

COP 3330C: Object-Oriented Programming Summer 2024 | CRN 31953 Course Modality: Online Asynchronous

Instructor: Professor Ashley Evans

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Phone: 407.582.1109

Student Engagement Hours: The engagement hours listed in the table on the first page of the syllabus represent the times that I will be at my computer responding to messages and holding online meetings. This is when we can communicate synchronously. In-person meetings and meetings outside of student engagement hours are available by student request.

Student Engagement Hours

Day	Time and Location		
Monday	3 PM – 5 PM / Canvas messages, e-mail, or Zoom		
Tuesday	3 PM – 5 PM / Canvas messages, e-mail, or Zoom		
Wednesday	y 3 PM – 5 PM / Canvas messages, e-mail, or Zoom		
Thursday	ay 3 PM – 5 PM / Canvas messages, e-mail, or Zoom		
Friday	Friday 10 AM – 12 PM / Canvas messages, e-mail, or Zoom		

Catalog Description

This course explores the concepts of object-oriented programming including abstraction, encapsulation, inheritance, and polymorphism. The applications developed will focus on extracting objects from a problem domain and designing solutions based on passing messages between objects. Implementation will be done in a current object-oriented language.

Prerequisites

A minimum grade of C in COP 1000C or department approval.

Course Learning Outcomes

- The student will develop a simple program using Object-oriented programming. This will be done by:
 - Implementing a program using classes and objects.
 - o Implementing a program utilizing constructors, default constructors, interfaces, abstract classes and abstract methods.
 - o Implementing a program using the concept of encapsulation.
 - o Implementing a program with multiple classes utilizing inheritance.
 - o Implementing a program with multiple classes utilizing polymorphism.
 - Implementing a program with multiple classes utilizing the concept of abstraction.

- The student will describe and implement the concept of an interface and recognize when and why to use interfaces along with creating inheritance hierarchies.
- The student will throw and catch exceptions and create multi-threaded programs.
- The student will write code that uses the major classes in the Collections framework along with simple user interfaces that listen for and respond to events.
- The student will write code that creates and modifies a relational database.

Important Calendar Dates

	Full Term	114	TIANK	112
	Full Term	H1	TWK	H2
Classes Begin				
	May 6, 2024	May 6, 2024	June 4, 2024	June 18, 2024
Drop/Refund Deadline by				
11:59PM ET	May 13, 2024	May 13, 2024	June 11, 2024	June 25, 2024
No Show	May 15-24, 2024	May 15-24, 2024	June 12-21, 2024	June 26 -July 5, 2024
Reporting Period			June 11 11, 101 :	June 20 Juny 3, 2021
Graduation Application	May 31, 2024	May 31, 2024	May 31, 2024	May 31, 2024
Deadline	•	• •	• ·	• ′
Student-Initiated	luma 20, 2024	June 7, 2024	June 12, 2024	July 19, 2024
Withdrawal (W Grade) Deadline by 11:59PM ET	June 28, 2024	Julie 7, 2024	Julie 12, 2024	July 19, 2024
Faculty-Initiated				
Withdrawal (W Grade)	Last Class Meeting	Last Class Meeting	Last Class Meeting	Last Class Meeting
Deadline 11:59 PM ET	3			
Day/Evening	I.d. 20 2024	June 17, 2024	July 30, 2024	July 30, 2024
Classes End	July 30, 2024	Julie 17, 2024	July 30, 2024	
Final Exams	Last Class Meeting	Last Class Meeting	Last Class Meeting	Last Class Meeting
Term Ends	July 30, 2024	July 30, 2024	July 30, 2024	July 30, 2024
Grades Due (by 9:00 AM ET)	August 1, 2024	August 1, 2024	August 1, 2024	August 1, 2024
College Closed (Credit classes Do Not Meet)	May 27 (Memorial Day) July 4 (Independence Day)			

Required Materials

Required Textbook

This course uses open educational resources (OERs) and other materials for educational usage. Therefore, students are not required to purchase any textbooks for this course. The required resources for this course are provided on Canvas. There may be additional required and/or recommended readings, supplemental materials, or other resources and websites necessary, which will be provided within the course, and throughout the term via the assignment/discussion/quiz or exam areas.

