CS 2334: Programming Structure/Abstractions Fall 2025 Syllabus

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Teaching Assistants: Reza Gheibi (<u>rezagheibi@ou.edu</u>)

Nam Huynh (nam@ou.edu)

Office hours: Dr. Sanjana Mudduluru [T/Th 2 - 3 PM]

Contact Policy:

• For all course-related queries, contact <u>cs2334 fall2025@groups.ou.edu</u>, which I and the TAs will monitor. This ensures a faster response and keeps the entire instructional team informed.

- For personal matters or private concerns, please email me directly at my university email address.
- TA office hours are posted on Canvas under 'pages'. These office hours are subject to change throughout the semester.

Lecture Time & Location:

Section 001 MWF 9:00 – 9:50 AM Dale Hall 112

MWF 10:00 – 10:50 AM

Dale Hall 112

Prerequisites:

Section 002

CS 1323 or 1321 or 1324, and MATH 1523 or higher.

Ambitious, Tentative List of Topics (not all topics necessarily covered, not necessarily in this order) The design and implementation of computer programs using disciplined methodologies. Use of several abstract data types. Software reuse through encapsulation, composition, aggregation, inheritance, polymorphism, and generics. Topics include recursion, GUI development, file processing, and unit testing. A program design tool will be used. Introduction to ethics in computer science, including philosophical ethics theories. Discussion of intellectual property rights and privacy.

CS 2334 Learning Objectives:

By the end of this course, you should be able to:

- Outline the process of encapsulation, inheritance, polymorphism, aggregation, recursion, generics & composition.
- Analyze simple computing problems and define the requirements that are appropriate to their solution.
- Create programming solutions to computing problems by application of design and development principles & tools (umlet). Specifically, implement a program in Java using abstract data types and objects.
- Apply GUI development and file processing techniques.
- Design and apply unit tests.
- Evaluate and analyze the professional, ethical, legal, security and social issues that are faced by computer scientists, specifically in the areas of intellectual property rights and privacy.

Labs are mandatory & are held on Wednesdays.

Section 011	Nam Huynh	11:00 – 12:50 PM	Sarkeys M207
Section 012	Nam Huynh	1:00 – 2:50 PM	Sarkeys M207
Section 013	Reza Gheibi	3:00 – 4:50 PM	Sarkeys M207
Section 014	Reza Gheibi	5:00 – 6:50 PM	Sarkeys M207

Each lab grade has two parts.

- 1. (Manual grade) will be awarded by TAs after each lab(includes attendance & comprehensive questions related to Labs).
- 2. (Auto grade) The ZyBook auto grader is used to test and grade your lab submission.

Required Textbooks and Resources:

- Programming Structures and Abstraction (Zybooks) https://zybooks.com.
 - 1. Sign in or create an account at learn.zybooks.com [must use your official OU email ID]
 - 2. Enter zyBook code: OUCS2334MudduluruFall2025
 - 3. Subscribe

When you create your Zybooks account, you <u>must use your official OU email ID</u> (the one with your full name, not your alias). We will otherwise be unable to match your Zybooks grades with your Canvas identity.

Students must read the assigned readings and complete the associated exercises and always make sure to have access to the textbooks since most of the assignments will be there.

Java SE Development Kit (JDK) Version 17

https://www.oracle.com/java/technologies/javase/jdk17-archive-downloads.html

Note that just having the Java Runtime Environment (JRE) is not sufficient (which you may have installed for previous classes).

• Eclipse integrated development environment (IDE)

If you install Java SDK before Eclipse, the installation process usually goes smoothly. We strongly recommend the latest version from https://www.eclipse.org

GitHub

We will be relying on GitHub for labs and projects. Setup an account using OU email ID on https://github.com/

Attendance Policy:

Attendance accounts for 10% of your overall grade and is monitored through in-class participation tasks. These tasks may include activities on gradescope or programming exercises completed during specified classes or days.

• Students can miss up to **two class sessions** throughout the semester without penalty.

• For the **labs** (approximately 10 sessions), students can miss **one lab session** during the semester.

Grading Breakdown:

The following requirements may change during the semester. [Tentative breakdown and subject to change as we progress through the summer]

Required work	Percentage
 Programming Projects About 4-5 projects Individual projects 	20%
 Attendance (In-class participation) In-class programming tasks Gradescope assignments Due at the end of each class unless stated otherwise 	10%
 Zybooks Assignments Reading assignments released each week 	10%
 Labs Labs are shorter programming tasks released each week 	20%
• Exams:	40%
o Midterm1: 10%	
o Midterm2: 10%	
 Final Exam: 20% [Final group project that leads to a poster presentation] 	
o All exams will be in person at the designated time & location	

Late Work Policy:

There are no makeup assignments for Labs & zybook assignments, but Projects have up to 2 days after the deadline. If you have any emergencies, please do not hesitate to contact the instructor. Your request for appropriate accommodation will be reviewed case by case, for one of the following reasons:

- (a) Medical situation
- (b) Family emergency
- (c) University-approved business (for example, business travel including OU Athletics).

The lowest grade for zybook assignments, labs, and in-class participation will be dropped, but not for projects & exams.

AI Policy & Academic Integrity Policy:

The following actions will be considered academic misconduct in lab and project work:

- o Submitting AI-generated code without significant personal contribution and understanding.
- o Submission of code from classmates as personal work.
- o Copy-pasting AI-generated solutions into assignments or exams.

Expectations

- O Documentation: If you use AI tools for assistance, you must: Indicate which tools were used and how (e.g., "Used ChatGPT to debug a NullPointerException"). Explain AI-generated suggestions in your own words.
- o Originality: All submissions must reflect your understanding of the material.
- Skill Development: Focus on learning the logic and process behind problem-solving rather than relying on tools for direct solutions.

