

University of North Texas
Department of Computer Science and Engineering
CSCE 5900 - Special Problems

(Ethics of Artificial Intelligence (1 credit hour) on Fall/2026)

Class:

CSCE 5900-001 (14643), Th 10:45AM - 11:35AM, NTDP D207A

*(This class is only 1 credit hour, and there is only one weekly meeting on **Thursday, 10:45 to 11:35AM**)*

Instructor:

Dr. Moawia Eldow

Office: E250E

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Office hours: TBA

TA/IA for 5900-001:

Name: TBA

Email: TBA

Office hours: TBA

(Important statement: *We reserve the right to modify course policies, the course outline, assignment or project point values, and due dates.***)**

Course Description, Structure, and Objectives

Course Description

The course is **a one-credit class** about special problems focusing on the ethical considerations surrounding Artificial Intelligence (AI) systems. The course focuses mainly on the principles that guide the responsible development and deployment of AI technologies, like how do we ensure AI products' fairness, transparency, privacy, and accountability. The course will cover some examples of technical aspects for explainable AI and responsible AI. **The course will be taught for one hour per week over a 16-week semester.**

Course Prerequisites

There is no required background to take this class.

Course Objectives (Learning Outcomes)

By the end of the course, students will be able to:

1. Understand the importance of ethics in the field of Artificial Intelligence (AI).
2. Describe AI ethical considerations on Fairness/Non-discrimination, Transparency/ Explainability, Privacy/Security, and Accountability.
3. Understand the technical aspects surrounding AI ethics, like LIME and SHAP in the explainable AI and recent methods in the responsible AI.

Required Textbooks

Ethics in Artificial Intelligence and Information Technologies (EAIT), by Gabriela Arriagada-Bruneau, Claudia López and Marcelo Mendoza, 1st Edition, CRC Press, 2026. ISBN: 9781003454625 (e-text) / 9781032594224 (print), <https://doi.org/10.1201/9781003454625>

Recommended Resources

Students can find many other recommended resources such as journal articles, website articles, references, and YouTube videos on the website of the class on Canvas.

Course Assessment

Discussions:

Discussions are methods for the online forum between students, instructor and TAs/IAs. Topics will be assigned for students led discussions that will include short literature related to and in support of the assigned topic in the social, ethical and professional issues of artificial intelligence. Students are expected to post a response to the assigned discussion topic as well as respond to other students' postings. Rubrics will be provided for the evaluation of the discussions.

Quizzes:

Generally, quizzes will be given based on the readings. Quizzes will test students' knowledge on the most important aspects of the readings only. Quizzes contain two parts: multiple choice questions (MCQs) and short-answer/critical-thinking questions (SAQs).

Written Assignments (Essays):

Written Assignments (Essays) are designed to engage students in their learning, so students can begin to apply the reading principles in practice and tailor them to given cases of problems and issues in Artificial Intelligence. Assignments are to be turned in individually, although students are encouraged to work together extensively. Rubrics will be provided for the evaluation of the written assignments.

Exams:

There will be one **midterm exam** during the middle of the term, which will cover the first half of the class topics. There will also be a **final exam** during finals week, which will cover the second half of the class topics.

Grading

Grades are determined by a simple points system. The expected distribution of points is given below, with the exact scale determined by percent given for the discussions, assignments, quizzes, and exams.

Assessment Category	Points	Percent
Discussions (<i>4 discussions – 10 points each</i>)	40	20%
Quizzes (<i>6 quizzes – 15 points each</i>)	90	30%
Written Assignments (<i>2 assignments – 15 points each</i>)	30	20%
Exams (<i>2 exams – 40 points each</i>)	80	30%
<u>Total</u>	<u>240</u>	<u>100%</u>

Grading Scale

Grading scale in this class will be as follows:

A = 90%-100%, **B** = 80%-89.9%, **C** = 70%-79.9%, **D** = 60%-69.9%, & **F** = <59.9%

Late Submission Policy:

Late work will not be accepted on this course. All work turned in after the deadline may lose a percentage of their graded points according to the following schedule:

On time: **0%**, 1-3 days: **10%**, 4-7 days: **20%**, 8-14 days: **40%**, > 14 days: **100%**

