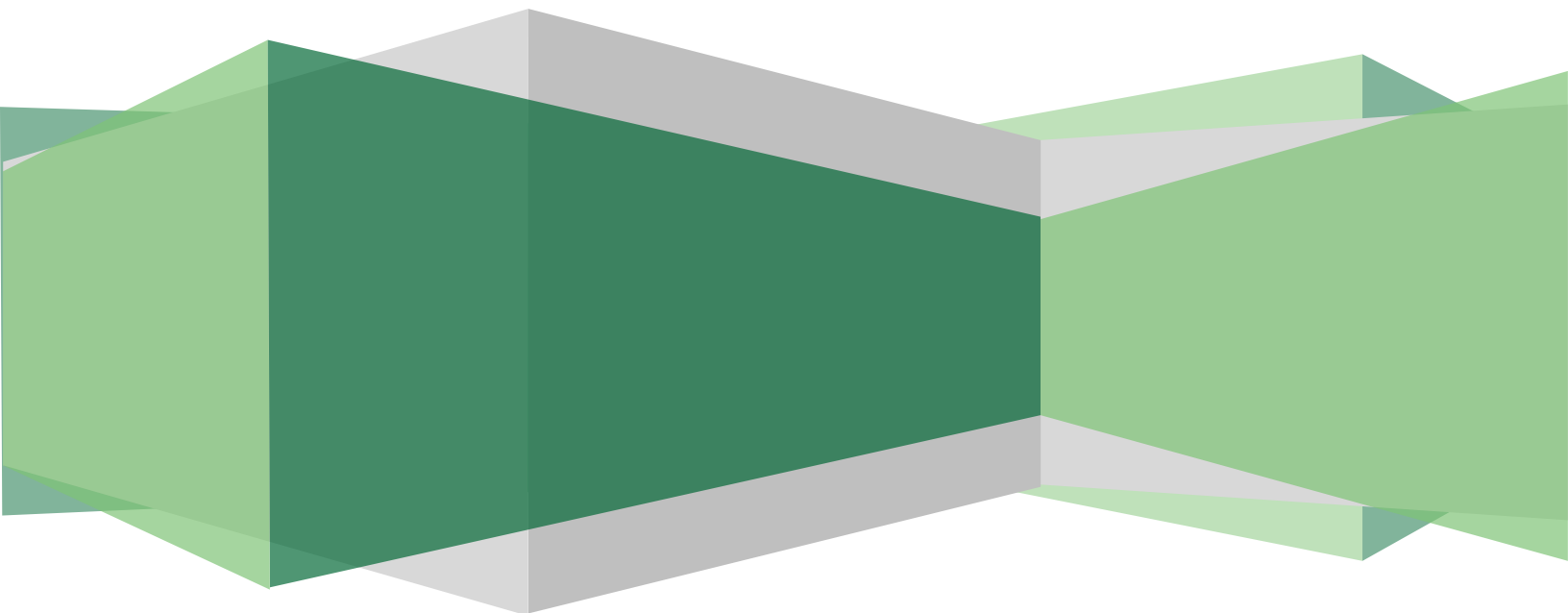


University of North Texas
Advanced Data Analytics – Toulouse Graduate School

Course Syllabus

ADTA 5560

AI: Recurrent Neural Networks for Sequence Data



**ADTA 5560.701: AI RNN for Sequence Data
Fall 2023****COURSE INFORMATION**

- ADTA 5560: AI Recurrent Neural Networks for Sequence Data – FALL 2023
- ADTA 5560: 3 credit hours
- ADTA 5560: 100% Online

Professor / Instructor Contact Information

- Professor: Thuan L Nguyen, PhD, Clinical Associate Professor
- Office Location: UNT DENTON – HICKORY #152
- Office Hours: 10:00 AM – 12:00 PM Fridays – FRISCO FRLD #324
- Email Address: Thuan.Nguyen@unt.edu

About the Professor / Instructor

Welcome to ADTA 5900/5560 – Recurrent Neural Networks for Sequence Data. I would like to share a little information about my background. I finished my BS in computer science, MS in Management Information Systems, and PhD in Information Systems. I had nearly 20 years of work experience in software engineering and information systems (designing, developing, and administering software, hardware systems in telecommunication, networking, business information systems, and IT industries) and data analytics. After that, I started my research and teaching career, first at the University of Texas at Dallas (UTD) and then at the University of North Texas (UNT). Besides data analytics and artificial intelligence deep learning, machine learning, my current research interests also include the theories of knowledge management, intellectual capital, and their applications in firm operations.

