DTSC 3030 - Cyber Ethics for Data Scientists

Online

SEMESTER: Spring 2025

COURSE INSTRUCTOR

Dr. Brady D. Lund, Assistant Professor

Email: Brady.Lund@unt.edu

Phone: 316-249-3338

Zoom Link

OFFICE HOURS

Office hours will be from 2-4pm on Tuesdays throughout the semester. If you need to meet outside of these hours, please send me an email to arrange a time.

COURSE FORMAT

This course is offered in an online, asynchronous format.

COURSE DESCRIPTION

3 hours. This is a 100% online course. In a world driven by rapid technological advancements and digital interactions, understanding the ethical implications of cyber activities has become crucial. This introductory course explores the fundamental principles and frameworks of cyber ethics, setting the stage for in-depth discussions on digital rights, privacy, cybersecurity, and responsible online behavior. Students will examine the role of ethics in technology design, analyze key dilemmas faced by users and organizations, and reflect on their personal responsibilities in digital spaces.

COURSE OBJECTIVES

This course will provide an introduction to cyber ethics, through the development of knowledge and skills in the following areas:

- Explaining the key concepts and scope of cyber ethics and their relevance in modern digital societies;
- Analyzing various ethical frameworks and theories applicable to decision-making in digital environments;
- Recognizing common ethical challenges, including privacy concerns, digital surveillance, and intellectual property conflicts;
- Developing strategies for ethical online engagement and digital citizenship;
- Applying ethical principles to real-world scenarios involving cybersecurity, social media, and online behavior.

LEARNING OUTCOMES

Upon completion of this course, students will have:

- Demonstrated a clear understanding of cyber ethics and its importance in the digital landscape;
- Critically assessed and compared different ethical frameworks as they apply to online decisionmaking;
- Analyzed ethical issues in contemporary digital environments;
- Used ethical reasoning to propose solutions to hypothetical and real-world cases involving cyber dilemmas;
- Reflected on personal roles and responsibilities as ethical participants in digital spaces.

COURSE READING MATERIAL

Each Module has a set of required and optional readings. Refer to the module reading list on Canvas course website (under the **Learning Module** tab); they are either directly linked from the website or can be found through the <u>UNT Electronic Library</u>.

There is no assigned textbook for this version of this course.

Reference and Citation Style

 American Psychological Association. (2020). Publication manual of the American Psychological Association: the official guide to APA style (Seventh ed.). Washington, DC: American Psychological Association.

COURSE OUTLINE

Course Introduction

Module 1: Digital Rights

Module 2: Consent in Digital Environments

Module 3: Intellectual Property

Module 4: Digital Surveillance

Module 5: Privacy and Data Protection

Module 6: Cybersecurity

Module 7: Dark Web and Anonymity Online

Module 8: Online Abuse and Cyberbullying

Module 9: AI Ethics

Module 10: Social Media Ethics

Module 11: Cyberlaw

Module 12: Future of Cyber Ethics

FINAL EXAM

COURSE REQUIREMENTS

Grading Criteria

As an undergraduate level course, students should be expected to demonstrate developing competencies within this area of information science. Students should demonstrate curiosity, critical thinking, and professionalism commensurate with that required of a future information professional. Students' work should demonstrate an understanding of the applicability of concepts to both real-world situations and discussions of professional philosophy. Students are encouraged to take advantage of the great resources available at the University Writing Center, if they feel that they need any assistance in improving their professional writing abilities. Each assignment will use a rubric, which will clearly outline the expectations and grading criteria for the assignment. Instructor comments will be provided for all submissions. I will make my best effort to grade and provide feedback for all submissions within one week of the due date.

Grade Distribution

250 points available

Assignments: 100 points (~43.5% of grade)

4 Major Assignments X 25 points each = 100 points

Assignment 1: Ethical Issues in Digital Surveillance

Assignment 2: Basic Cybersecurity Principles

Assignment 3: Ethics in AI Design

Assignment 4: Quantum Computing and Its Implications

Discussions: 105 points (~45.6% of grade)

21 Discussions X 5 points each = 105 points

Intro Post

8 QQRs

12 Guided Readings

Exam: 25 points (~10.9% of grade)

1 Exams X 25 points = 25 points

GRADING SCALE

The UNT scale for **grading** is as follows:

A= 90 - 100 points

B= 80 - 89 points

C= 70 - 79 points

D= 60 - 69 points

F = 59 points and below

COMMUNICATIONS

Course announcements and information will be by email and posted under "Announcements" and students are expected to monitor this area; Students are also expected to check their Canvas Message box and UNT email address regularly, as this is the main avenue of communication used by the instructor.

