University of Oklahoma Gallogy College of Engineering

Computer Science 4063/5063

Human-Computer Interaction Spring 2025 Syllabus

Course Description

This course introduces the theory and practice of human-computer interaction, focusing on the graphical user interfaces that make up the modern human-centric computing experience. Topics include fundamental principles of human-computer interaction, interface design and analysis, human cognitive and perceptual capabilities and limitations, desktop/window systems, and social implications of computing. You will learn about current graphic user interface development tools and programming libraries. You will complete a semester-long team-oriented project that provides a realistic experience with human-computer interaction from developer, designer, and end-user perspectives.

General Information

Class Time: Tuesday and Thursday 12:00 pm - 1:15 pm

Class Location: FELGAR Hall 0300

Prerequisites: CS 2413 or CS 2414, and CS 2813 or MATH 2513

Instructor and Office Hours:

Name	Office	Hours	Email
Ghulam Jilani Quadri	DEH 242	Tuesday 2:00 pm - 3:30 pm	quadri@ou.edu
	DEH 242	Thursday 2:00 pm - 3:30 pm	

Teaching Assistant and Office Hours:

Name	Office	Hours	Email
Oluwademilade (Demi) Jooda	DEH 226 or Zoom	Mon 12:00 pm - 01:30 pm	oluwademilade.o.jooda-1@ou.edu
	DEH 226 or Zoom	Wed 12:00 pm - 01:30 pm	
Tapendra Pandey	DEH 226 or Zoom	Tue 03:30 pm - 05:00 pm	pandey@ou.edu
	DEH 226 or Zoom	Thu 03:30 pm - 05:00 pm	
Important Dates			

Important Dates

Final Exam 1:30 - 3:30 pm May 6 (Tuesday), 2025

Course Expectations

Students in the course are expected to engage cognitively and behaviorally in readings, discussions, learning groups, experiential activities, and individual and collaborative assignments, among other teaching methods. Learning is, by itself, with others and for others. Your active participation in the course will help build a community of practice for everyone.

Inclusion Statement

My goal is to create a class in which everyone is welcome, included, and able to learn and succeed. Our readings will include writing from authors of diverse backgrounds and cultures, and we will work together to

create an environment in which each of you can contribute fully. Please tell me if I need to know something to better facilitate a positive and productive learning environment for you.

Text and Course Materials

Required Materials:

Ben Shneiderman, et al. Designing the User Interface: Strategies for Effective Human-Computer Interaction, 6th Edition. Pearson, 2017. ISBN-13: 978-0134380384,

Supplemental Materials (not an exhaustive list):

1. Git, https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet

5.1 Ownership of Course Materials

The instructor retains ownership and all rights to the original content. This includes but is not limited to exams, lectures, quizzes, handouts, protocols, electronic documents, syllabi, and all other materials. Original or transcribed course content may not be copied, recorded, retransmitted, posted on-line, or sold without the expressed written consent of the instructor. Violation of content ownership will be treated as academic misconduct.

5.2 Course schedule

This schedule is tentative and subject to change.

* The due date for the term project: 11:30 pm on 4/25 (Fri)

Assessment

6.1 Project

Student groups will develop their project idea. Regarding the project grade, the group project will be scaled by peer evaluation. The group assessment will be scaled for each individual based on their peer feedback.

Example: The grade for a group: 85%, Peer feedback (1-10): 7, The individual grade for a student: 59.5%.

6.2 Homework

There are assignments on these topics: layout design, a simple interface with evaluation, and interface development.

6.3 Presentations

Each student group will present their project's final outcome and demonstrate their project during the Final Presentation.

6.4 Paper Presentation for CS 5063

Each student choose a paper published in the ACM CHI (https://dl.acm.org/conference/chi), and present a paper in class.

6.5 Final Examination

The final examination will be conducted on 6 May (2025), from 1:30 to 3:30 pm in FELGAR Hall 300.

6.6 Grading Questions

If there is a dispute about the grading of a homework problem, you may stay after class the day the tests are returned to discuss it. If you cannot stay at this time, return the paper to me and stop by during my office hours. Once homework has been removed from the classroom after it has been returned, the grade is final and will not be changed, even if it is found to be in error.

- Homework: Grading questions for projects, reports and homework that are graded by the TA should first be brought to the same TA. If this does not resolve your question, please see the instructor.
- Others: All other grading questions may be brought to the instructor.
- Please note that when a homework is brought with grading questions, we may examine the entire
 assignment and your final grade may end up lower. All disagreements about scores must be brought
 to our attention within one week of when the item is returned.