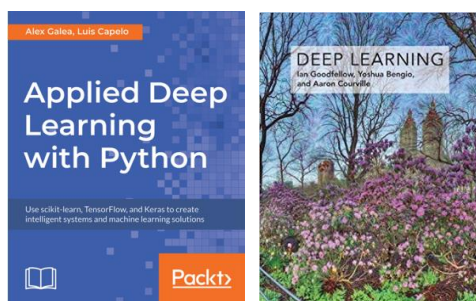
Course Pre-requisites, Co-requisites, and/or Other Restrictions

- One of the courses: ADTA 5240, 5250, 5340
- Or the instructor consent
- Knowledge and skills in Python programming are required
- Knowledge and skills to install software applications in Windows OS (for Windows users) or MAC OS (for MAC users) are required

Materials – Text, Readings, Supplementary Readings

No textbook is required for this course.

In addition to the articles listed in the document [suggested_reading.docx](#) (Getting Started - Canvas), the following books are for suggested reading:



- Galea, A. and Capelo, L. (2018). *Applied Deep Learning with Python*. Packt Publishing. ISBN: 978-1789804744
- Goodfellow, I., Bengio, Y., & Courville, A (2016). *Deep Learning*. MIT Press. ISBN: 978-0262035613

Course Description

This course discusses the recurrent neural networks (RNN) – one of the most popular types of the artificial neural network – and focuses on the LSTM (Long Short Term Memory) neural network that is considered as the most powerful and versatile RNN variation. The course provides the student with a guide through how to use TensorFlow and Keras, the two most popular AI frameworks at present, to build artificial neural networks for deep learning that will be trained on the sequence data of which time series is one example. This course covers both the theory and the practical implementation of the AI network. As the fundamentals are discussed, exemplary AI techniques will be employed to illustrate how AI deep learning theories can be applied to real-world solutions using various programming and system tools.

Course Objectives

Upon successful completion of this course, the learner will be able to:

1. Discuss the impacts of AI, Machine Learning, and Deep Learning on the society.
2. Describe the roles of the recurrent neural network in the context of recent breakthroughs in AI.
3. Demonstrate the understanding of core concepts of the recurrent neural network, especially the Simple RNN.
4. Explain the vanishing gradient problem as a critical shortcoming of the Simple RNN.
5. Demonstrate the understanding of the Long Short-Term Memory (LSTM) neural network and its core concepts: Cell State and Gates.
6. Build, train, test, and improve the performance of the Simple RNN on time-series data.
7. Build, train, test, and improve the performance of the LSTM network on time-series data.
8. Demonstrate the skills of using TensorFlow AI framework and Keras (plus Python) in AI projects with RNN and sequence data.
9. Demonstrate the understanding and skills of using the cloud computing in AI Deep Learning projects.

Course Topics

- Overview of AI, Machine Learning, and Deep Learning
- Linear Algebra for AI Deep Learning
- Fundamentals of Sequence Data and AI Memory
- Artificial Neural Networks for Sequence Data: Recurrent Neural Network (RNN)
- Recurrent Neural Network: Simple RNN with Sequence Data
- Recurrent Neural Network: Long Short Term Memory (LSTM): Core Concepts
- RNN: Long Short Term Memory (LSTM): Core Concepts: Cell State
- RNN: Long Short Term Memory (LSTM): Core Concepts: Gates
- AI Frameworks for Deep Learning on Time Series Data: TensorFlow and Keras
- Neural Network Programming on Time Series Data with TensorFlow, Keras, and Python
- Applied AI Deep Learning on Sequence Data: Time Series Analysis
- Setting up the Cloud Computing Environment for Deep Learning Research

