# CS6750: Human-Computer Interaction (SP25)

Hi! Welcome to CS6750. This course will begin at 9AM on the first day of the semester; if you're visiting before then, return then to check the course out!

To start the class as a whole, you should start by clicking Course Content above and clicking through the "Welcome to CS6750: Human-Computer Interaction!" lesson. It will walk you through getting set up for the class and what to expect.

After that, you'll watch course lessons on <u>Ed Lessons</u>, ask questions and chat with your classmates on <u>Ed Discussion</u>, and <u>submit assignments</u> and <u>take exams</u> here on Canvas.

## **About this Course**

If you would like to read more about this class in and of itself, there are two resources you should consult. First, you should check out the general course description, located <a href="here on Canvas">here on Canvas</a>. This will give you a view of the course, its learning objectives, and its structure.

Finally, as you'll see us say in several places, this course heavily utilizes the course discussion forum. That is where you'll see course announcements, get answers to your questions, participate in class discussions, and more. So, join today!

This page provides information about the Georgia Tech OMS CS6750 class on Human-Computer Interaction relevant only to the Spring 2025 semester. Note that this page is subject to change at any time. Below, find the course's calendar, grading criteria, and other information. For more complete information about the course's requirements and learning objectives, please see the general CS6750 page.

## **Course Calendar At-A-Glance**

Below is the calendar for the Spring 2025 OMS CS6750 class. Note that assignment due dates are all Sundays at 11:59PM <u>Anywhere on Earth timeLinks to an external site</u>. For the complete course calendar, please see the <u>Full Course Calendar</u>.

This course is roughly divided into three phases: the **Content** phase, the **Practice** phase, and the **Application** phase. In the **Content** phase, you will go through all the course content and explore its applications on a series of written homework assignments. In the **Practice** phase you will delve deeper into the content through readings, test your knowledge through quizzes, and practice your skills in the individual project. In the **Application** phase, you will put all of this into practice in a team project. You will also peer review a homework, project check-in, or project deliverable every week, and complete two tests.

Week # Week Of Content & Deliverables Assignment Due Date

**Pre-Course Phase: Getting Started** 

Week #	Week Of	Content & Deliverables	Assignment Due Date			
1	01/06/2025	Start-of-Course Survey Syllabus Comprehension Quiz CITI Training (Recommended) Lessons 1.1 – 1.3	01/12/2025			
	Content Phase: Lectures and Homeworks					
2	01/13/2025	Lessons 2.1 – 2.2 Lessons 3.1 – 3.2 Homework 1	01/19/2025			
3	01/20/2025	Lessons 2.3 – 2.5 Lessons 3.3 – 3.4 Homework 2	01/26/2025			
4	01/27/2025	Lessons 2.6 – 2.7 Lessons 3.5 – 3.6 <u>Homework 3</u>	02/02/2025			
5	02/03/2025	Lessons 2.8 – 2.10 Lessons 3.7 – 3.8 Homework 4 Quarter-Course Survey	02/09/2025			
	Practice Phase: Readings, Quizzes, and the Individual Project					
6	02/10/2025	Readings 1.1 – 1.3 Readings 2.1 Readings 3.1 – 3.3 Quiz 1	02/16/2025			
7	02/17/2025	Readings 2.2 – 2.4 Readings 3.4 <u>CITI Training</u> (Due) <u>Individual Project Check-In 1</u>	02/23/2025			
8	02/24/2025	Readings 2.5 – 2.7 Readings 3.5	03/02/2025			

Week #	Week Of	Content & Deliverables	<b>Assignment Due Date</b>	
		Quiz 2 Individual Project Check-In 2		
9	03/03/2025	Readings 3.6  Quiz 3  Individual Project Check-In 3  Test 1  Mid-Course Survey	03/09/2025	
10	03/10/2025	Readings 2.8 – 2.10 Readings 3.7 – 3.8 Quiz 4 Individual Project Check-In 4	03/16/2025	
11	03/17/2025	Individual Project	03/23/2025	
Application Phase: The Team Project				
12	03/24/2025	Lesson 4.1 <u>Team Project Check-In 1</u>	03/30/2025	
13	03/31/2025	Lesson 4.2 <u>Team Project Check-In 2</u>	04/06/2025	
14	04/07/2025	Lesson 4.3 <u>Team Project Check-In 3</u>	04/13/2025	
15	04/14/2025	Team Project Check-In 4	04/20/2025	
16	04/21/2025	Team Project Test 2	04/27/2025	
Victory Lap				
17	04/28/2025	Lessons 5.1 – 5.3 End-of-Course Survey CIOS SurveyLinks to an external site.	05/04/2025	