Required Software

- 1. Required IDE: Access to an IDE is required for this course, and the required IDE is IntelliJ. All programming projects must be done with this IDE. A link to download IntelliJ is provided on Canvas.
- 2. <u>Java JDK:</u> Java 17. You need to install this in addition to IntelliJ to compile and execute Java code. A link to download Java 17 is provided on Canvas.
- 3. <u>Open-Source Builds Maven</u>: Maven is required for Project 7. Instructions for how to install Maven are provided on Canvas
- 4. <u>Databases SQLite:</u> For the last programming project, we will explore databases using SQL. You can download a version of SQL Lite from the link provided on Canvas.

Assessment Methods and Evaluation

Grading Scale

A 100 % to 89.5%

B < 89.5 % to 79.5%

C < 79.5 % to 69.5%

D < 69.5 % to 59.5%

F < 59.5 % to 0.0%

Grading Breakdown

Checkpoint Activities - 10% Quizzes - 10% Programming Projects - 25% Midterm Exam - 27.5% Final Exam - 27.5%

No-Show Policy | Required Attendance Activities

If you do not log in to the course during the first week and complete the Academically Related Attendance Activities (Orientation Quiz and Introductions Discussion) you will be withdrawn from the class as a "no show". Class attendance is required for online classes; students who are not actively participating in an online class and/or do not submit the required attendance activity or assignment by the scheduled due date must be withdrawn by the instructor at the end of the first week as a "no show". If you are withdrawn as a "no show," you will be financially responsible for the class and a final grade of "WN" will appear on your transcript for the course.

Any student who does not attend class by the drop/refund deadline for this part of term will be withdrawn by the professor as a no-show. This will count as an attempt in the class, and students will be liable for tuition. If your plans have changed and you will not be attending this class, please drop yourself through your Atlas account by the drop deadline.

Attendance Policy

This is an online course, available 24/7, managed through Canvas. You must have access to the Internet (available on all Valencia campuses) to complete the course requirements. Your online attendance is required; attendance will be checked based on your participation in the course and submission of coursework. You must submit a minimum of two assignments [quiz, checkpoint activity, or programming project] each week to meet the attendance requirement. In the event of an extended absence, you should contact me via email or phone as soon as possible to indicate the reason and discuss the impact on your course performance.

Late Work/Makeup Policy

Late work will be accepted only if students provide written documentation of a medical emergency or ongoing medical condition that is submitted on the first day of the student's return to the course. Outside of documented medical emergencies/conditions or severe personal circumstances, late assignments, late exams, makeup assignments, and makeup exams are not permitted.

Exam Policy

There are two exams in this course: the midterm exam, and the final exam. All exams are required. All exams will be administered as published in the course schedule supplied within this syllabus. You must be available for the exam testing windows posted. You will not be able to take the exams at any other time aside from the exam testing windows posted.

The only exception to this policy is when a student has documented proof of a medical emergency; the medical documentation must be submitted to the instructor by email within 24 hours of the student's medical release.

Exam Proctoring

All exams will be proctored, using the **Honorlock software**. While using this software:

- you will be limited to one monitor.
- you will have to submit a picture of your face.
- you will have to submit a picture of your Valencia ID or driver's license.
- you will have to show your entire workspace via webcam.
- you will be prohibited from using unapproved websites or computer applications during the exam.
- you will be recorded while taking the exam.
 - o the software will flag academic honesty issues (such as cell phone use) during the

Use of the Honorlock software and adherence to all academic honesty guidelines is required for all exams.

Honorlock Requirements

To use Honorlock, you will need:

- a webcam.
- a microphone.
- a computer.
- the <u>Chrome web browser</u>. (this software only runs on Chrome).
- to install the <u>Honorlock extension</u> within your web browser (Chrome recommended).

Privacy

Your privacy is important. Read the Honorlock Privacy Policy to learn more. If you are concerned about your privacy, please read the entire list of FAQ's regarding Honorlock in the link below. In a nutshell, Honorlock is bound by contract to protect your privacy. It is explicitly stated in the terms set up with Valencia College. Valencia takes privacy seriously. Read Valencia's agreement with Honorlock to protect your privacy.

