

Course Syllabus - Fall 2025

Note: Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: Special Topics in Engineering: AI Literacy

Credits: 2

Format: Hybrid with In-Person Labs

Prerequisites/Recommended Preparation: None.

Instructor Information:

Course Instructor & Designer: Arash Zaghi, Ph.D.

Co-Instructor: Michael Vaccaro, Ph.D.

Communication:

This is a large course, so we want to make sure your questions and concerns are addressed in the fastest way possible. Your first line of communication is your Lab TA (see email in the list below). Please also CC the course instructor email (ai4all@uconn.edu) on all communications with any questions/concerns you have. Please add "ENGR 1195: AI Literacy" along with your lab section to the subject line of your email.

Please allow for a response time of 1 to 2 business days.

TA Information:

Lab TAs are assigned by section. Please refer to the table below for your assigned TA.

| Assigned TA | Email | Sections |
|----------------------|--|--|
| Nick Bailey | nicholas.bailey@uconn.edu | 019 (M 2:30 – 3:45) 017 (W 1:25 – 2:40) |
| Becca Padron | rsp23001@uconn.edu | 028 (Tu 2:00 – 3:15) |
| Yuna Kuo | yuan-jen.kuo@uconn.edu | 014 (W 12:20 – 1:35) 020 (W 2:30 – 3:45) |
| Jimmy Padilla | jimmy.padilla@uconn.edu | 016 (M 1:25 – 2:40) 024 (Tu 11:00 – 12:15) |
| Kenneth Chow | kenneth.chow@uconn.edu | 027 (Th 12:30 – 1:45) |
| Millenia Polanco | millenia.polanco@uconn.edu | 026 (Tu 12:30 – 1:45) |
| Connie Syharat | connie.syharat@uconn.edu | 018 (F 1:25 – 2:40) |
| Anna Persuad | arp23050@uconn.edu | 029 (Th 2:00 – 3:15) |
| Claire Olmstead | cao23008@uconn.edu | 010 (M 11:15 – 12:30) 011 (W 11:15 – 12:30) |
| Vishal Saminathan | vishal.saminathan@uconn.edu | 012 (F 11:15 – 12:30) |
| Nandhana Senthikumar | nas23030@uconn.edu | 023 (Th 9:30 – 10:45) 015 (F 12:20 – 1:35) |
| Jasmine Yee | jasmine.yee@uconn.edu | 022 (Tu 9:30 – 10:45) 021 (F 2:30 – 3:45) |
| Himanshu Thakur | himanshu.thakur@uconn.edu | 013 (M 12:20 – 1:35) 025 (Th 11:00 – 12:15) |

Office Hours/Availability: By previous appointment. Please do not hesitate to reach out.

Course Materials

Required course materials should be obtained/installed on your computer before the first day of class.

Required Materials:

Note: The University has set [minimum device requirements for all students](#). Chromebooks and iPads do not meet these requirements and are not compatible with the software used in this course.

Item 1. Laptop with either Windows or MacOS operating system.

The assignments in this course require you to use the *desktop version* of Microsoft Word on either a Windows or a Mac laptop. Chromebooks and tablets like iPads cannot run the *desktop version* of Microsoft Word, which is required to complete the assignments in this course.

Please be sure to bring your *laptop* (and charger if necessary) with you to *every lab section*.

Item 2. Software – *Microsoft Word*

Many of the assignments will require you to use the *desktop version* of Microsoft Word. You can download and install Microsoft 365 apps (including Microsoft Word) for free using your University account. Please reference the knowledge base article below published by UConn ITS for instructions. Follow the instructions to “Install on a personal computer”.

Note: If you do not have a computer that can run the *desktop version* of Microsoft Word (e.g., Chromebook), you may be able to run it through [Uconn Anyware](#). This option is *not recommended* unless you cannot install Office apps on your computer.

Additional course readings and media are available within HuskyCT, through either an Internet link or Library Resources.

Course Description

AI is a powerful tool that is already shaping our future. This course treats AI as something you can use today for learning, creativity, and real problem solving. We will lean into its benefits for personal growth and societal good, while building a grounded ethical compass for how to use it well.

You will work hands-on with modern AI systems. You will practice asking better questions, turning ideas into drafts and prototypes, and checking results with a critical eye, keeping your own voice along the way. You will learn where AI helps and where human judgment matters most.

In this course, we will talk about privacy, bias, transparency, and truthfulness. We will also focus on accessibility and personalization so every student can build a workflow that fits the way they learn and think. Expect short lessons, active labs, case studies from many fields, and reflective work that helps you turn skills into habits.