Given above are the numeric labels for each lesson. For reference, here are those lessons' titles:

#### **Unit 1: Introduction**

- 1.1 Introduction to Human-Computer Interaction
- 1.2 Introduction to CS6750
- 1.3 Exploring HCI

## **Unit 2: Principles**

- 2.1 Introduction to Principles
- 2.2 Feedback Cycles

#### **Unit 3: Methods**

- 3.1 Introduction to Methods
- 3.2 Ethics and Human Research
- 3.3 Needfinding and Requirements Gathering
- 3.4 Design Alternatives
- 3.5 Prototyping
- 3.6 Evaluation
- 3.7 HCI and Agile Development
- 3.8 Conclusion to Methods

- 2.3 Direct Manipulation and Invisible Interfaces
- 2.4 Human Abilities
- 2.5 Design Principles and Heuristics
- 2.6 Mental Models and Representations
- 2.7 Task Analysis
- 2.8 Distributed Cognition
- 2.9 Interfaces and Politics
- 2.10 Conclusion to Principles

#### **Unit 4: Applications**

- 4.1 Technologies
- 4.2 Ideas
- 4.3 Domains

#### **Unit 5: Conclusion**

- 5.1 Course Recap
- 5.2 Related Fields
- 5.3 Next Steps

## **Course Assessments**

Your grade in this class is generally made of five components: four quizzes, two tests, four homeworks, two projects, and class participation.

Final grades will be calculated as an average of all individual grade components, weighted according to the percentages below. Students receiving a final average of 90 or above will receive an A; of 80 to 90 will receive a B; of 70 to 80 will receive a C; of 60 to 70 will receive a D; and of below 60 will receive an F. There is no curve. It is intentionally possible for every student in the class to receive an A.

### Quizzes (20%)

There are four quizzes in this course: Quiz 1, Quiz 2, Quiz 3, and Quiz 4. Each quiz contains five open-ended short-answer questions intended to be answered in a paragraph or two. On each quiz, four of the questions are derived from the course video material, and the fifth will be based on one or more readings from the corresponding lessons. Quizzes are digitally-proctored, closed-book, closed-note, and closed-internet; you may not consult any other resources during the quizzes. You have 120 minutes to complete each quiz; note that the intention is not for the quiz to require all 120 minutes, but rather that 120 minutes should be plenty of time to comfortably complete the quiz. The quizzes are delivered via Canvas and proctored via Honorlock.

## **Tests (20%)**

There are two proctored tests in this course, each with 30 questions. Each question is multiple-choice, multiple-correct with five choices and between 1 and 4 correct answers. Partial credit is awarded. The interleaved schedule alternates between Unit 2 and Unit 3; as such, Test 1 covers the first half of each unit (Lessons 2.1 through 2.5 and 3.1 through 3.5), and Test 2 covers roughly the second half of each unit (Lessons 2.6 through 2.10 and 3.6 through 3.8). Note that while Test 2 does not ask any questions about Test 1's material directly, there may be questions that rely on knowledge from older material as well. Each test is worth 10% of your overall grade. The tests are delivered via Canvas and proctored via Honorlock.

### Homework (20%)

There are four written homework assignments in this course: <u>Homework 1</u>, <u>Homework 2</u>, <u>Homework 3</u>, and <u>Homework 4</u>. These written assignments primarily—though not exclusively—focus on Unit 2 content. Each homework asks you to answer four provided questions, each of which is weighted equally. All assignments should be written <u>using JDFLinks to an external site</u>.

## Projects (30%)

There are two projects in this class: an <u>individual project</u> and a <u>team project</u>, each worth 15% of your overall grade. Each project follows the same sequence: you will plan and perform some initial needfinding; brainstorm design alternatives; create three prototypes; plan and perform an evaluation of these prototypes and conduct further needfinding; brainstorm a next prototype; create a new, higher-fidelity prototype; and plan and perform an evaluation of this prototype. A video prototype is required for this final, higher-fidelity prototype as well. The individual and team projects differ primarily on their scope: the team project will expect more needfinding, higher-fidelity prototypes, and more thorough evaluation. You may select your own team for the team project, but if you cannot find a team on your own, you will be assigned to one based on shared interests in project ideas. Both projects should be written <u>using JDFLinks to an external site.</u>.

