

## **CS 4460 Syllabus**

**Course Name: Introduction to Information Visualization**

**Section: LSS, Summer 2026**

**Credit: 3**

### **Instructor Information**

---

**Instructor: Songwen Hu**

**Email: [shu343@gatech.edu](mailto:shu343@gatech.edu)**

### **General Course Information**

---

#### **Description**

Data is everywhere. It helps us to make informed decisions. However, it is always overwhelming to interpret the “raw” data. Visualizations are tools that translate the raw data into meaningful graphics. They take advantage of the powerful human visual system to summarize data in a cognitively efficient way, making them popular in science, analysis, and the media. This course provides an introduction to understand, design, create, and evaluate data visualizations.

#### **Course Learning Outcomes**

- Understand the basic principles of data visualization.
- Recognize different types of visualizations and when to use them.
- Design clear and effective visual representations of data.
- Understand how interaction can support data exploration and communication.
- Critically evaluate visualization designs.
- Develop foundational skills for creating visualizations using web technologies (JavaScript, HTML, CSS).

#### **Required Course Materials**

Interactive Data Visualization for the Web, Scott Murray, O’Reilly Media, ISBN 9781449339739.

## **Grading Policy:**

There are four major components in this course: Homework, Labs, and Tests. A curve may be applied to final grades at instructor discretion to adjust overall grade distribution. Grades of individual assignments will not be curved. If a curve is given, it will only be curved up (not down).

## **Description of Graded Components**

- Labs are programming activities and practice exercises with detailed instructions.
- Homework consists of programming assignments.
- Midterm and final tests are closed-book exams that assess both theoretical and practical knowledge of visualization.

## **Course Policies**

---

### **Attendance and/or Participation**

Attendance is expected. Institute approved absences will be accommodated, as will absences for interviews, conferences, etc. Notify us by email or direct Canvas messages if you will miss class for one of these two reasons (if you feel some other reason for absence is reasonable, email us, but again, in advance).

### **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 in order 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](#) articulate 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.

## **Extra Credit Opportunities**

Students who participate in extra curriculum studies get one extra point on the final grade for each study. Each student can get three extra points at maximum.

## **Collaboration, Group Work, and Use of Generative AI**

Use of generative AI tools is permitted only for grammar and language polishing. Any use for generating solutions, code, or completing assignments is not allowed. Suspicious cases will be directly reported to the [Office of Student Integrity \(OSI\)](#). The teaching team will NOT make any judgement but follow the decision from OSI. OSI will initiate a formal investigation to determine if it falls into the use of AI, and may lead to the following [possible consequences](#).

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

Late work will receive a 20% per day penalty. After 5 days, a 0% will be given and no submission will be accepted. Too much other work, gone for the weekend, ran out of paper etc. are not emergencies. Advance notification to the instructor and TAs is expected in all but the most severe emergency situations.

However, it is understandable that life events and other reasons come up that may require you to miss a deadline. As such, each student is given 2 “late days” to submit without penalty throughout the semester. If you want to use any of your late days, add a note to the canvas submission at the time you submit. You cannot apply late days to assignments at the end of the semester or days after you submit your assignment.

## Campus Resources for Students

---

### **Undergraduate Student Academic Success Resources:**

Academic Success and Advising (a unit in the Office of Undergraduate Education & Student Success) provides free support for your courses. Students can attend scheduled supplemental review (PLUS) sessions, stop by Drop-In Tutoring, or schedule a one-on-one appointment through Knack. To explore what options work best for you, please visit us online at [success.gatech.edu/tutoring](https://success.gatech.edu/tutoring), email us at [tutoring@gatech.edu](mailto:tutoring@gatech.edu), or come see us at Clough Undergraduate Learning Commons, Suite 283.

### **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 \(gatech.edu\)](#))