6.7 Final Grade

The course grade will be determined by the average of the individual homework, and group projects. The final letter grading for the course will be as follows: $A \ge 90\%$, B = 89-80%, C = 79-70%, D = 69-60%, F = 60%. The instructor will round all averages to two significant figures (69.5 will round to 70 and 69.4 will round to 69) to determine the student's letter grade in the course (70 = C, 69 = D). There is no curve in this course. The instructor reserves the right to make linear adjustments to quiz and final exam grades in cases where a quiz or exam question was found to be in error or unreasonably difficult.

6.8 Canvas Grade Summary

Canvas has a grade book that is used to store the raw data that is used to calculate your course grade. It is the responsibility of each student in this class to check their grades on Canvas after each project or homework is returned. If an error is found, bring the grading document to me, and I will correct it.

6.9 Borderline Grade

Final grades on the borderline will be determined based on your class participation and assignment performance. Active participation during class sessions can positively influence your final grade by potentially pushing you over a grade boundary.

6.10 Course Grade

There are four components to the course grade. They are weighted as follows:

Category	Percent of Final Grade
Homework	30% (20% for CS5063)
Term Project	45%
Project Proposal	(5%)
Progress presentation	(10%)
Code review	(5%)
Projects	(20%)
Final report + presentations	(15%)
Group Discussion participation	10%
Paper Presentation	10% (CS 5063 only)
Exam	15%
Total	100%

Course Policies

7.1 Course Home Page: Canvas

This class will use Canvas software for our home page. The URL for the home page is https://canvas.ou.edu. Log in with your 4+4 using your standard OU password. If you have difficulty logging in, call 325-HELP. This software provides several valuable features, including assignments and announcements, an electronic mailing list, newsgroups, and a grade book. I will use this website for all updates. I may update the Canvas page several times a week. When I update the site significantly, I will post an announcement on Canvas telling you what has been added and where it is located. You are responsible for anything posted on the site within 48 hours of the post. Note that you can configure Canvas to email you whenever new information is posted. You should check the site regularly.

7.2 Course Announcements

Announcements will be posted in Canvas. It is your responsibility to 1) Set up Canvas to receive notifications of course announcements, class and group forum messages, and updates to course content, including posting assignments. 2) Ensure that your contact info in Canvas includes an email address you read regularly. I'll send at least one class-wide message during the first week of class. If you do not receive this message, you must resolve the problem immediately. 3) Have your email program set up properly so that replying to your email will work correctly the first time. You can send an email to yourself and reply to yourself to test this. If you need assistance accomplishing any of these tasks, contact OU IT.

7.3 Course Communication

The General Discussion in Canvas should be the primary method of communication outside of class. This allows everyone in the class to benefit from the answer to your question. If you want to contact me, please email me. Please put CS4063-HCI or CS5063-HCI as the first word in the subject line of your email. Do not send messages through Canvas. Matters of personal interest should be directed to email instead of to the discussion, e.g., informing me of an extended personal illness.

7.4 Classroom Conduct

Disruptions of class are not permitted. No electronic devices may be used during class except to take notes or as a direct part of class exercises. Examples of disruptive behavior include:

- Allowing a cell phone or other device to make audible sounds.
- Browsing, listening to music, or playing computer games, regardless of whether they are visible or audible to other class members. (Such activities disrupt YOUR ability to pay attention and participate.)

- Exhibiting erratic or irrational behavior.
- Behavior that distracts the class from the subject matter or discussion.
- Making physical or verbal threats to a faculty member, teaching assistant, or class member.
- Refusal to comply with faculty direction.

In the case of disruptive behavior, I may ask that you leave the classroom and may charge you with a violation of the Student Rights and Responsibilities Code.

7.5 Evaluating the Course

The College of Engineering utilizes student ratings as one basis for evaluating each faculty member's teaching effectiveness. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible to the machine-scored items and the open-ended questions.

7.6 Incompleteness

The grade of I is intended for the rare circumstance when a student who has been successful in a course has an unexpected event occurs shortly before the end of the course. I will not consider giving a student a grade of I unless all three of the following conditions have been met: (1) it is within two weeks of the end of the semester; (2) the student has a grade of C or better in the class; (3) the reason that the student cannot complete the class is properly documented and compelling.

7.7 Collaboration, Cheating, and Plagiarism Policy

You are welcome to discuss the course's ideas, material, and homework with others to understand it better, but the work you turn in must be your own (or, for the project, yours and your teammate's). For example, you must write your code, design your visualizations, and critically evaluate the results in your own words. You may not submit the same or similar work to this course that you have submitted or will submit to another. Nor may you provide or make available solutions to homework to individuals who take or may take this course in the future.

