



Course Snapshot

Topics in Computer Science and Engineering CSCE 4930 002

Term: 2026 Fall

Modality: In Person

, -, NO ASSGN

Instructor Information

Name: Stephanie Ludi

UNT Email Address: Stephanie.Ludi@unt.edu

Office Hours and Location

DP A160, MW 10:30-11:30 and by appointment

Office or Department Phone Number: 9403697124

Preferred Contact Method: Email

Expected Response Time: Weekdays: within a day; Weekends: email is checked once per day

Course Description

4930. Topics in Computer Science and Engineering. 3 hours. Topics in Computer Science or Computer Engineering. May be repeated for credit. Prerequisite(s): Junior or senior standing in computer science, computer engineering or information technology, and consent of instructor. You must get Instructor consent by email. As well as, Departmental Consent by filling out the Enrollment Assistance request form at www.cse.unt.edu/overrides. Please upload the instructor consent in the form.

Course Structure

This course will introduce you to the basics of research in computer science as part of your participation in the UR2PHD program for undergraduate research. You will learn what a research problem in CS looks like, how to read and find research papers, how to articulate a problem, and how to propose a research project to solve that problem. It is group-based, so the majority of the work you will do in this course will be collaborative. This course will prepare you for independent research projects in computing and beyond.

The course is comprised of 2 parts: the brief online CS research training that the CRA UR2PHD program offers and the hands-on research that you will be doing in the lab that you have been matched to this semester.

Learning Outcomes and Alignment

These are the BIG IDEAS that you should walk away with and hold on to by the time class is over. Specifically, by the end of this course, you should be able to:

1. RESEARCH SKILLS: Develop practical skills required to effectively conduct a computer science research project
2. COMMUNICATION: Communicate research findings via written and oral means
3. TEAMWORK: Work effectively in a team to accomplish research goals
4. CS & SOCIETY: Evaluate the social, ethical, and cultural impacts of your computer science research project
5. RESEARCH IDENTITY: Develop a computer science research identity for yourself.
6. CAREER: Aspire towards consideration of pursuing a graduate degree in computer science

Course Materials

papers will be assigned on Canvas or by your mentor (in your lab)

Course-Specific Technology

- Zoom: As part of the CRA UR2PHD CS Research Training sessions, there will be live class sessions online with Zoom. Please be sure that you are able to join Zoom meetings prior to the start of class. We will be using the following link for all class sessions: posted on Canvas and emailed to you.
- Webcam and Microphone: We will have significant group interactions online and thus a functioning webcam and microphone are necessary to facilitate these interactions. If you do not have access to a webcam or microphone please contact your instructors for assistance.
- Research project specific materials will be provided to you by your faculty mentor.

Major Assignments and Assessments

The following is what is typically part of this course. The online training portion for UR2PHD may vary from the following, however this is typically what is expected:

Weekly Pre-class and In-class Assignments: Most weeks of class will have some type of pre-class work associated with it to prepare you for class. In-class, we will be doing lots of different types of activities to help you apply concepts related to computer science research.

Group Work and Participation: We expect you to work well in class together each day with either or both your UR2PHD groups (groups made of students from different universities) and your on-site groups (groups made of students from your own research group). You should arrive at class on time each day and be prepared to participate in all activities.

Peer Evaluation: Since the majority of this course involves group work, it is important to be accountable to yourself and your groupmates. You will complete both a mid-course and an end-of-course peer evaluation where you provide a “grade” and feedback to your groupmates.

Research Logs: Taking detailed notes and keeping track of your experimental data are

extremely important aspects of doing computer science research. You will be expected to keep an online research log that you update regularly with your tasks, data, and accomplishments. You will complete these assignments independently.

LinkedIn Profile: In order to facilitate your professional development in the computer science research community, you will be building a LinkedIn profile during the course. Each week, you will add small components to your profile, and by the end of the course will have a fully developed profile that you will use to share the progress of your research project and you will begin making connections with the broader computer science community. You will complete this assignment independently.

Research Proposal: The heart of this course is the writing of a research proposal. We will guide you through this process and help you structure your proposal over several weeks, starting with a literature review and ending with a fully developed proposal. You will complete this assignment with your on-site group.

Presentation: You will present your research proposal to the class at the end of the course two ways. First, you will give a brief “promo” presentation live on Zoom where you give the major highlights of the proposal. Second, you will record a more formal presentation video similar to what you would present at a research conference. You will complete this assignment with your on-site group.

Exams and Quizzes: There are no quizzes nor exams in this course.

Research Work with your Faculty Sponsor: The work here will be identified by your faculty sponsor. Typically, this could consist tasks such as reading papers, writing paper summaries, program design, coding, testing, and participating in the conduct of experiments or studies.

Grading and Feedback

There will be multiple grading opportunities in this course, giving you many chances to do well. A summary of the various grading opportunities is given below.