Course Requirements/Schedule

Module/Week	Readings/Resources (Refer to other resources on Canvas)	Evaluation (Refer to due dates/times on Canvas)
<u>Module 1:</u> AI and Ethics <u>Aug. 17-28</u>	Reading & Resources: • EAIIIT: Chapter 1 (What is AI Ethics?) • Other related resources on Ethics in AI	Activity: • Module 1 Discussion (10 pts) Evaluation: • Module 1 Quiz (15 pts) • Module 1 Written Assignment (15 pts)
<u>Module 2:</u> Integrating Ethics into AI Projects <u>Aug. 31-Sep. 11</u>	Readings and Resources: • EAIIIT: Chapter 2 (Sociotechnical Approach to Integrate Ethics into AI Projects), • Other related resources on the Sociotechnical Approach.	Activity: • Module 2 Discussion (10 pts) Evaluation: • Module 2 Quiz (15 pts)
<u>Module 3:</u> Bias and Fairness in AI <u>Sep. 14-25</u>	Readings and Resources: • EAIIIT: Chapter 4 (Bias in AI), Chapter 5 (5.1 Fairness in AI) Other related resources on Bias and Fairness in AI	Activity: • Module 3 Discussion (10 pts) Evaluation: • Module 3 Quiz (15 pts)
<u>Sep. 28-Oct. 2</u>	Review Week for Mid-Term Exam	
<u>Oct. 5-9</u>	Mid-Term Exam (Modules 1, 2 & 3) (40 pts)	
<u>Module 4:</u> Accountability and Explainability in AI <u>Oct. 12-23</u>	Readings and Resources: • EAIIIT: Chapter 5 (5.3 Accountability in AI, 5.4 Transparency in AI) • Other related resources on Accountability and Explainability in AI	Activity: • Module 4 Discussion (10 pts) Evaluation: • Module 4 Quiz (15 pts) • Module 4 Written Assignment (15 pts)
<u>Module 5:</u> Technical Aspects of Explainable AI <u>Oct. 26-Nov. 6</u>	• EAIIIT: Chapter 7 (Explainable Artificial Intelligence) • Other related resources on LIME and SHAP for Explainable AI.	Evaluation: • Module 5 Quiz (15 pts)
<u>Module 6</u> Technical Aspects of Responsible AI <u>Nov. 9-20</u>	• EAIIIT: Chapter 6 (6.3 Responsible AI) • Other related resources on technical aspects for Responsible AI.	Evaluation: • Module 6 Quiz (15 pts)
<u>Nov. 23-27</u>	Thanksgiving Break (no classes)	
<u>Nov 30-Dec 4</u>	Review Week for Final Exam	
<u>Dec 7-11</u>	Final Exam (Modules 4, 5 & 6) (40 pts)	

Communication

Students are expected to communicate with the instructor/TAs through the office hours, using only the UNT emails of students and instructor/TAs, and/or the communication facilities provided in Canvas. Connect with me through email and/or by attending office hours. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within two business days, please send a follow up email. A gentle nudge is always appreciated.

Laboratory Safety Procedures and Guidelines policy

Students can access this policy at: [Laboratory Safety Procedures and Guidelines policy \(PDF\)](https://policy.unt.edu/sites/default/files/06.049_Standard%20Syllabus%20Policy%20Statements_supplement.pdf) (https://policy.unt.edu/sites/default/files/06.049_Standard%20Syllabus%20Policy%20Statements_supplement.pdf).

Attendance and Participation

Research has shown that students who attend class are more likely to be successful. You should attend every class unless you have a university excused absence such as active military service, a religious holy day, or an official university function as stated in the [Student Attendance and Authorized Absences Policy \(PDF\)](https://policy.unt.edu/sites/default/files/06.039_StudAttandAuthAbsence.Pub2_.19.pdf) (https://policy.unt.edu/sites/default/files/06.039_StudAttandAuthAbsence.Pub2_.19.pdf). If you cannot attend a class due to an emergency, please let me know. Your safety and well-being are important to me.

Digital Requirements

This course has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System. If circumstances change, you will be informed of other technical needs to access course content.

Information on how to be successful in a digital learning environment can be found at Learn Anywhere (<https://online.unt.edu/learn>).

How to Succeed in this Course

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable 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 reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access](http://www.unt.edu/oda) website (<http://www.unt.edu/oda>). You may also contact ODA by phone at (940) 565-4323.

Supporting Your Success and Creating an Inclusive Learning Environment

Every student in this class should have the right to learn and engage within an environment of respect and courtesy from others. We will discuss our classroom's habits of engagement and I also encourage you to review UNT's student code of conduct so that we can all start with the same baseline civility understanding ([Code of Student Conduct](https://deanofstudents.unt.edu/conduct)) (<https://deanofstudents.unt.edu/conduct>)

Academic integrity, student misconduct, and professionalism policies for CSE

These are the policies of the Department of Computer Science and Engineering (CSE) at University of North Texas related to academic integrity, student misconduct, and professionalism.

All department policies on Academic Integrity and Student Conduct apply for this course – these are available at the following link:

<https://engineering.unt.edu/cse/students/resources/academic-integrity.html>

Artificial Intelligence in Academic Integrity

Students need to be aware the "unauthorized" use of any person or technology that assists in a student's assignment, project, or paper is considered cheating under the UNT Student Academic Integrity Policy (UNT Policy 6.003). Unless a professor or instructor gives explicit "authorization," AI cannot be used to assist in the completion of assignments, projects, or papers. Doing so will result in a "cheating" violation. Again, if uncertain contact the instructor prior to using AI tools.

Other University Policies

Students will be aware about Eagle Alert if there is a campus closing that will impact a class and the calendar is subject to change, refer to the [Emergency Notifications and Procedures Policy \(PDF\)](https://policy.unt.edu/policy/15-006) and the Campus Closures Policy (<https://policy.unt.edu/policy/15-006>).

Students can access these policies in Navigate (Navigate.unt.edu), in Canvas under the Help menu, in EIS, and on the [Student Support Services & Policies](#) page.