### **Class Participation (10%)**

HCI is a deeply collaborative field, and there is no better way to learn than to interact with your peers, to participate in one another's usability studies, and to see the variety of approaches taken by your classmates to the class's assignments. Thus, participation credit may be earned in one of several ways: every week there is an assignment available for peer review, and you may also earn credit by participating in one another's surveys and interviews, by participating in discussions on the course forum, by completing annotated bibliographies or submitting candidate exam questions, and by completing the secret survey by clicking the hidden link here before the end of week 2 to indicate you read the entire syllabusLinks to an external site. In order to support rapid feedback, additional incentives are built in to complete peer reviews quickly. Note that all types of participation are graded not only on their quantity, but also on their quality; peer reviews and the course forum contributions only receive credit if they are substantive, and participation in peers' studies receives differing amounts of credit based on the effort involved.

## **Course Policies**

The following policies are binding for this course.

#### **Official Course Communication**

You are responsible for knowing the following information:

- 1. Anything posted to this syllabus (including the pages linked from here, such as the general course landing page).
- 2. Anything emailed directly to you by the teaching team (including announcements via the course forum or Canvas), 24 hours after receiving such an email.

Generally speaking, we will post announcements via Canvas and cross-post their content to the course forum; you should thus ensure that your Canvas settings are such that you receive these announcements promptly, ideally via email (in addition to other mechanisms if you'd like). Georgia Tech generally recommends students to check their Georgia Tech email once every 24 hours. So, if an announcement or message is time sensitive, you will not be responsible for the contents of the announcement until 24 hours after it has been sent.

We generally prefer to handle communication via the course forum to help with collaboration among the teaching team, but we understand the course forum is not ideal for having information "pushed" to you. We may contact you via a private the course forum post instead of an email, but if we do so, we will choose to send email notifications immediately, bypassing your individual settings, in order to ensure you're alerted. As such, this type of communication will also spring under #2 above.

Note that this means you won't be responsible for knowing information communicated in several other methods we'll be using. You aren't responsible for knowing anything posted to the course forum that isn't linked from an official announcement. You aren't responsible for anything said in Slack or other third-party sites we may sometimes use to communicate with students. You don't need to worry about missing critical information so long as you keep up with your email and understand the documents on this web site. This also applies in reverse: we do **not** monitor our Canvas message boxes and we may not respond to direct emails. We are committed to reading all top-level posts that are visible to all instructors, and to reading any follow-up in which we are tagged; while we will try to keep up with ongoing conversations, we cannot commit to reading posts beyond these two types. If you need to get in touch with the course staff, please post privately to the course forum (either to all Instructors or to an instructor individually) or tag the instructor in the relevant post.

#### **Communicating with Instructors and TAs**

Communication with the course teaching team should be handled via the discussion forum. If your question is relevant to the entire class, you should ask it publicly; if your question is specific to you, such as a question about your specific grade or submission, you should ask it privately.

Our workflow is to regularly filter the forum for Unresolved posts, which includes top-level threads with no answer accepted by the original poster, as well as mega-threads with unresolved follow-ups. If your question requires an official answer or follow-up from an instructor or teaching assistant, make sure that it is posted as either a Question or as a follow-up to a mega-thread, and that it is marked Unresolved. Once an instructor or TA has answered your question, it will automatically be marked as Resolved; if you require further assistance, you are welcome to add a follow-up, but make sure to unmark the question as Resolved in order to make sure that it is seen by a member of the teaching team.

Similarly, in order to keep the forum organized, please post as a Post or Note instead of a Question if your question does not require an official response from the teaching team. For example, if you are interested in getting multiple perspective from classmates, getting feedback on your ideas, or having a discussion that does not have a

single answer, please use Post or Note instead of Question. Please reserve Question threads for questions that will likely have a single official response. TAs and instructors will regularly convert Questions to Posts or Notes that do not need a single official answer, but it will save time and allow them to focus their attention on other students if you correctly categorize your post in the first place.

#### **Late Work**

Running such a large class involves a detailed workflow for assigning assignments to graders, grading those assignments, and returning those grades. As such, work that does not enter into that workflow presents a major delay. We have taken steps to limit as much as possible the need to ever submit work late: we have made the descriptions of all assignments available on the first day of class so that if there are expected interruptions (such as like weddings, business trips, and conferences), you can complete the work ahead of time. If you have technical difficulties submitting the assignment to Canvas by the deadline, post privately to the course forum **immediately** and attach your submission. Then, submit it to Canvas as soon as you can thereafter.