Teaching Philosophy

For teaching, it is my main goal to create a teaching/learning environment in which students feel respected and valued, and they believe that they are capable contributors. As an instructor, it is my responsibility to determine exactly what I expect students to understand after completing my course, then to facilitate student learning so that every student reaches this level. I believe the essence of effective teaching is to provide students with real-world examples, encourage them to discuss the material, and offer them opportunities to practice what they have learned. I also believe that creating an active learning environment is an essential part of teaching. Asking questions, promoting discussion, and using real-world analogies are important in an interactive classroom that can enhance students' learning and sustain their enthusiasm. I expect all students to make the best efforts with their class work, respect others, and participate in the class activities so that their experiences can add to the overall learning experience.

COURSE REQUIREMENTS

1. The student will be responsible for checking the announcements that are sent to his/her UNT email.
2. The student will access and follow all course instructions found in the syllabus, announcements, assignments, and all other class-related documents.
3. The student will complete all the class assignments in the time frame specified in the class documents including the course calendar to participate effectively in class activities.
4. The student will complete all the assessment tests and exams – if required – in the time frame specified in the class documents including the course calendar.
5. The student will complete all the projects – if required – in the time frame specified in the class documents including the course calendar.

COMMUNICATIONS

Interaction with Instructor: I look forward to getting to know all of you and working with you. Contact me anytime using my UNT email (Thuan.Nguyen@unt.edu). I will check messages daily and will make every effort to respond as quickly as possible. If you would like to meet me personally, we can meet in the office at UNT New College in Frisco #109 during the office hours (10:00 AM – 12:00 PM Fridays). Please let me know in advance if you intend to have an online meeting.

My goal is for you to enjoy this course, to learn how to engage in meaningful and useful online course activities, to gain a greater understanding of the topics associated with the fundamentals of data engineering, and to help you in any way that I can to be successful.

ASSIGNMENTS, ASSESSMENTS, and PROJECTS

There will be **weekly discussions**, except for the midterm take-home week and the final week.

- The student will respond to posted online course discussion questions each week following the instructions for discussion forums. For each student, he/she should submit his/her initial posts to respond to the discussion questions by the deadline provided on the Course Calendar. Then he/she should continue by posting responses to his/her classmates' posts throughout the week to maximize points earned each week. Students are encouraged to enhance the conversation by providing complementary resource materials and properly referenced supplementary items.

There will be **five homework assignments** throughout the course.

- Students are required to submit their homework on time.

There will be **one midterm take-home assignment**.

- Midterm assignment: Due in Week 4.

There will be **a final project**.

- The student will complete a final project following the project instructions.
- Students will submit the final project by the deadline provided on the Course Calendar.

Make-Up Policy

No make-up assessment tests or exams will be offered except for being approved in advance. Students will be required to provide necessary documentation.

Late-work Policy

All assignments are to be submitted using the UNT email.

The deadline for submitting an assignment is 11:00 PM on the due date.

Late submissions can still be submitted up to 24 hours after the deadline. Assignments submitted within 24 hours after the due date/time will be subject to a 25% penalty. No submissions will be accepted later than 24 hours after the deadline.

NOTES: Late work is subject to penalty described above unless previously approved by the instructor.

Class Schedule

The following is a tentative schedule. Should any change become necessary, it will be announced in class as well as in the announcements sent via the UNT email. It is the student's responsibility to check for changes in the schedule.

Week	Date	Topics	Suggested Reading
1	10/16 - 10/22/2023	Course Overview Introduction: AI and Technology Advancements AI: Overview of Machine Learning and Deep Learning GOOGLE CLOUD PLATFORM: GCP for Deep Learning Big Data: Structured and Unstructured Data (Review) Introduction to Jupyter Notebook Python: Introduction to Python (Review) Python: Standard Data Structures (Review) Discussion: Personal Introduction Homework Assignment 1: Assigned	Readings: Week 1
2	10/23 - 10/29/2023	Deep Learning: A Modern AI Approach Fundamentals of Sequence Data - PART I Fundamentals of Sequence Data - PART II Fundamentals of Artificial Neural Networks - PART I Fundamentals of Artificial Neural Networks - PART II Linear Algebra for AI: Deep Learning TensorFlow: An AI Framework for Deep Learning: Introduction Data Science: Data Analytics Life Cycle (Review) Python: Programming Techniques (Review) Discussion 1: Assigned (Monday) Homework Assignment 1: Due Homework Assignment 2: Assigned Discussion 1: Due (Sunday)	Readings: Week 2
3	10/30 - 11/05/2023	AI Neurons, Perceptron, and Multilayer Perceptron (MLP) Fundamentals of Feedforward Neural Networks Time Series Data: Introduction Fundamentals of AI: Recurrent Neural Networks (RNN)	

