CS 1331 Syllabus

Objects and Design, Section C/FAC, 3 Credits

Fall 2026

Instructor Information

Instructor: Jacob Chambers

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General Course Information

Description

Introduction to techniques and methods of object-oriented programming such as encapsulation, inheritance, and polymorphism. Emphasis on software development and individual programming skills.

Students gain exposure to modern application development using the Spring Boot framework to build simple, structured applications. Additional topics include basic concepts of secure computing with respect to graphical user interfaces (e.g., password fields) and memory management.

Course Learning Outcomes

Students will learn how to:

1. Understand object-oriented programming principles and apply them in the construction of Java programs.
2. Demonstrate proficiency in writing medium-sized (1-10 source files) Java programs.
3. Create, select, and use appropriate basic algorithms and data structures in Java programs.
4. Understand and apply fundamental concepts of application development using the Spring Boot framework.

Required Course Materials

Introduction to Java Programming and Data Structures - Comprehensive Version, by Y. Daniel Liang.

Grading Policy:

The course will be graded on a traditional 60-70-80-90 system. See http://registrar.gatech.edu/info/grading-system for more information about the grading system at Georgia Tech.

Assignments

- Participation activities: 5%
- Homeworks: 10%
- Programming excercises: 5%
- Midterms (3 x 14%): 42%
- Final exam: 38%

Description of Graded Components

Participation activities are short quizzes given through Canvas following many, but not all, lectures. Students will have 24 hours to complete these assignments. Their purpose is primarily diagnostic, so students can see what they have understood well from the lecture, and what they may need to review.

Programming exercises are shorter, introductory assignments meant to translate concepts taught in lecture into practical problem solving in code. They are given weekly for roughly the first half of the course.

Homeworks are more fulsome, challenging programming assignments, where students synthesize concepts from throughout the class to solve real-world problems under practical conditions and constraints. These are given weekly for roughly the second half of the course.

Midterms are hour-long cumulative exams with combinations of multiple choice, fill-in-the-blank, and coding questions. They are given on paper during the regularly scheduled lecture period.

The *final exam* is similar in format to midterms, but is longer, more comprehensive, and with a greater emphasis on coding questions.

Course Policies

Attendance and/or Participation

All students are required and expected to attend class. Recitations are optional, but attendance at recitations is highly recommended. If you must miss class for any reason, it is your responsibility to find out what was covered and seek the help of TAs or classmates to get caught up. Participation quizzes will be given out at the end of many, but not all, lectures, and students have 24 hours to complete these required assignments.

Pre- &/or Co-Requisites

At least one of CS 1301, CS 1315, CS 1321, or CS 1371, minimum grade of C.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

You may submit your homework up to 24 hours late for a 25% reduction in possible points. This means that if the assignment is worth 100 points and you turn it in 12 hours after it is due, there will be a deduction of 25 points from whatever the result of your grade is. No late homework submissions will be accepted after 24 hours without a valid excused absence. Note that an assignment turned in at one minute after midnight is still late; you have had the assignment for an adequate amount of time to complete it (usually a week).

Make sure to practice safe submission and retrieve your submission after you submit it to make sure all the files you thought you turned in are there. You are responsible for ensuring that what you want graded is submitted correctly. After receiving a homework grade, you have until the close of the regrade request period (typically one week) to inquire about the grade and address any potential grading issues with your homework.

Exam Policy

All students are expected to complete the assessments. Forgetting about the assessments or simply missing them are not proper excuses and will result in a zero score. If a documented excused school absence will prevent you from taking an assessment, you should get written confirmation of the approved absence from the Registrar's office and notify the instructor prior to the day(s) of the absence if possible.

In the event of a medical emergency or an illness that is severe enough to require medical attention, students are responsible for contacting the Dean of Students as soon as possible to report the medical issue or emergency, providing dated documentation from a medical professional, and requesting assistance in notifying their instructors. The medical documentation will be handled confidentially within the Office of the Vice President and Dean of Students and will inform a decision as to whether communication with instructional faculty is appropriate.

For a confirmation of a medical excused absence, please contact the Dean of Students Office here instead of sending me anything: Class Absence Verification Form

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Core IMPACTS

Core IMPACTS is the University System of Georgia's General Education curriculum. If you are teaching a course that counts towards Core IMPACTS, you should include a syllabus statement about the Core area and associated career competencies. This resource developed by the Center for Excellence in Teaching and Learning and Online Education at Georgia State University includes template syllabus statements for each of the Core IMPACTS areas that you may adapt for your course.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulates some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Collaboration, Group Work, and Use of Generative AI

We have chosen to focus the assessment of students' individual knowledge of course concepts and skills primarily on in-class exams rather than homework assignments. Homework assignments are opportunities for learning and discovery; they are not significant instruments of evaluation.

The weekly programming assignments provide opportunities for each student to learn object-oriented programming and Java well. Thus, what you submit for these assignments should be your own work, and they should be code that *you* have written. We do expect that you understand and can explain the homework solution that you submit.

The use of generative AI is not permitted for completing assignments in this course. Generative AI is an excellent resource for testing your knowledge, generating practice problems, and searching documentation, but using it as a pure substitute for writing code subverts the purpose of the course. The use of generative AI for homework assignments or programming exercises is equivalent to plagiarism or copying code from another student; all code must be your own.

Approved Sources of Assistance

Students should be aware of the approved sources of assistance, help, and collaboration in our course. You may use resources provided for everyone, including the instructor, teaching assistants, the textbook, recitations, and Ed Discussion. In particular, you should take advantage of our TA helpdesk/office hours to get personalized assistance on HW assignments.

We also seek to create a culture where you can interact with and learn from other students in class as well. Interaction between students at a conceptual, high-level is permitted. You

can discuss course concepts and HW assignments at a conceptual level to increase your understanding. If you find yourself dropping to a level where specific Java code is being discussed, that is going too far. To be clear, you should never exchange code related to an assignment with anyone other than the instructor and TAs.

Prohibited Activities

In addition to what is allowable, it is important for you to understand what is not permitted in our class. Sharing code, whether an entire program or just a portion of one, between students is not allowed. Taking/receiving assignments from other classmates, being given a homework solution, or downloading solutions (partial or complete) from websites are considered plagiarism and are not allowed. These are activities that are simply meant to earn a score, not to understand our course material.

Similarly, you should not give or even show a copy of your code, or a portion of your code, to another student. If we find that code has been shared or plagiarized, such cases will be referred to the Office of Student Integrity.

Student Well-Being

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A comprehensive list of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being (student-resource-guide (gatech.edu)