In homework and projects, you must not use libraries or code provided on the internet except when explicitly permitted in the instructions. You may use limited parts of code found online in your project, provided its license allows you to re-use it. You can use general-purpose frameworks or libraries (e.g., Node.js, Bootstrap, JQuery, etc.) You may not use plotting libraries such as plot.ly. You must acknowledge any source code you did not write by a proper citation (author, year, title, time accessed, URL) directly in your source code (comment or header) and provide a link to the source. You can also acknowledge sources in a README.txt file if you used whole classes or libraries. You also must include these references clearly visible on your project website.

We will use both manual and automatic methods to check your submissions for plagiarism and will also check against online sources and submissions from previous years. For details on the policy, please refer to the OU Academic Integrity Policy. Plagiarism will lead to a failing grade in this course.

7.8 Use of Generative AI

Students should complete all coursework individually. If generative AI is used, explicitly declare where it is used in the coursework. Students should highlight their contributions.

7.9 Late Work Policy

You can turn in your homework assignments up to two days late; however, for each day that an assignment is turned in late, we will deduct 10% off the total possible points. One day late is 10% off, and two days is 20% off. So, if your assignment is two days late, the maximum number of points (out of 10) you can receive is 8. With permission from the instructor, you may use more than two late days in extenuating circumstances. However, the 10% rule per day will still apply.

7.10 Class Attendance

You are expected to attend all the lectures in which you are enrolled. In this class, you will participate in the activities of your team. This is an activity-based course; you will learn more effectively by attending the class.

7.11 Make-up Policy

Although the Instructor does not expect a student to miss an assignment, if a student does miss an assignment for a legitimate, verifiable reason, the Instructor will work with the student to provide an opportunity for make-up work.

7.12 Changes in the Syllabus

As the course develops, appropriate changes to this syllabus might be desirable or necessary. The Instructor reserves the right to make changes if necessary.

Course Coverage and Procedures

8.1 Teamwork Issues

The workloads of teams are expected to be evenly distributed among the members. One will risk losing all or part of the project grade if he does not make a fair contribution.

8.2 Backup Copies of Projects

It is the student responsibility to backup their files appropriately. No extensions to deadlines will be given as a result of lost files, unless there is a massive, network wide problem that affects the entire class. Do not rely on anyone else to backup your important files. Configure OneDrive that is a part of your Office365 to make backing up your work a routine part of computer usage. It is particularly important to save a backup copy of any project that is submitted. This backup version should not be opened or edited after submission in case something goes wrong with the submission system.

8.3 Code Sharing for Group Projects

If you are keeping your code on GitHub, you have to keep your code in private repositories.

8.4 Academic Integrity

Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community, it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html. To be successful in this class, all work on exams and assignments must be yours and yours alone. You may not

receive outside help. Should you see someone else engaging in this behavior, I encourage you to report it to myself or directly to the Office of Academic Integrity Programs. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it.

All work submitted for an individual grade, should be the work of that single individual: not their friends or tutor. Please ask me if you are in doubt before you collaborate with others. You have to work individually unless it is stated that a collaboration is allowed.

- Do not show another student a copy of your homework or individual projects before the submission deadline. The penalties for permitting your work to be copied are the same as the penalties for copying someone else work.
- If you choose to do your work on your computer, make sure that your computer account is properly protected. Use a good password, and do not give your friends access to your account or your computer system. Do not leave printouts, or thumb drives around a laboratory where others might access them.
- Upon the first documented occurrence of collaborative work, I will report the academic misconduct to the Campus Judicial Coordinator. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code (http://integrity.ou.edu/summary_of_the_process.html). In the unlikely event that I elect to admonish the student, the appeals process is described in http://www.ou.edu/provost/integrity-rights/.
- If you work with anyone else in completing an assignment, you must include that person's name on the submitted work. Failure to list a student you worked with on the assignment is a violation of academic integrity. If I find that the submitted work appears to be plagiarized, all students involved will be invited to my office individually to explain the work and/or perform similar work. The instructor will determine whether plagiarism occurred based on the match between the depth of understanding of the material displayed in the assignment and the individual interviews.