		<p>MLPs (Fully Connected Neural Networks) with Keras Keras: Another AI Framework for Deep Learning Recurrent Neural Network (RNN): Cells and Layers Time Series Data Analysis with RNN, MLPs, and Keras Data Visualization with Pandas & Matplotlib (Review)</p> <p>Python: Numpy Arrays & Pandas Series (Review)</p> <p>Discussion 2: Assigned (Monday) Homework Assignment 2: Due Homework Assignment 3: Assigned Discussion 2: Due (Sunday)</p>	Readings: Week 3
4	11/06 - 11/12/2023	<p>Midterm Take-Home: Assigned</p> <p>Homework Assignment 3: Due</p> <p>Midterm Take-Home: Due</p>	NO Readings
5	11/13 - 11/19/2023	<p>Fundamentals of AI: Long Short Term Memory (LSTM) Recurrent Neural Network (RNN) and LSTM RNN: Long Short Term Memory (LSTM): Cells & Layers Time Series Data Analysis with LSTM, Tensorflow, and Keras</p> <p>Python: Pandas DataFrame (Review)</p> <p>Discussion 3: Assigned (Monday) Homework Assignment 4: Assigned Discussion 3: Due (Sunday)</p> <p>Final Project: Kick-Start</p>	Readings: Week 5
	11/20 - 11/26/2023	THANKSGIVING BREAK	
6	11/27 - 12/03/2023	<p>LSTM: Core Concepts: Cell State and Gates: Introduction LSTM: Core Concepts: Backpropagation Through Time (BPTT)</p>	

		Time Series Data Analysis with LSTM and Keras (Cont.) RNN: LSTM: Core Concepts: Cell State Time Series Data Analysis with LSTM and Keras (Cont.) Discussion 4: Assigned (Monday) Homework Assignment 4: Due Homework Assignment 5: Assigned Discussion 4: Due (Sunday)	Readings: Week 6
7	12/04 - 12/10/2023	RNN: LSTM: Core Concepts: Gates Time Series Data Analysis with LSTM and Keras (Cont.) RNN: LSTM: A Powerful Solution to Vanishing Gradient Discussion 5: Assigned (Monday) Homework Assignment 5: Due Discussion 5: Due (Sunday)	Readings: Week 7
8	12/11 - 12/14/2023	Final Project Presentation	NO Readings

GRADING POLICY

The student's grade consists of the following components:

Discussions:	15%
Homework Assignments:	30%
Midterm Assessment:	25%
Final Project:	30%

The final letter grade will be determined as follows:

- **A: 90 – 100**
- **B: 80 – 89.99**
- **C: 65 – 79.99**
- **D: 50 – 64.99**
- **F: < 50**

STUDENT TECHNICAL SUPPORT

The University of North Texas [UIT Student Helpdesk](#) provides student technical support in the use of Canvas and supported resources. The student help desk may be reached at:

Email: helpdesk@unt.edu

Phone: 940.565-2324

In Person: Sage Hall, Room 130

Business hours are:

- Monday-Thursday 8am-midnight
- Friday 8am-8pm
- Saturday 9am-5p
- Sunday 8am-midnight

ACCESS & NAVIGATION

Access and Log in Information

This course was developed and will be facilitated utilizing the University of North Texas' Canvas. To get started with the course, please go to the website at <https://canvas.unt.edu>

You will need your EUID and password to log in to the course. If you do not know your EUID or have forgotten your password, please go to the website at <http://ams.unt.edu>.