The online training aspect of the course will constitute 50% of your final grade. It is graded by

the the facilitators based on the following:

Assignment	Weight	Comments
Participation	10%	12x, drop 1
Research Logs	10%	6x, drop 1
Peer Evaluation	10%	2x, mid and final
Pre-class and Homework	10%	~13x, drop 1
LinkedIn Profile	10%	4x throughout the course
Final Presentations	10%	2x, recorded and live
Research Proposal	40%	Several components

The other 50% of your grade will be based on feedback from the faculty member that you are working with on your research project this term. There will be evaluations from them in Week 5, 10 and 16.

You earn a grade based on your overall performance. Grades will be assigned according to your institution's grading scale and represent the extent of the demonstrated mastery of the material listed in the learning objectives. As general guidelines, composite scores of ~90% or above are an A, >80% are a B, >70% are a C, >60% are a D and below 60% are an F.

There may need to be some adjustment to the specifics of the online course, however the example above gives you the typical grading approach. The schedule will be adjusted if needed.

Course Calendar

This course runs for the full semester, where the research project activities will vary by lab.

The online training part, starts in mid-September and you will be contacted

by the UR2PHD program with information on how to access your session of the online training. You will be attending the same online training session as your partner/teammates so that you can work on in-class activities together in the online session.

Authorized Absences Policy

An absence will be excused by the university for: a. religious holy day, including travel for that purpose; b. participation in an official university function; c. required military service, including travel for that purpose; d. pregnancy and parenting under Title IX; and e. when the University is officially closed.

For more details and procedures regarding UNT Authorized Absences, please see [Policy 06.039](#).

Absences that do not fall under Title IX, Required Military Service, and Official University Absences (religious holy days, participation in an official university function, and when the University is officially closed), are deemed a matter between the student and their faculty member. If the absence is due to an illness or extenuating circumstance that exceeds 5 consecutive days, the faculty member may request for the student to provide documentation through the Dean of Students' office.

Course Level Absence Practice

Attendance: You must attend each class on time, and participate actively in the class activities. For each class session, you will receive a grade of Participating if you arrive on time and actively participate in class activities, or Absent/Not Participating if you are either not present, very late, or not participating. Please be on time, have your microphone ready to use, and have your webcam on to facilitate group interactions. Students who are chronically late will not receive full participation credit. Excused absences will be honored.

Absences: You are expected to attend all scheduled class sessions for your specific

section. This course is not following any specific university calendar, so if your university has a holiday or break day when we have class, we still expect you to attend. If you need to miss a session, please let your instructors know ahead of time and attend the other section if possible. If you cannot attend the other section, then we will provide you with access to the class recording for your th review and you can make up the assignments from that day within a certain period of time. If you routinely miss class we will reach out to you for a discussion.

UNT Academic Integrity Policy

According to [UNT Policy 06.003](#), Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Course Specific Academic Integrity Practice

Academic Integrity: In this course, you will complete your work honestly, with integrity, and support an environment of integrity. You will get out of the UR2PHD course what you put into it. For that reason, it does not make any sense to cheat. All work in this class must be your own or the work of your group, where appropriate. ALL writing must be your own original work, or the joint work of your group where appropriate, and may not be copied from any source without proper attribution. If you have any questions or concerns about what constitutes cheating in this class, please ask the instructors as soon as the question arises. All work in this course will be clearly labeled as “individual” or “group” work. When the work is individual, we expect that you will complete the work thoughtfully on your own. You may work alongside others and discuss the work, but all writing should be yours and yours only. When the work is group-based, you will submit a single submission for your entire group, and you will all receive the same grade (with some limited exceptions, see specific assignments for details).

General AI policy: Generative Artificial Intelligence (genAI) tools such as ChatGPT are important resources in many fields and industries. Because these tools will be used in professional and personal contexts, we believe it is valuable for you to engage critically

with these tools and explore their use in generating content submitted for evaluation in this course, including [papers; take-home examinations; specified other assignments]. You remain responsible for all content you submit for evaluation. You may use genAI tools to help generate ideas and brainstorm. However, you should note that the material generated by these tools may be inaccurate, incomplete, biased, or otherwise problematic. We encourage you to consider how genAI complements, supplants, or fails to replace your contributions and abilities. If you include content (e.g., ideas, text, code, images) that was generated, in whole or in part, by Generative Artificial Intelligence tools (including, but not limited to, ChatGPT and other large language models) in work submitted for evaluation in this course, you must document and credit your source. Failure to properly cite sources, including AI tools for generating content, would be considered academic misconduct.

AI Use Practice

In this course, the use of GenAI tools is limited as directed by the instructor. Any additional use requires explicit permission, proper citation, and authentic student work.