Student Responsibilities for All Exams

- You must take the exam within the testing window provided in the syllabus. You may not take the exam at any other time. Failure to complete the exam within the testing window will result in a grade of zero (0%) for the exam.
- A functioning computer is required for the exam. Not a cell phone or tablet. It is your responsibility to make sure you have a working computer.
- A stable internet connection is required for the exam. It is your responsibility to take the exam in a place with stable internet. That might mean taking the exam in a public place (or a Valencia campus or a restaurant) in order to have access to reliable internet. Do NOT take the exam in a setting with unstable internet. Loss of internet will not be an automatic excuse for not completing an exam.
- You must have a functioning webcam for the exam. It must stay on for the duration of the exam. Turning your camera off is a violation of the academic honesty policy for the exam. It is your responsibility to ensure that you have a working webcam.
- You must have a microphone for the exam. It must be enabled for the entire exam. It is your responsibility to ensure that your microphone is working properly. You will not be penalized for background noises that occur during the exam.
- You must use Honorlock for the entire duration of the exam. It is your responsibility to complete the practice quiz so that you understand how to start an exam with Honorlock. Exam time will not be extended due to the time it takes you to complete the setup within Honorlock.
- You must share your screen for the duration of the exam. Once screen sharing is started, it shouldn't be stopped for any reason. Discontinuing to share your screen is a violation of academic honesty and can result in a grade of 0 (0%) for the exam.
- You must type in all of your work and code. It is your responsibility to complete the practice quiz because it will help you to become familiar with typing your code into Canvas.
- You may have one (1) piece of blank scrap paper for the exam. You must show your blank paper (front and back) to the camera prior to starting the exam.
- You may not use a personal calculator during the exam one will be provided to you on the screen
- You may not use your book, notes, headphones, a cell phone, another computer, a search engine, or another person during the exam.
- It is your responsibility to speak with me personally if you have an extreme circumstance that is prohibiting you from being successful in this course.

Extra Credit Policy and "Grade Requests"

Extra Credit Policy

No opportunities for extra credit will be provided during this course. Please make an appointment to speak with me if you have concerns about your grade.

"Grade Requests"

Throughout the semester, please do not e-mail me with grade requests, such as:

- "I need at least a C to get credit for this class."
- "I need at least a D to keep my financial aid."
- "If I fail this class I'll be on academic probation."
- "How can I get extra credit to improve my grade?

If you know that you need a certain grade in this class to avoid a dire consequence (such as loss of financial aid, citizenship status, or GPA requirements), you need to make sure the choices you are making now will provide you with the result you want later.

This means putting forth the time and effort to study, ask questions, learn from your mistakes, and understand the concepts taught in each module. Please do not attempt to bias my thinking, or grading, by sending a grade request at any point during the semester.

Your final grade will be exactly what you earn, by putting in the time and effort that is required to learn the material. You can expect the grad book to be updated weekly. That grade is an accurate picture of your progress in the course. If you are unhappy with your grade, please contact me to discuss what actions you can take to change it.

Using Al: How, When, and Why

The use of AI to perform research or aid in your learning of core concepts is allowed, however, please review the policies below for **HOW** AI should be used.

Why should students use AI in this course?

Years ago, calculators transformed mathematics. Today, AI platforms like ChatGPT have similarly reshaped numerous tasks across diverse employment industries. However, it's crucial to understand that AI, much like a calculator, is a tool—its value stems from the user's ability to use it appropriately. After AI's release to the world in 2022, proficiency in AI tools like ChatGPT is becoming as expected in the workplace as Microsoft Office skills. To ensure you're fully prepared for the skills your future career will expect, this course introduces AI – covering aspects like prompt engineering, data validation, and potential pitfalls. We'll discern when AI enhances efficiency and when it hinders. Most critically, we'll explore its ethical use in our educational setting.

When should students use AI in this course?

You are allowed to use AI for your checkpoint assignments. These assignments clearly indicate when and how to use AI, and how it should be documented within your work when you submit the assignment. The use of AI is not allowed on programming projects or exams. If you don't know how to write your own code, you won't be successful in this class.

How should students use AI in this course?

In this course, we will observe the following ethical practices concerning the use of AI:

- 1.) **Think critically.** All is not infallible it's not 100% right, 100% of the time. We must be able to evaluate its responses for accuracy and correctness. We must also consider whether we have we gotten the wrong answer from Al, or if we have asked it the wrong question.
- 2.) **Use AI as a tool, not a crutch.** Merely copying and pasting AI's suggestions is not genuine learning. Remember, proctored exams in this course prohibit AI access. If you sidestep understanding core concepts, your project will suffer, putting your course success at risk.
- 3.) **Analyze bias in AI**. Large language models draw from diverse human-authored content, which may contain biases. It's our duty to be cognizant of these biases when interpreting AI responses.
- 4.) **Confirm accuracy.** There was a time (early 2000s) when people would use Wikipedia as a credible source of information. Now, we all know that it's not. An AI-generated response is not to be considered accurate and trustworthy by default. You should perform additional analysis and research to confirm what AI is telling you.
- 5.) **Respect Privacy**. Once you enter information into any AI platform, it's no longer private information. Refrain from feeding personal details, especially pertaining to peers or educators, into any AI system.