TECHNICAL REQUIREMENTS / ASSISTANCE

The following information has been provided to assist you in preparation for the technological aspect of the course.

UIT Help Desk: <http://www.unt.edu/helpdesk/index.htm>

Web Browser

Word Processor

Creating and submitting files in Microsoft Office, the standard software for this course

Minimum Technical Skills Needed:

Using the learning management system

Using email with attachments

Copying and pasting

Downloading and installing software

Using spreadsheet programs

COURSE POLICIES

Class Participation

Students are required to log in regularly to the online class site. Students are also required to participate in all class activities such as discussion boards, chat or conference sessions, and group projects. To learn more about campus resources and information on how you can achieve success, go to <https://succeed.unt.edu>.

COVID-19 Impact on Attendance

While attending class activities is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class activities because you are ill, or unable to attend class activities due to a related issue regarding COVID-19.

If you are experiencing any symptoms of COVID-19 (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attending class activities is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

ACADEMIC POLICIES

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. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level.

Instructor Responsibilities and Feedback

The instructor is responsible for responding to student questions about assignments and projects, about the course material presented, and for providing additional resources to enhance understanding of course material. Timely feedback is essential for student success and the instructor is responsible for providing timely feedback to students throughout the course. The instructor will actively participate in each week's discussion forum and will provide feedback to students each week regarding their participation. The instructor will grade submitted assignments and will post grades for students within 10 days of assignment due date.

Virtual Classroom Citizenship

The same guidelines that apply to traditional classes should be observed in the virtual classroom environment. Please use proper netiquette when interacting with class members and the professor as discussed at this link: <http://www.albion.com/netiquette/corerules.html>.

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law will not be tolerated.
- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.
- Ask for and use the correct name and pronouns for your instructor and classmates.
- Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individual’s experiences.
- Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.
- Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”
- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.
- Avoid using “text-talk” unless explicitly permitted by your instructor.
- Proofread and fact-check your sources.
- Keep in mind that online posts can be permanent, so think first before you type.

See these [Engagement Guidelines](https://clear.unt.edu/online-communication-tips) (https://clear.unt.edu/online-communication-tips) for more information.

Incompletes

This course will observe the UNT policy on incompletes, found here: <http://registrar.unt.edu/grades/incompletes>

Add/Drop Policy

The University of North Texas Add Drop Policy for Fall 2017 can be found at the following link: <http://registrar.unt.edu/registration/fall-add-drop>

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 which 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:

helpdesk@unt.edu or 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.

Copyright Notice

Some or all of the materials on this course Web site 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 <http://copyright.unt.edu>.

Graduate Online Course Attendance Policy

Students are expected to participate actively each week and to meet all deadlines for course assignments as detailed in the Course Calendar. *Information about the University of Texas' Attendance Policy may be found at <http://policy.unt.edu/policy/15-2-5>*

Administrative Withdrawal

This course will observe the UNT policy on academic withdrawal found here: <https://deanofstudents.unt.edu/withdrawals>

Syllabus Change Policy

Changes to the course syllabus or due dates are not anticipated but should they be necessary, the instructor will provide ample notification to students to allow them to complete assignments in a timely manner without penalty.

UNT GENERAL POLICIES

Student Conduct and Discipline: [Student Handbook](#).

You are encouraged to become familiar with the University's Policy of Academic dishonesty found in the [Student Handbook](#). The content of the Handbook applies to this course. If you are in doubt regarding the requirements, please consult with me before you complete any requirements of the course.

The UNT Code of Student Conduct can be found here:

https://deanofstudents.unt.edu/sites/default/files/code_of_student_conduct.pdf

ADA Policy

The University of North Texas 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 you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. ... 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. Students are strongly encouraged to deliver letters of 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 see the Office of Disability

Accommodation website at <http://disability.unt.edu/>. You may also contact them by phone at 940.565.4323.

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

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 Canvas 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 Canvas 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. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (<https://deanofstudents.unt.edu/conduct>) to learn more.