Course Level Practices

Courtesy to your fellow students and instructor during online class sessions: While we will be holding class online, we still expect you to be courteous to each other and to your instructors. This includes muting your microphone when not speaking, not speaking over someone else, using appropriate language, and overall simply being respectful. By doing so you will help create a positive and inclusive online classroom environment where we can work together successfully!

Late or missing work: Late work will not be accepted. Missing work will be considered a dropped assignment score. If you have an official university excused absence, then you may be excused from the assignment in question and you do not have to make it up and it does not count as a dropped assignment.

Regrade policy: If you think your work has been graded inappropriately, you may submit

a regrade request within one week of when the work is returned to you. You must submit this request in writing (i.e. email) to your instructors and give evidence for why your work should be re-graded. Note that when submitting a regrade request, the entire assignment will be re-graded, not just the portion in question.

Principles for group interaction: Be respectful. Be sensitive. Be aware. Promote Others. UR2PHD is about building a community where everyone feels supported, included, empowered and safe. To promote this environment, it is imperative that everyone adhere to the communication guidelines below:

- Treat your classmates with respect.
- Be thoughtful and open in discussion.
- Be aware and sensitive to different perspectives.
- Build one another up and encourage one another to succeed.
- Actively ensure that everyone is contributing to the discussion.

Academic Support and Student Services

Technology Support

Part of working in the online environment involves managing the inconveniences and frustrations that can arise when technology breaks down or does not perform as expected. Here at UNT, we have a [Student Help Desk](#) that you can contact for help with Canvas or other technology issues:

- Phone: 940-565-2324
- Email: helpdesk@unt.edu
- Current list of [Student Help Desk hours](#)

Academic Support Services

- The [UNT Academic Resource Center](#) provides links to the bookstore, registration and advising information, tuition information, financial aid, and more.
- The [UNT Academic Success Center](#) offers academic support services and free individual tutoring.

- [UNT Writing Lab](#)
- [UNT Libraries](#)

Student Services

- [Counseling and Testing Services](#)
- [Student Affairs Care Team](#)
- [Student Health and Wellness Center](#)
- [Student Legal Services](#)
- [UNT Food Pantry](#)

Civil Discourse

As a leading public university, the University of North Texas has a fundamental responsibility to create enduring value for the public good. The fulfillment of our mission as a university depends upon the free exchange of ideas in the pursuit of knowledge. We bring these commitments into action by centering civil discourse in our culture and curriculum. We define civil discourse as the practice of constructive dialogue to broaden understanding, grounded in our shared values and deep respect for each other's potential. By committing to this practice, we seek to equip every student with skills and mindsets to engage, contribute, and lead—at UNT and throughout your lives.

My role as an instructor is to introduce you to different ideas and scholarship and facilitate discussions that are credible, open, respectful, and relevant to this course. Our class brings together individuals with different backgrounds, experiences, and viewpoints. You may disagree with the views presented, and others may disagree with your views. But, you should expect to be listened to with respect and evaluated fairly based on the learning objectives of this course. Even when you disagree, engaging with other points of view can help you better understand both the issue at hand and your own perspective. While we may engage in vigorous debate about competing ideas, speech that violates the Student Code of Conduct, including speech that harasses a specific individual or disrupts the course is not acceptable and works against our educational mission.

University Policies

ADA Accommodation Statement: UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the ODA website at disability.unt.edu.

Emergency Notification & Procedures: UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.

Retention of Student Records: Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Blackboard online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional

information.

Acceptable Student Behavior: Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at deanofstudents.unt.edu/conduct.

Access to Information – Eagle Connect: Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail: eagleconnect.unt.edu/.

Student Evaluation Administration Dates: Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website at spot.unt.edu or email spot@unt.edu.

Survivor Advocacy: UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit

sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565-2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Pregnancy Modifications Under Title IX and Parenting Resources: UNT is committed to supporting students who may need pregnancy and parenting modifications in compliance with Title IX. If you are a pregnant student or have a pregnancy related condition, please visit report.unt.edu and complete the 'Request Pregnancy/Parenting Modifications' form. Parenting students who may need resources can seek support and guidance from the Dean of Students and the Eagle Engagement Center. [Pregnant and Parenting Students Policy number 16.008](#).

Copyright Notice: Materials used in connection with this course may be subject to copyright protection. Materials may include, but are not limited to: documents, slides, images, audio, and video. Materials in this course website are only for the use of students enrolled in this course, for purposes associated with this course, and may not be retained for longer than the class term. Unauthorized retention, duplication, distribution, or modification of copyrighted materials is strictly prohibited by law. For more information, visit the [UNT Policy Office](#), or [Copyright.gov](https://copyright.gov).

Web Accessibility & Privacy: Please find the web accessibility and privacy statements for UNT and Canvas.

UNT

- [Web Accessibility Policy](#)
- [Privacy Statement](#)

Canvas/Instructor

- [Accessibility Statement](#)
[Privacy Policy](#)