Course Objectives

By the end of the semester, students should be able to:

1. Explain core AI ideas and key milestones. Describe AI’s impacts on learning, work, and society in plain language.
2. Design prompts and human-AI workflows that keep your own voice. Finish tasks with clear human checks in the loop.
3. Evaluate AI outputs with a structured checklist. Verify facts with multiple sources and document your steps.
4. Identify privacy risk, bias, and opacity in real use cases. Propose safer alternatives and name trade-offs.
5. Take and defend a position in ethical scenarios that involve generative AI. Justify your stance with reasons and evidence.
6. Build an AI-augmented solution or prototype for a real need. State goals and compare quality, cost, time, and risk.
7. Personalize AI tools for focus and accessibility. Create workflows that fit how you learn and think.
8. Apply AI across disciplines and modalities.
9. Compare different AI models or tools on the same task, reporting strengths, limits, and failure modes.
10. Draft a sustainable lifelong-learning plan for AI, including habits, privacy practices, and ways to keep your skills current.

Course Outline & Calendar

Module 01: Course Introduction & the AI Revolution

Module 02: The Evolution of AI & Emergence of Generative Models

Module 03: Using Generative AI Tools for Knowledge & Creativity

Module 04: Foundations of Prompt Engineering

- Module 05:** Fundamentals of Learning & AI-Enhanced Personalization
Module 06: AI-Metacognitive Skills
Module 07: Using Generative AI for Communication & Teamwork
Module 08: Challenges, Critical Reliance, and Ethical Implications of Advanced Generative AI
Module 09: Thinking Critically with Generative AI
Module 10: Practical Strategies for Validating Generative AI Outputs
Module 11: Multimodal AI & Ethical Implications of Generative AI
Module 12: Harnessing AI for Inclusive Empowerment
Module 13: Balancing Automation & Ability
Module 14: Prospects of AI

Please see the Course Schedule linked in HuskyCT for the due dates in each module.

Course Requirements and Grading

Summary of Course Grading

| Course Components | Weight |
|--------------------------|--------|
| Post-Lecture Assignments | 30% |
| Lab Check-in | 20% |
| Lab Assignments | 50% |

1. Post-Lecture Assignments

Each module begins with two short lectures. You can watch the videos (~10 minutes each) or listen to the podcast versions (~15 minutes each). Both cover the same material. After each lecture, you'll complete one Post-Lecture Assignment (two per module). These are short reflections or quick exercises. They're not quizzes; they're meant to help you think critically and prepare for lab.

Engaging with the lectures before lab is essential. It sets you up to contribute meaningfully to both the individual and group activities.

Deadlines and attempts:

- **Due time:** Except for Module 1, both Post-Lecture Assignments are due by 11:59 PM ET the day before your scheduled lab. See the Course Schedule for Module 1 due dates.
- **Attempts:** You have unlimited submissions until the deadline; only your final submission is graded.
- **Grade drops:** Your two lowest Post-Lecture Assignment scores will be dropped at the end of the semester.

For ongoing tips, quick demos, and new content beyond the formal lectures, feel free to subscribe to the course YouTube channel (www.youtube.com/@AI4ALL-Zaghi) to keep your learning fresh all semester and beyond this course.

2. Lab Check-in

Each week your lab TA will have a Slido QR code on the projector at the beginning of class. These check-ins will contain three questions: 1 about how you are doing that day and 2 about the week's video lectures. Lab check-ins will start Week 2. Your 1 lowest grade will be dropped at the end of the semester.

3. Lab Assignments

There is one lab assignment per module. Labs are the core of this course, and your success depends on showing up and participating actively. You will work in person with a team of three or four during your scheduled lab. Each student will complete and submit their own lab document. Labs blend short individual exploration of AI tools with team discussion. The work is designed to be finished in the room. Skipping lab means missing the hands-on practice and critical discussion/reflection that lecture cannot replace.

Deadlines and attempts:

- **Due time:** Labs are due 11:59 PM ET on the day your lab meets. Lab assignments are designed to be completed during class. We highly encourage you to submit by the end of class, but you can polish/finalize your submission after class if needed.
- **Attempts:** You have unlimited submissions until the deadline; only your final submission is graded.
- **Grade drops:** Your lowest lab score will be dropped at the end of the semester.

A note on Lab Participation

Please come to class each week ready to participate actively in your group discussion. Collaboration with your peers is at the heart of this course's design. Please send an email to your Lab TA and CC the course instructors (ai4all@uconn.edu) if you will not be able to attend class one week.

Undergraduate Grading Scale

| Explanation | Weighted Grade | Letter Grade | GPA |
|----------------|----------------|--------------|-----|
| Excellent | 93 - 100 | A | 4.0 |
| | 90 - 92.99 | A- | 3.7 |
| Very Good | 87 - 89.99 | B+ | 3.3 |
| | 83 - 86.99 | B | 3.0 |
| Good | 80 - 82.99 | B- | 2.7 |
| | 77 - 79.99 | C+ | 2.3 |
| Average | 73 - 76.99 | C | 2.0 |
| Fair | 70 - 72.99 | C- | 1.7 |
| Poor | 67 - 69.99 | D+ | 1.3 |
| | 63 - 66.99 | D | 1.0 |
| Merely Passing | 60 - 62.99 | D- | 0.7 |
| Failure | 0 - 59.99 | F | 0.0 |

Requests for any bonus grades to put you in the next grade bracket will not be accepted. Any requests for passing the course if your grade is less than 59.99 will not be accepted.

