CS1301 Syllabus

Course Information

Course Prefix and Number: CS1301
Course Name: Introduction to Computing
Course Semester: Fall 2026
Course Section: C
Instructor: Kearse, Iretta

Course Description

Introduction to computing principles and programming practices with an emphasis on the design, construction, and implementation of problem solutions using software tools. Topics include algorithmic thinking, control structures, data structures, and modular design.

Course Learning Outcomes

By the end of this course and upon successful completion, students will have achieved the following goals:

- Apply algorithmic thinking to real-world problems.
- Analyze problems and abstract key information to formulate computational solutions.
- Integrate control flow constructs and data structures to create effective programs.
- Design and implement modular code using functions and classes.
- Recognize computational problem-solving patterns and apply them to new scenarios.
- Systematically test, evaluate, and debug programs to resolve issues.
- Compare and assess algorithms' efficiency and environmental impact.
- Identify and understand the basic principles of secure computing.

Required Course Materials

To help you succeed in this course, we strongly recommend reading the free online textbook "How To Think Like a Computer Scientist: Learning with Python 3" by Peter Wentworth, Jeffrey Elkner, Allen B. Downey, and Chris Meyers.
You can access it here: http://openbookproject.net/thinkcs/python/english3e/

Grading Policy

This course uses a fixed grading scale. Grades are not curved. Final grades are calculated to the nearest tenth. Scores are not rounded up. For example, a final score of 89.9 will be recorded as a B, not an A. Scores are calculated using the following assignment category percentages:

Midterm Exams (3): 40%
- Exam 1 10%
- Exam 2 15%
- Exam 3 15%

Homework (10): 20%
Final Exam: 20%
Labs (3): 15%
- Lab 1 3%
- Lab 2 4%
- Lab 3 4%
- Lab 4 4%

Participation: 5%
Extra credit: 2%
Labs: 1%
Practice problems: 0.5%
Other: 0.5%

Letter Grade Scale:

A	90.0 and above
B	80.0 – 89.9
C	70.0 – 79.9
D	60.0 – 69.9
F	Below 60.0

Pass/Fail Option: Students taking the course on a Pass/Fail basis must earn a minimum score of **70.0** to receive a Pass.

Description of Graded Components

Homework, quizzes, and exams are all individual assignments. Labs 1 and 2 are individual, while Labs 3 and 4 are done in teams. Exams are timed and no supporting materials (e.g. notes, books) are allowed. No collaboration is allowed for exams. Collaboration on homework, quizzes and lab assignments must abide by the academic integrity policy.

Attendance Policy

Attendance is required for lectures and strongly encouraged for recitations. Participation grades are based on in-class quizzes and surveys. You are fully responsible for all course content and administrative announcements made during class, including updates to the syllabus, assignments, and exam schedules. Missing class may negatively impact your understanding of the material and your ability to participate meaningfully. Absences must be documented and approved through the Dean of Students.

Academic and Research Honesty/Integrity Statement

Students are expected to read, understand, and abide by the Georgia Tech Academic Honor Code. Academic misconduct is taken very seriously in this class. **You are expressly forbidden from supplying a copy of any assignment, electronically or otherwise, to another student. If you share a copy of your assignment with another student and they are charged with copying, you will also be charged.**

Collaboration with other students currently in this CS 1301 class is an important learning method. The following explanation will help you understand collaboration. Students may only collaborate with fellow students currently taking CS 1301, the TAs, and the instructor. Collaboration means talking through problems, assisting with debugging, explaining a concept, etc. You should not exchange code or write code for others, whether it is on a tablet, piece of paper, a whiteboard, directly on a computer, etc. **Each individual programming assignment must be coded by you in its entirety.** Your submission must not be substantially similar to another student's submission. Collaboration at a reasonable level will not result in substantially similar code. Students who turn in submissions that are not fundamentally unique and their own will receive a zero and will be referred to the Office of Student Integrity. We strongly urge you to be familiar with these Georgia Tech sites:

- The Honor Code — https://osi.gatech.edu/students/honor-code
- Office of Student Integrity — http://www.osi.gatech.edu/index.php/

Artificial Intelligence Policy

We recognize that generative AI tools (e.g., ChatGPT, Copilot) can support learning when used responsibly. In this course, you may use AI tools to brainstorm, explore ideas, or clarify concepts—similar to how you might collaborate with peers. However, **All Submitted Work Must Reflect Your Own Understanding and Original Expression.**

You are responsible for ensuring that all submitted work is your own. Submitting content generated by AI tools will be treated as academic misconduct. If you're unsure whether your use of AI is appropriate, please ask.

Guidelines for Ethical AI Use:

- **Use AI for Learning, Not for Writing Your Submission**

Do not copy and paste AI-generated text into your assignment.

You may consult AI tools to help you understand a topic or generate ideas.

Instead, reflect on what you've learned and write your response in your own words.

- **Separate Your Writing from AI Interactions**

Do NOT work on your assignment and use an AI tool simultaneously.

Treat your AI interaction as a preparatory step—like reading a source or discussing with a peer. After using AI, close the tool and write your assignment independently reflecting your revised knowledge.

- **Avoid AI Tools That Auto-Generate Code and Content in Your Workspace**

Do not use AI features embedded in writing/coding platforms that insert content directly into your document (e.g. GitHub Copilot, ChatGPT, Tabnine Cursor, Replit AI, Sourcery, Jedi). This is equivalent to allowing someone else to write part of your assignment.

These guidelines are designed to help you stay within academic integrity boundaries. Deviating from them does not automatically mean misconduct, but it increases the risk.

Core IMPACTS

This is a Core IMPACTS course that is part of the Institution area.
Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.
This course should direct students toward a broad Orienting Question:

- How does my institution help me to navigate the world?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will demonstrate the ability to think critically and solve problems related to academic priorities at their institution.

Course content, activities, and exercises in this course should help students develop the following Career-Ready Competencies:

- Critical Thinking
- Teamwork
- Time Management

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, 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 in order to set up a time to discuss your learning needs contact the Office of Disability Services

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. This summarizes my expectations for you and what you can expect from me. 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. Expectations of Advisors and Advisees