Consequences of Misuse

 Violations of this policy will be treated as academic misconduct, with consequences ranging from loss of credit for the assignment to more severe disciplinary action as outlined in the university's code of conduct.

Canvas Postings

Course materials, including videos, slides, homework assignments, programming project and announcements will be posted on Canvas. You should check the Canvas page at least twice a week, but daily is even better.

Communication channels

Often, we need to alert the class to an important issue or problem. You should check your outlook e-mail at least twice a week, but daily is even better. Course e-mails are sent to your official OU e-mail address.

University Policies

Mental Health Support Services

Support is available for any student experiencing mental health issues that are impacting their academic success. Students can either been seen at the University Counseling Center (UCC) located on the second floor of Goddard Health Center or receive 24/7/365 crisis support from a licensed mental health provider through <u>TELUS</u> Health. To schedule an appointment or receive more information about mental health resources at OU please call the UCC at 405-325-2911 or visit <u>University Counseling Center</u>. The UCC is located at 620 Elm Ave., Room 201, Norman, OK 73019.

Title IX Resources and Reporting Requirement

The University of Oklahoma faculty are committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX. There are resources available to those impacted, including: speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you have (or someone you know has) experienced any form of sex or gender-based

discrimination or violence and wish to speak with someone confidentially, please contact <u>OU</u> <u>Advocates</u> (available 24/7 at 405-615-0013) or <u>University Counseling Center</u> (M-F 8 a.m. to 5 p.m. at 405-325-2911).

Because the University of Oklahoma is committed to the safety of you and other students, and because of our Title IX obligations, I, as well as other faculty, Graduate Assistants, and Teaching Assistants, are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures that occur in: class discussion, writing assignments, discussion boards, emails and during Student/Office Hours. You may also choose to report directly to the Institutional Equity Office. After a report is filed, the Title IX Coordinator will reach out to provide resources, support, and information and the reported information will remain private. For more information regarding the University's Title IX Grievance procedures, reporting, or support measures, please visit Institutional Equity Office at 405-325-3546.

Reasonable Accommodation Policy

The University of Oklahoma (OU) is committed to the goal of achieving equal educational opportunity and full educational participation for students with disabilities. If you have already established reasonable accommodations with the Accessibility and Disability Resource Center (ADRC), please <u>submit your semester accommodation request through the ADRC</u> as soon as possible and contact me privately, so that we have adequate time to arrange your approved academic accommodations.

If you have not yet established services through ADRC, but have a documented disability and require accommodations, please complete <u>ADRC's pre-registration form</u> to begin the registration process. ADRC facilitates the interactive process that establishes reasonable accommodations for students at OU. For more information on ADRC registration procedures, please review their <u>Register with the ADRC</u> web page. You may also contact them at (405)325-3852 or <u>adrc@ou.edu</u>, or visit <u>www.ou.edu/adrc</u> for more information.

Note: disabilities may include, but are not limited to, mental health, chronic health, physical, vision, hearing, learning and attention disabilities, pregnancy-related. ADRC can also support students experiencing temporary medical conditions.

Religious Observance

It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty. [See Faculty Handbook 3.15.2]

Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact the Accessibility and Disability Resource Center at 405/325-3852 and/or the Institutional Equity Office at 405/325-3546 as soon as possible. Also, see the Institutional Equity Office <u>FAQ on Pregnant and Parenting Students'</u> Rights for answers to commonly asked questions.

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy.

Emergency Protocol

During an emergency, there are official university <u>procedures</u> that will maximize your safety.

Severe Weather: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather.

- 1. <u>Look</u> for severe weather refuge location maps located inside most OU buildings near the entrances.
- 2. <u>Seek</u> refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
- 3. Go to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
- 4. Get in, Get Down, Cover Up
- 5. Wait for official notice to resume normal activities.

Additional Weather Safety Information is available through the Department of Campus Safety.

The University of Oklahoma Active Threat Guidance

The University of Oklahoma embraces a Run, Hide, Fight strategy for active threats on campus. This strategy is well known, widely accepted, and proven to save lives. To receive emergency campus alerts, be sure to update your contact information and preferences in the account settings section at one.ou.edu.

RUN: Running away from the threat is usually the best option. If it is safe to run, run as far away from the threat as possible. Call 911 when you are in a safe location and let them know from which OU campus you're calling from and location of active threat.

HIDE: If running is not practical, the next best option is to hide. Lock and barricade all doors; turn of all lights; turn down your phone's volume; search for improvised weapons; hide behind solid objects and walls; and hide yourself completely and stay quiet. Remain in place until law enforcement arrives. Be patient and remain hidden.

FIGHT: If you are unable to run or hide, the last best option is to fight. Have one or more improvised weapons with you and be prepared to attack. Attack them when they are least expecting it and hit them where it hurts most: the face (specifically eyes, nose, and ears), the throat, the diaphragm (solar plexus), and the groin.

Please save OUPD's contact information in your phone.

NORMAN campus: For non-emergencies call (405) 325-1717. For emergencies call (405) 325-1911 or dial 911.

TULSA campus: For non-emergencies call (918) 660-3900. For emergencies call (918) 660-3333 or dial 911.

Fire Alarm/General Emergency

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates:

- 1. *LEAVE* the building. Do not use the elevators.
- 2. KNOW at least two building exits
- 3. ASSIST those that may need help
- 4. PROCEED to the emergency assembly area
- 5. ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues.
- 6. *WAIT* for official notice before attempting to re-enter the building.

OU Fire Safety on Campus