COURSE EVALUATION

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. The survey will be made available 3-4 weeks before the end of a semester to provide students with an opportunity to evaluate how this course is taught. 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 anonymous 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.Links to an external site. or email spot@unt.edu.

SCHOLARLY EXPECTATIONS

All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor.

COURSE POLICIES

Assignment Policy

Please use the academic calendar included here as the official due date repository. Additional information on assignments can be found in the modules.

Late Work

All students are expected to submit their module activities and other assignments by the due date. We will deduct points for late submissions. If you submit an assignment after the deadline, we will **deduct 10% of the grade per delayed day** (24 hours) from the assessed score.

This prevents students from getting too far behind in the course and allows the instructor to assign grades in a consistent manner. Assignments are due by 11:59 PM (midnight) on the date due. If an extenuating circumstance such as a medically diagnosed illness or family emergency arises, request an extension <u>prior to the due date</u> in a professional and effective manner. Contact the instructor *and* TA via Canvas e-mail.

Incomplete

An Incomplete Grade ("I") is a non-punitive grade given only during the last one-fourth of a term/semester and only if a student (1) is passing the course and (2) has a justifiable and documented reason, beyond the control of the student (such as serious illness or military service), for not completing the work on schedule. The student must arrange with the instructor to finish the course at a later date by completing specific requirements. Please refer to the registrar's website for more information. It is your responsibility to contact the instructor to request an incomplete and discuss requirements for completing the course. If you do not remove the incomplete within one calendar year, you will receive a grade of F.

Withdrawal: See *UNT Graduate Catalog* for policies and UNT semester schedule for deadlines. A grade of withdraw (W) or withdraw-failing (WF) will be given depending on your participation and grades to date. If you simply disappear and do not file a formal UNT withdrawal form, you may receive a grade of F. UNT has a new policy for withdrawing from a course. Please see details on the <u>dropping classes</u> webpageLinks to an external site..

Copyright Notice

Some or all of the materials on this course website may be protected by copyright. Federal copyright law prohibits the reproduction, distribution, public performance, or public display of copyrighted materials without the express and written permission of the copyright owner, unless fair use or another exemption under copyright law applies. Additional copyright information may be located at: <a href="Links to an external site.http://copyright.unt.edu/content/untLinks to an external site.-Links to an external site.-Links to an external site.-Links to an external site..Links to an external site...Links to an external

Syllabus Change Policy

The information in this document is intended for students taking INFO 5646 for the current semester. The instructor will use this syllabus as a guide in offering the course and will notify the class if changes occur.

Policy on Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty that prevents students from completing a time sensitive assessment activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the UNT Student Help Desk at 940.565.2324. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

ACADEMIC INTEGRITY

The UNT Students Standards of Academic Integrity (2009) are available at the <u>Provost office</u> <u>websiteLinks to an external site.</u>. The Student Standards of Academic defines six categories of academic dishonesty: cheating, plagiarism, forgery, fabrication, facilitating academic dishonesty, and sabotage. The category *plagiarism* defined as follows: "Use of another's thoughts or words without proper attribution in any academic exercise, regardless of the student's intent, including but not limited to:

- the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgement or citation.
- the knowing or negligent unacknowledged use of materials prepared by another person or by an agency engaged in selling term papers or other academic materials."

Enrollment in any INFO course is considered implicit acceptance of all DIS and UNT student policies. It is the responsibility of the student to understand and adhere to these policies. DIS has zero tolerance for academic dishonesty. DIS instructors may choose to submit any student work to Turnitin for verification of originality. Penalties for plagiarism in INFO 5000 follow the UNT guidelines and for repeated offenses, Student will receive a failing grade for the course. The instructor will direct the student to schedule an in-person conference with the instructor to discuss the suspected misconduct. The instructor will submit to UNT, per the policy, a report of the violation.

<u>Important Notice for F-1 Students taking Distance Education Courses:</u>

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the <u>Electronic Code of Federal Regulations websiteLinks to an external site.</u>. The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f) (6) (i) (G). The paragraph reads: (G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.