If due to a personal emergency, health emergency, family emergency, or other unforeseeable life event you find you are unable to complete an assignment on time, please post privately to the course forum with information regarding the emergency. Depending on your unique situation, we will share guidance on how to proceed; if the emergency is projected to delay a significant quantity of the work required for the class, we may recommend withdrawing and reattempting the class at a later date. If the emergency will likely only impact a small amount of the course, we may be able to accept the work late as a one-time exception. If the emergency takes place once you have already completed a significant fraction of the coursework, we may offer an Incomplete grade to allow you to finish the class after the semester is over. Note that institute policies dictate we can only offer an Incomplete to students who have completed 70% of the coursework; if you will not be able to complete at least 70% of the coursework by the end of the term, you will be advised to withdraw instead.

Note that depending on the nature and significance of the request, we may require documentation from the Dean of Students office that the emergency is sufficient to justify offering an incomplete grade or accepting late work. Note also that regardless of the reason, we also cannot promise any particular turnaround time for grading work that was approved to be submitted late; it may be that grades and feedback will not be returned before the end of the term, and it may be that a temporary grade of Incomplete must be entered to leave time to grade work that was accepted late.

If you are not comfortable sharing with us the nature of an emergency, or if you need more comprehensive advocacy, we ask you to go through the Dean of Students' office regarding class absences. The Dean of Students is equipped to address emergencies that we lack the resources to address. Additionally, the Dean of Students office can coordinate with you and alert all your classes together instead of requiring you to contact each professor individually. The Dean of Students is there to be an advocate and partner for you when you're in a crisis; we wholeheartedly recommend taking advantage of this resource if you are in need. You may find information on contacting

the Dean of Students with regard to personal emergencies here: <a href="https://studentlife.gatech.edu/request-assistanceLinks">https://studentlife.gatech.edu/request-assistanceLinks</a> to an external site.

#### **Academic Honesty**

All students in the class are expected to know and abide by the Georgia Tech <u>Academic Honor CodeLinks to an external site.</u>. Specifically for us, the following academic honesty policies are binding for this class:

First, for homeworks and projects:

- In written essays, all sources are expected to be cited according to APA style. When directly quoting another source, both in-line quotation marks, an in-line citation, and a reference at the end of the document are required. When directly summarizing another source in your own words, quotation marks are not needed, but an in-line citation and reference at the end of your document are still required. You should consult the Purdue OWL Research and Citation ResourcesLinks to an external site. and the Purdue OWL Avoiding Plagiarism ResourcesLinks to an external site. for more specific guidance if you are unfamiliar with standard citation practices. You should also consult our dedicated pages (from another course) on how to use citationsLinks to an external site. and how to avoid plagiarismLinks to an external site. Note, however, that it is not necessary to cite course content from this class itself in your essays; you may assume the reader knows you are completing homeworks and projects as part of this course, and so references to course concepts and vocabulary need not be cited.
- Any figures or images borrowed from other sources must similarly be cited.
  If you borrow an existing figure and modify it, you must still cite the original
  figure. It must be obvious what portion of your submission is your own
  creation.
- It is important to note that "sources" in the above contexts means *any* material that you did not write yourself: it does not matter whether you are referencing academic sources with named authors, general web sites with no named writer, popular open-source libraries with many contributors, or AI-generated text in response to a prompt you provided. Any text that is not originally written by you is considered an external source that should be cited accordingly.
- You may not post the work that you submit for this class publicly either during or after the semester is concluded. We understand that the work you submit for this class may be valuable for job opportunities, personal web sites, etc.; you are welcome to write *about* what you did for this class, and to provide the actual work privately when requested, but we ask that you do not make your actual submissions or code publicly available; this is to reduce the likelihood of future students plagiarizing your work. Similarly, unless you notify us otherwise, by participating in this class you authorize us to pursue the removal of your content if it is discovered on any public assignment repositories, especially if it is clearly contributed there by someone else.

Second, for proctored assessments:

- During all proctored assessments, you are prohibited from interacting directly with any other person on the topic of the exam material. This includes posting on forums, sending emails or text messages, talking in person or on the phone, or any other mechanism that would allow you to receive live input from another person.
- During all proctored assessments, you may only use the device on which you
  are completing the assessment; you may not use other devices, even during
  open-book, open-note assessments as it is not possible to know whether
  secondary devices are being used to consult resources or to interact with
  others. This means that the result of using any keyboard and mouse should
  be observable in the session recording.
- During closed-book quizzes, you may not access any resources besides the quiz itself, including both on-screen resources and physical resources.
- Finally, you may not take any content contained on proctored assessments
  out of the proctored assessment, such as writing down exam questions,
  taking screenshots, or sharing information with classmates. Any attempt to
  retain a copy of exam content, or to obtain or consult exam content retained
  by someone else, will be treated as academic misconduct. Note that while
  open-book tests allow you to interact with other tools, you may not copy or
  transcribe actual exam content into any tool that will let you retain access to
  that content after the exam has ended.