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 [Eagle Connect](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

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. The survey will be made available during weeks 13, 14 and 15 [insert administration dates] of the long semesters 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 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](http://spot.unt.edu/) (<http://spot.unt.edu/>) or email spot@unt.edu.

Sexual Assault Prevention

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.

Important Notice for F-1 Students taking Distance Education Courses:**Federal Regulation**

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the Electronic Code of Federal Regulations website at <http://www.oea.gov/index.php/links/electronic-code-of-federal-regulations>. The specific portion concerning distance education courses is located at "Title 8 CFR 214.2 Paragraph (f) (6) (i) (G)" and can be found buried within this document: <http://www.gpo.gov/fdsys/pkg/CFR-2012-title8-vol1/xml/CFR-2012-title8-vol1-sec214-2.xml>

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.

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:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) 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.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](https://policy.unt.edu/policy/07-002) (<https://policy.unt.edu/policy/07-002>).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Download the UNT System Permission, Waiver and Release Form

Transmission and Recording of Student Images in Electronically-Delivered Courses

1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.
3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.

Class Recordings & Student Likenesses

Synchronous (live) sessions in this course will be recorded for students enrolled in the class section to refer to throughout the semester. Class recordings are the intellectual property of the university or instructor and are reserved for use only by students in this class and only for educational purposes. Students may not post or otherwise share the recordings outside the class, or outside the Canvas Learning Management System, in any form. Failing to follow this restriction is a violation of the UNT Code of Student Conduct and could lead to disciplinary action.

ACADEMIC SUPPORT & STUDENT SERVICES

Student Support Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- [Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (<https://studentaffairs.unt.edu/student-health-and-wellness-center>)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (<https://studentaffairs.unt.edu/counseling-and-testing-services>)
- [UNT Care Team](https://studentaffairs.unt.edu/care) (<https://studentaffairs.unt.edu/care>)
- [UNT Psychiatric Services](https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry) (<https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry>)
- [Individual Counseling](https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling) (<https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling>)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- [UNT Records](#)
- [UNT ID Card](#)
- [UNT Email Address](#)
- [Legal Name](#)

**UNT euIDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.*

Pronouns

Pronouns (she/her, they/them, he/him, etc.) are a public way for people to address you, much like your name, and can be shared with a name when making an introduction, both virtually and in-person. Just as we ask and don't assume someone's name, we should also ask and not assume someone's pronouns.

You can [add your pronouns to your Canvas account](#) so that they follow your name when posting to discussion boards, submitting assignments, etc.

Below is a list of additional resources regarding pronouns and their usage:

- [What are pronouns and why are they important?](#)
- [How do I use pronouns?](#)
- [How do I share my pronouns?](#)
- [How do I ask for another person's pronouns?](#)
- [How do I correct myself or others when the wrong pronoun is used?](#)

Additional Student Support Services

- [Registrar](https://registrar.unt.edu/registration) (<https://registrar.unt.edu/registration>)
- [Financial Aid](https://financialaid.unt.edu/) (<https://financialaid.unt.edu/>)
- [Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (<https://studentaffairs.unt.edu/student-legal-services>)
- [Career Center](https://studentaffairs.unt.edu/career-center) (<https://studentaffairs.unt.edu/career-center>)
- [Multicultural Center](https://edo.unt.edu/multicultural-center) (<https://edo.unt.edu/multicultural-center>)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (<https://studentaffairs.unt.edu/counseling-and-testing-services>)
- [Pride Alliance](https://edo.unt.edu/pridealliance) (<https://edo.unt.edu/pridealliance>)
- [UNT Food Pantry](https://deanofstudents.unt.edu/resources/food-pantry) (<https://deanofstudents.unt.edu/resources/food-pantry>)

Academic Support Services

- [Academic Resource Center](https://clear.unt.edu/canvas/student-resources) (<https://clear.unt.edu/canvas/student-resources>)
- [Academic Success Center](https://success.unt.edu/asc) (<https://success.unt.edu/asc>)
- [UNT Libraries](https://library.unt.edu/) (<https://library.unt.edu/>)
- [Writing Lab](http://writingcenter.unt.edu/) (<http://writingcenter.unt.edu/>)