **Academic Accommodations - American with Disabilities Act (ADA)**

   If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to [Disability Services Office](), click the button for "Request for Services" and complete all the steps.

   You can also contact the college's disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. **The Family Educational Rights and Privacy Act (FERPA)**

   Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. **Academic Honesty Rules**

   San Juan College expects all students to adhere to the [Academic Honesty Rules]() as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

4. **Student Conduct Statement**

   College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

5. **Student Safety**

   Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College's emergency

messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with [Rave](). When registering, please make sure that your mobile status is "confirmed."

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed in or out of the campus.)
- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.

6. **Non-Discrimination, Sexual Harassment, and Retaliation.**

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran's status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College's [Title IX]() site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or [allens@sanjuancollege.edu]().

7. **Drop for Non-Attendance and/or Non-Participation**

Class Attendance and Participation Expectation:

Face-to-Face -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student

missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

Competency-Based Education Classes -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

8. **Failure to Meet Class Participation Expectation:**

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

9. **Grading Policies**

Incomplete: Incomplete Grade Assignment ([Incomplete Grades Information](#))

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control. Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

10. **Grade Appeals**

The policy for grade appeals is in the Academic Catalog.([Grade Appeal Policy](#))

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

[Student Handbook](#)