- 6.) **Be Transparent**. If you used AI to help complete an AI-approved assignment, indicate how and where you used it within your assignment submission.
- 7.) **Uphold Academic Integrity.** If you have been explicitly told not to use AI for an assignment, quiz, or exam don't use it. These assessments are designed to see what YOU know, not what ChatGPT knows. Even with the introduction of AI into our daily lives, humans will never stop needing to know how and why things work. If we depend on computers to spit out answers without knowing how the answers can be found, we are headed for a future where ChatGPT will be telling us what to do, instead of the other way around.

Withdrawal Policy

Per Valencia policy a student who withdraws from class before the established deadline for a particular term will receive a grade of "W". A student is not permitted to withdraw after the withdrawal deadline.

I will not withdraw students from class, no matter the reason. If you do not intend to complete the course, you must withdraw yourself prior to the withdrawal date. Any student who withdraws or is withdrawn from a class during a third or subsequent attempt in the same course will be assigned a grade of "F." For a complete policy and procedure overview on Valencia Policy 6Hx28:4-07, please go to: College Policies.

NOTE: Before choosing to withdraw, students should speak first with me regarding your progress in the course and with an Academic Advisor to discuss the impact of the W on your academic progress, future fees, and financial aid.

Communication Policy

You may contact me during the follow ways throughout the semester:

- E-mail me: <u>aevans57@valenciacollege.edu</u>
- Send me a Canvas message
- Call me at 407.582.1109

All communications will receive a response within 24 hours.

Note to International Students (F-1 or J-1 VISA):

Please be advised that withdrawal from this course due to attendance may result in the termination of your visa status if you fall below the full-time enrollment requirement of 12 credit hours. Consult the International Student Services office for more information.

Standards of Classroom Conduct:

Valencia College is dedicated to the advancement of knowledge and learning and to the development of responsible personal and social conduct. By enrolling at Valencia College, a student assumes the responsibility for becoming familiar with and abiding by the general rules of conduct as listed in 6Hx28: 8–03 and the Student Handbook. Even though Faculty manage the classroom environment, the primary responsibility for maintaining a respectful and civil learning environment rests with the students. Students who violate the Student Code of Conduct may be referred to the Dean of Student's Office for disciplinary action, which may result in a sanction up to and including expulsion. College Policies

As a registered student in this class, you assume the responsibility for conducting yourself in a manner that contributes positively to Valencia's learning community as described in the Student Code of Conduct. My role as an instructor is to facilitate academic discussions and promote critical

thinking about sometimes challenging and uncomfortable facts and ideas. Your peers and instructor may share diverse ideas and viewpoints, or we may differ in our ideas and viewpoints, but we will always be respectful of other opinions as provided by the law and as expected in an academic environment. No lesson is intended to espouse, promote, advance, inculcate, compel a particular feeling, perception, viewpoint, or belief in a concept. Concepts as presented are not endorsed by the instructor but are presented as part of the larger course of instruction. Should a student feel uncomfortable with how course content is presented or discussed, please contact the instructor for further conversation.

Academic Honesty:

All forms of academic dishonesty are prohibited at Valencia College. Academic dishonesty includes but is not limited to, acts or attempted acts of plagiarism, self-plagiarism, cheating, furnishing false information, forgery, alteration or misuse of documents, misconduct during a testing situation, facilitating academic dishonesty, and misuse of identification with intent to defraud or deceive.

Turning in code for (programming projects or exams) that was written by another person, another source, or an AI tool (ChatGPT or otherwise) is considered plagiarism.

Plagiarism of any kind will become clear during exams – you will have to write your own code in real-time, in a proctored environment. Students who get good grades on plagiarized assignments won't be able to demonstrate the same skills on exams, because they aren't truly learning. This will be reflected in their overall grade for the course. The exams are worth far more than the programming assignments. Write your own code at all times.

All work submitted by students is expected to be the result of the student's individual thoughts, research, and self-expression. Whenever a student uses ideas, wording, or organization from another source, the source shall be appropriately acknowledged. If a student is caught submitting plagiarized work a first offense will result in a zero score on the assignment, and a second offense will result in a class grade of F.

College Policies:

A full description of all College policies can be found in College Catalog and at College Policies .