[See http://integrity.ou.edu/faculty_guide.html]

- Programming projects may be checked by software designed to detect collaboration. This software is extremely effective and has withstood repeated reviews by the campus judicial processes.
- Tutors can be an excellent source of support for students who are having difficulty in the class, but only if the tutor is aware of the distinction between teaching students the material so that they can do their own work, and doing work for students. Tutors who do work for students are not only failing to help the students learn, they are abetting academic misconduct. Examples of misconduct include: If your tutor is sitting behind you while you are typing and methodically telling you what to enter, he or she is abetting academic misconduct. If your tutor is emailing files containing partial or complete programming projects to you, you will commit academic misconduct if you use those lines in your program. More effective use of tutoring services is to do problems that are similar to the assigned work, instead of doing assigned work. For example, it would be fine to work unassigned problems from the textbook with a tutor. This requires significant discipline, both on the part of the tutor and the part of the student. Copying from a tutor is as unacceptable as copying from another student. If your tutor doesn't know how to teach properly, please ask them to call or visit me and I will provide training and guidance. If you are tutoring someone else in the class, you can be accused of academic misconduct if this person copies your work.
- Cheating is strictly prohibited at the University of Oklahoma because it devalues the degree you are working hard to get. As a member of the OU community it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity at http://integrity.ou.edu/students_guide.html.

To be successful in this class, all work on exams and quizzes must be yours and yours alone. You may not receive outside help. On examinations and quizzes you will be informed about permissible study aids. Should you see someone else engaging in this behavior, I encourage you to report it to myself. That student is devaluing not only their degree, but yours, too. Be aware that it is my professional obligation to report academic misconduct, which I will not hesitate to do. Sanctions for academic misconduct can include expulsion from the University and an F in this course, so don't cheat. It's simply not worth it.

- Feel free to discuss all assignments with the instructor or the TAs. However, do not discuss, look at, or copy another student's work. Doing so is considered cheating. For group projects, communication is expected between group members. However, communication about the solution to a project between groups is disallowed. Doing so is considered cheating.
- You may make use of the net as a reference as you are working on assignments. For projects, these
 references must be explicitly documented in your code. However, downloading or deriving specific
 solutions from the net is considered cheating.

8.5 Land Acknowledgement Statement Provided by OU's Tribal Liaison office

Long before the University of Oklahoma was established, the land on which the University now resides was the traditional home of the "Hasinais" Caddo Nation and "Kirikiri:s" Wichita & Affiliated Tribes. We acknowledge that this territory once also served as a hunting ground, trade exchange point, and migration route for the Apache, Comanche, Kiowa, and Osage nations. Today, 39 tribal nations dwell in the state of Oklahoma as a result of settler and colonial policies that were designed to assimilate Native people. The University of Oklahoma recognizes our university's historical connection with its indigenous community. We acknowledge, honor, and respect the diverse Indigenous peoples connected to this land. We fully recognize, support, and advocate for the sovereign rights of all of Oklahoma's 39 tribal nations. This acknowledgment is aligned with our university's core value of creating a diverse and inclusive community. It is an institutional responsibility to recognize and acknowledge the people, culture, and history of our entire OU Community.

University Policies

9.1 Mental Health Support Services

Support is available for any student experiencing mental health issues that are impacting their academic success. Students can either be seen at the University Counseling Center (UCC) located on the second floor of Goddard Health Center or receive 24/7/365 crisis support from a licensed mental health provider through TELUS Health. To schedule an appointment or receive more information about mental health resources at OU please call the UCC at 405-325-2911 or visit University Counseling Center. The UCC is at 620 Elm Ave., Room 201, Norman, OK 73019.

9.2 Title IX Resources and Reporting Requirement

The University of Oklahoma faculty is committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX. Resources available to those impacted include speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you have (or someone you know has) experienced any form of sex or gender-based discrimination or violence and wish to speak with someone confidentially, please contact OU Advocates (available 24/7 at 405-615-0013) or University Counseling Center (M-F 8 a.m. to 5 p.m. at 405-325-2911).

Because the University of Oklahoma is committed to your and other students' safety, and because of our Title IX obligations, I, other faculty, graduate assistants, and teaching assistants are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures in class discussions, writing assignments, discussion boards, emails, and during Student/Office Hours. You may also choose to report directly to the Institutional Equity Office. After a report is filed, the Title IX Coordinator will reach out to provide resources, support, and information, and the reported information will remain private. For more information regarding the University's Title IX Grievance procedures, reporting, or support measures, please visit the Institutional Equity Office at 405-325-3546.

9.3 Reasonable Accommodation Policy

The University of Oklahoma (OU) is committed to the goal of achieving equal educational opportunity and full educational participation for students with disabilities. If you have already established reasonable accommodations with the Accessibility and Disability Resource Center (ADRC), please submit your semester accommodation request through the ADRC as soon as possible and contact me privately, so that we have adequate time to arrange your approved academic accommodations.