Information on grades and grading can be found on the Registrar's site and in the catalog:

- [Registrar's Information on Grading Scales](#)
- [Undergraduate Catalog Grade Information](#)

Due Dates and Late Policy

Due Dates: All course due dates are identified in the Course Schedule available in HuskyCT. Deadlines are based on U.S. Eastern Time; if you are in a different time zone, please adjust your submission times accordingly. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

Late Policy: You will lose 10 percent per day an assignment is late, unless otherwise approved by a course instructor in the case of a medical emergency or an approved co-curricular activity. The assignment will not be accepted for credit if not submitted within 5 calendar days of the original deadline.

Work missed resulting from a medical emergency or from co-curricular activities performed in the interest of the university and/or those that support the scholarly development of the student may be accommodated on a case-by-case basis. Students involved in co-curricular activities should inform the course instructors in writing using the ai4all@uconn.edu email at least one week prior to the anticipated absence and should take the initiative to make up missed work in a timely fashion.

Feedback and Grades

We will make every effort to provide feedback and grades within **two weeks** of the due date. To keep track of your performance in the course, refer to the "Gradebook" tab in HuskyCT.

Weekly Time Commitment

You should expect to dedicate 6-9 hours a week to this course. This expectation is based on the various course activities, assignments, and assessments and the University of Connecticut's policy regarding credit hours. More information related to hours per week per credit can be accessed at the [Online Student website](#).

Course Policy on Generative AI

Using AI in this course

- AI use is expected. You will work with generative AI each week for ideas, drafting, and problem solving.
- You are the director. Your job is to give the system enough context, constraints, and examples so the output reflects your ideas and experiences.

What's not allowed

- **Zero-shot paste-backs:** typing the assignment prompt once, pasting the raw output, and submitting. This shows no context, no iteration, and little learning. It will earn a low score.

OK vs. Not OK

- **OK:** Build context, run several prompts, point to course concepts, get a draft that reflects your ideas, verify and refine, submit and acknowledge your use of generative AI.
- **Not OK:** One prompt → copy → submit. Output that ignores your context or the course material.

What good AI use looks like

- You build context before generating an output: who you are, what you know, goals, constraints, examples from your work, relevant course material(s).
- You iterate with follow-ups. You ask for alternatives, checks, and improvements.
- You align the result with the lab or lecture. You point the system to the exact ideas we covered.
- You verify facts and remove errors. You add citations when you use sources.
- You include an AI use statement, including AI model and what it was used for.

Each graded submission will ask you for:

- **Tools used:** e.g., ChatGPT, Claude, Gemini, Grok, etc.
- **Key prompts (including context)**

Copyright Notice

My lectures, notes, handouts, and displays are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. I will inform you as to whether you are authorized to record my lectures at the beginning of each semester. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else, or make a commercial use of them without prior permission from me.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Resources on Avoiding Cheating and Plagiarism
- [Academic, Scholarly, and Professional Integrity and Misconduct \(ASPIM\)](#)
- Copyrighted Materials
- Credit Hours and Workload

- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment, and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Student Health and Wellness

The University of Connecticut strives to support the optimal well-being of all students. [Student Health and Wellness](#) (ShaW) offers a comprehensive set of services including medical care, mental health, and health promotion.

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or visit <https://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from [Blackboard's website](#))

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- HuskyCT/Blackboard ([HuskyCT/ Blackboard Accessibility Statement](#), [HuskyCT/ Blackboard Privacy Policy](#))
- [Adobe Acrobat Reader](#) ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Microsoft Office ([free to UConn students](#)) ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).

For information on managing your privacy at the University of Connecticut, visit the [University's Privacy page](#).

NOTE: This course has NOT been designed for use with mobile devices.

Help

This course is facilitated online using the learning management platform, [HuskyCT](#). The [IT Knowledge Base](#) provides students with support, troubleshooting, and how-to information about HuskyCT. The [IT Knowledge Base](#) includes a video tour of HuskyCT.

For technical help with HuskyCT, you have access to the in-person/live person support options available during regular business hours through the [Technology Support Center](#). You also have [24x7 Course Support](#) outside of business hours, including access to live chat, phone, and support documents.

[Technical and Academic Help](#) provides a guide to frequently asked questions for online students that may be helpful to you as well.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Use Microsoft Word documents.
- Fill out and access assignments in HuskyCT.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics, or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's [Student Evaluation of Teaching \(SET\)](#), which is administered by the [Office of Budget, Planning and Institutional Research \(BPIR\)](#).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.

Blackboard Materials Copyright Notice

The materials on the course web site are only for the use of students enrolled in this course, for purposes associated with this course, and may not be retained or further disseminated.

This course has NOT been designed for use with mobile devices.

Blackboard conforms to the Web Content Accessibility Guidelines (WCAG) 2.1 Level AA: Blackboard's Accessibility Statement