These policies, including the rules on all pages linked in this section, are binding for the class. Any violations of this policy will be subject to the institute's Academic Integrity procedures, which may include a 0 grade on assignments found to contain violations; additional grade penalties; and academic probation or dismissal.

Note that if you are accused of academic misconduct, you are **not** permitted to withdraw from the class until the accusation is resolved; if you are found to have participated in misconduct, you will not be allowed to withdraw for the duration of the semester, nor will you be eligible for grade replacement for this class. If you withdraw anyway, you will be forcibly re-enrolled without any opportunity to make up work you may have missed while illegally withdrawn.

### **AI Collaboration Policy**

Recent advancements in artificial intelligence—Copilot, ChatGPT, etc.—can be great resources for improving your learning in the course, but it is important to ensure that their benefits are targeted at your *learning* rather than solely at your *deliverables*. Toward that end, the same academic integrity policy above applies to AI assistance: you are welcome to consult with AI agents just as you would consult with classmates, discuss ideas with friends, and seek feedback from colleagues. However, just as you would not hand your device to someone else to directly fix or improve your classwork, so also you may not copy anything directly from an AI agent into your document, nor let an AI agent directly generate content for your submission. This rule means you should disable any AI assistance more advanced than a grammar checker inside your word processors and IDEs.

Although you are prohibited from having these tools directly integrated into your workspace or from copying content from these assistants directly into your work, you are nonetheless permitted to use them more generally. The important consideration is to ensure that you are using the Al agent as a learning assistant rather than as a homework assistant: so long as your submission solely reflects your own understanding of the content, you are encouraged to let Al assistants aid in developing your understanding.

#### Feedback

Every semester, we make changes and tweaks to the course formula. As a result, every semester we try some new things, and some of these things may not work. We ask your patience and support as we figure things out, and in return, we promise that we, too, will be fair and understanding, especially with anything that might impact your grade or performance in the class. Second, we want to consistently get feedback on how we can improve and expand the course for future iterations. You can take advantage of the feedback box on the course forum (especially if you want to gather input from others in the class), give us feedback on the surveys, or contact us directly via private the course forum messages.

# Course Summary:

Date	Details	Due
Mon Jan 13, 2025	Quiz Start-of-Course Survey	due by 9am
11011 0411 13, 2020	Quiz Syllabus Comprehension Quiz	due by 9am
Mon Jan 20, 2025	Assignment Homework 1	due by 9am
Mon Jan 27, 2025	Assignment Homework 2	due by 9am
Mon Feb 3, 2025	Assignment <u>Homework 3</u>	due by 9am
Man Eah 10, 2025	Assignment Homework 4	due by 9am
Mon Feb 10, 2025	Quiz Quarter-Course Survey	due by 9am
Mon Feb 17, 2025	Quiz <u>Quiz 1</u>	due by 9am
Mon Feb 24, 2025	Assignment CITI Training	due by 9am

Date	Details	Due
	Assignment <u>Individual Project</u> <u>Check-In 1</u>	due by 9am
Mon Mar 3, 2025	Assignment <u>Individual Project</u> <u>Check-In 2</u>	due by 9am
,	Quiz Quiz 2	due by 9am
	Assignment Individual Project Check-In 3	due by 9am
Mon Mar 10, 2025	Quiz Mid-Course Survey	due by 9am
,	Quiz Quiz 3	due by 9am
	Quiz <u>Test 1</u>	due by 9am
	Assignment Individual Project Check-In 4	due by 9am
Mon Mar 17, 2025	Quiz Quiz 4	due by 9am
	Quiz Team Formation Survey	due by 9am
Mon Mar 24, 2025	Assignment Individual Project	due by 9am
Mon Mar 31, 2025	Assignment Team Project Check-In 1	due by 9am
Mon Apr 7, 2025	Assignment <u>Team Project Check-In 2</u>	due by 9am
Mon Apr 14, 2025	Assignment Team Project Check-In 3	due by 9am
Mon Apr 21, 2025	Assignment Team Project Check-In 4	due by 9am
Mon Apr 28, 2025	Assignment Survey Participant Submission	due by 9am

Date	Details	Due
	Assignment Team Project	due by 9am
	Quiz <u>Test 2</u>	due by 9am
Sat May 3, 2025	Quiz End-of-Course Survey	due by 9am
	Assignment Class Participation	