Intro to Media Computation

Last Updated: Sun, 12/21/2025

Course prefix: CIS

Course number: 1315

Section: A

CRN (you may add up to five):
21148

Instructor First Name: Iretta

Instructor Last Name: Kearse

Semester: Spring

Academic year: 2026

Course description:

Introduction to computation (algorithmic thinking, data structures, data transformation and processing, and programming) in a media and communication context. CS 1315 is an introduction to computing concepts for students with no previous background in CS who are majoring in subjects other than CS or engineering. Students learn computing through the design of programs to manipulate media and multimedia objects such as digitized pictures, sounds, and web pages. Credit not awarded for both CS 4452 and CS 1315.

Course learning outcomes:

Write programs for mathematically based calculations, image and sound manipulation, and text (e.g. HTML) creation/manipulation.

· Apply basic concepts of computer science (especially data representations, algorithms, encodings, forms of programming) to media related problems.

· Apply a range of useful computing skills.

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:

• There will be homework every week, including the last full week of class of the semester.

• There will be approximately seven quizzes, as well as a final exam. Quizzes are usually administered on Fridays.

• There are NO “dropped” quizzes or homework.

• The final exam is cumulative and mandatory.

• There is a Participation grade for this course. Students will have "Reality Checks (RC)" on topics every lecture that will be turned in during lecture or by the end of the day.

• If you miss any assignment without a valid excuse, you receive a 0.

Participation: 4%

Homework/programming: 36%

Quizzes: 35%

Final Exam: 25%

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.

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 by the Dean of Students.

If you miss a quiz or exam, it is your responsibility to get an official excuse from the Dean of Students.

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Academic honesty/integrity statement:

At Georgia Tech, academic integrity is a core value. In this course, we take the Academic Honor Code seriously, and we expect all students to uphold it.

What You Must NOT Do

· Do not share your assignments with other students, in any format (electronic, paper, etc.).

· Do not copy or allow others to copy your work. If your work is found in another student’s submission, both parties may be charged with academic misconduct.

· Do not exchange code or write code for others, whether on paper, whiteboards, or computers.

What You CAN Do

Collaboration is encouraged when done appropriately.

· Discuss concepts and ideas.

· Talk through problems.

· Help debug code (without writing it for someone else).

You may collaborate only with:

· Fellow CS1301 students who are enrolled in the current semester.

· Course TAs and the instructor.

Important: Every programming assignment must be written entirely by you. Your submission must be your own original work. Reasonable collaboration should not result in similar code.

Consequences

Submissions that are not fundamentally unique will receive a zero and be referred to the Office of Student Integrity. If you're ever unsure about what's allowed, please ask your instructor or TA. We're here to help you succeed with 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**

Core IMPACTS statement(s) (if applicable):

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