If you have not yet established services through ADRC, but have a documented disability and require accommodations, please complete ADRC's pre-registration form to begin the registration process. ADRC facilitates the interactive process that establishes reasonable accommodations for students at OU. For more information on ADRC registration procedures, please review their Register with the ADRC web page. You may also contact them at (405)325-3852 or adrc@ou.edu, or visit www.ou.edu/adrc for more information.

Note: disabilities may include, but are not limited to, mental health, chronic health, physical, vision, hearing, learning and attention disabilities, pregnancy-related. ADRC can also support students experiencing temporary medical conditions.

9.4 Religious Observance

It is the university's policy to excuse students' absences due to religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays without penalty.

[See Faculty Handbook 3.15.2]

9.5 Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact the Accessibility and Disability Resource Center at 405/325-3852 and/or the Institutional Equity Office at 405/325-3546 as soon as possible. Also, see the Institutional Equity Office FAQ on Pregnant and Parenting Students' Rights for answers to commonly asked questions.

9.6 Final Exam Preparation Period

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy, please refer to OU's Final Exam Preparation Period policy.

Emergency Protocol

During an emergency, there are official university procedures that will maximize your safety.

10.1 Severe Weather

If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather:

- 1. LOOK for severe weather refuge location maps located inside most OU buildings near the entrances
- 2. SEEK refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
- 3. GO to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
- 4. GET IN, GET DOWN, COVER UP.
- 5. WAIT for official notice to resume normal activities.

Additional Weather Safety Information is available through the Department of Campus Safety.

10.2 The University of Oklahoma Active Threat Guidance

The University of Oklahoma embraces a Run, Hide, Fight strategy for active threats on campus. This strategy is well known, widely accepted, and proven to save lives. To receive emergency campus alerts, be sure to update your contact information and preferences in the account settings section at one.ou.edu.

RUN: Running away from the threat is usually the best option. If it is safe to run, run as far away from the threat as possible. Call 911 when you are in a safe location and let them know from which OU campus you're calling from and location of active threat.

HIDE: If running is not practical, the next best option is to hide. Lock and barricade all doors; turn of all lights; turn down your phone's volume; search for improvised weapons; hide behind solid objects and walls; and hide yourself completely and stay quiet. Remain in place until law enforcement arrives. Be patient and remain hidden.

FIGHT: If you are unable to run or hide, the last best option is to fight. Have one or more improvised weapons with you and be prepared to attack. Attack them when they are least expecting it and hit them where it hurts most: the face (specifically eyes, nose, and ears), the throat, the diaphragm (solar plexus), and the groin

Please save OUPD's contact information in your phone.

NORMAN campus: For non-emergencies call (405) 325-1717. For emergencies call (405) 325-1911 or dial 911.

TULSA campus: For non-emergencies call (918) 660-3900. For emergencies call (918) 660-3333 or dial 911.

10.3 Fire Alarm/General Emergency

If you receive an OU Alert that there is a danger inside or near the building, or the fire alarm inside the building activates:

- 1. LEAVE the building. Do not use the elevators.
- 2. KNOW at least two building exits
- 3. ASSIST those that may need help
- 4. PROCEED to the emergency assembly area
- 5. ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues.

6. WAIT for official notice before attempting to re-enter the building.

OU Fire Safety on Campus

10.4 Office of Access and Opportunity's Belonging Statement

Why You Belong at the University of Oklahoma: The University of Oklahoma fosters an inclusive culture of respect and civility, belonging, and access, which are essential to our collective pursuit of excellence and our determination to change lives. The unique talents, perspectives, and experiences of our community enrich the learning, and working environment at OU, inspiring us to harness our innovation, creativity, and collaboration for the advancement of people everywhere.

10.5 Course Reflection Survey

You'll receive a Course Reflection Survey at the end of each semester for each course that you are enrolled in. I strongly encourage you to complete this survey. Your feedback can help me adjust my class for future semesters to help other students be successful. Your feedback is confidential and I will only receive it after final grades are due. Course Reflection Survey results may also factor into teaching evaluations and annual performance reviews and are shared with department and program chairs.

10.6 Copyright Statement, for in-person or online courses

Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

10.7 Pre-Finals Week Policy

During pre-finals week, all normal class activities will continue; however, no assignment, test, or examination accounting for more than 3% of the course grade may be assigned, unless it is assigned in advance of pre-finals week and worth less than 10%, or scheduled at least 30 days prior if worth more than 10%. No activity or field trip may be scheduled that conflicts with another class. There are some exceptions and nuances, so please review the Final Exam Policies prior to designing your course schedule.

Tentative Schedule (Subject to Change)