Student Assistance Program:

Valencia College is interested in making sure all our students have a rewarding and successful college experience. To that purpose, Valencia students can get immediate help with issues dealing with stress, anxiety, depression, adjustment difficulties, substance abuse, time management as well as relationship problems dealing with school, home or work. BayCare Behavioral Health Student Assistance Program (SAP) services are free to all Valencia students and available 24 hours a day by calling (800) 878-5470. Free face-to-face counseling is also available.

Any student who has difficulty accessing sufficient food to eat, or who lacks a safe and stable place to live, and believes this may affect his or her performance in the course, is urged to meet with a Counselor in the Advising Center for information about resources that may be available from the college or community.

Office of Students with Disabilities Information:

Students with disabilities who qualify for academic accommodations must provide a Notification to Instructor (NTI) form from the Office for Students with Disabilities (OSD) and discuss specific needs with the professor, preferably during the first two weeks of class. The Office for Students with Disabilities determines accommodations based on appropriate documentation of disabilities.

East Campus Bldg. 5, Rm. 216 Ph: 407-582-2229 Fax: 407-582-8908 TTY: 407-582-1222 West Campus SSB, Rm. 102 Ph: 407-582-1523 Fax: 407-582-1326 TTY: 407-582-1222 Osceola Campus Bldg. 1, Rm. 140A Ph: 407-582-4167 Fax: 407-582-4804 TTY: 407-582-1222 Winter Park Campus Bldg. 1, Rm. 212 Ph: 407-582-6887 Fax: 407-582-6841 TTY: 407-582-1222

Disclaimer:

This syllabus is an agreement between the student and the instructor. By enrolling in and then attending this course, the student agrees to and accepts the terms and conditions of this agreement. It is the responsibility of the student to carefully read this syllabus/agreement in its entirety and to adhere to all policies and procedures within the syllabus. Please retain a copy of this syllabus for your records.

Changes may be made at the discretion of the instructor.

Course Schedule

The course schedule is provided on the following page.

COP 3330C - Course Schedule Summer 2024

Week	Topics	Activities to Complete	Due Date (by 11:59 PM)
1	Orientation	Introductions Discussion	Tuesday, May 7, 2024
		Orientation Quiz	Tuesday, May 7, 2024
	Module 1: Classes and Objects	Module 1 Quiz	Thursday, May 9, 2024
		Module 1 Checkpoint Activity	Thursday, May 9, 2024
		Module 1 Project	Sunday, May 12, 2024
2-3	Module 2: Inheritance and Polymorphism	Module 2 Quiz	Thursday, May 16, 2024
		Module 2 Checkpoint Activity	Wednesday, May 22, 2024
		Module 2 Project	Sunday, May 26, 2024
4	Module 3: Exceptions	Module 3 Quiz	Tuesday, May 28, 2024
		Module 3 Checkpoint Activity	Thursday, May 30, 2024
		Module 3 Project	Sunday, June 2, 2024
5	Module 4: Threads and	Module 4 Quiz	Tuesday, June 4, 2024
	Concurrency	Module 4 Checkpoint Activity	Thursday, June 6, 2024
		Module 4 Project	Sunday, June 9, 2024
6	Module 5: Collections	Module 5 Quiz	Tuesday, June 11, 2024
		Module 5 Checkpoint Activity	Thursday, June 13, 2024
		Module 5 Project	Sunday, June 16, 2024
7	Midterm Exam (Online, Proctored)		Exam opens: Monday, 6/17/2024 12:00:00 AM Exam closes: Wednesday, 06/19/2024 11:59:59 PM
8	Module 6: Generics	Module 6 Quiz	Friday, June 21, 2024
		Module 6 Checkpoint Activity	Sunday, June 23, 2024
		Module 6 Project	Wednesday, June 26, 2024
9	Module 7: GUI Programming	Module 7 Quiz	Saturday, June 29, 2024
		Module 7 Checkpoint Activity	Wednesday, July 3, 2024
		Module 7 Project	Monday, July 8, 2024
10-11	Module 8: Database	Module 8 Quiz	Saturday, July 13, 2024
	Connectivity	Module 8 Checkpoint Activity	Wednesday, July 17, 2024
		Module 8 Project	Wednesday, July 24, 2024
12	Final Exam (Online, Proctored)		Exam opens: Thursday, 07/25/2024 12:00:00 AM Exam closes: Sunday, 07/28/2024 11:59:59 PM