



## Teaching Team

 **Instructor:** Dr. Zeynep Orhan

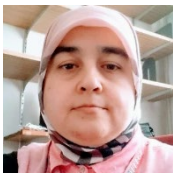
 **Lecture Hours:** Tuesday 1:00 PM - 2:50 PM (CT) at Cury 204

 **Office Hours:**

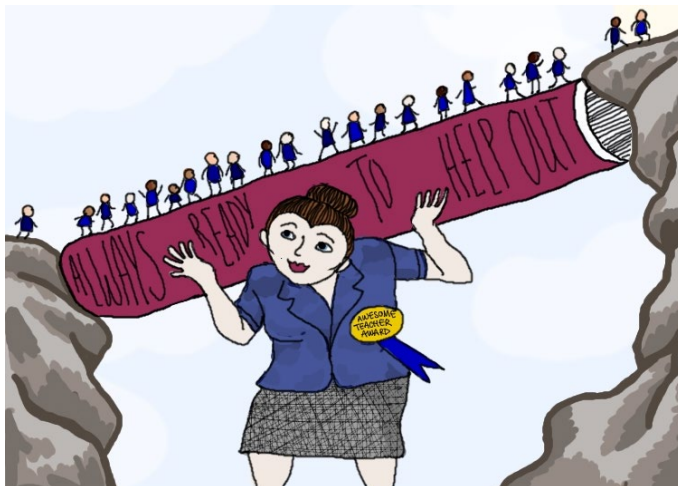
- **In-person(GAB 110 B) and Virtual via Zoom link on Canvas**  
Tuesday 11:00 AM – 12:30 PM (CT) or by appointment
- **In-person(GAB 110 B) and Virtual via Zoom link on Canvas**  
Wednesday 3:00 PM – 4:30 PM (CT) or by appointment

 **Email:** [Zeynep.Orhan@unt.edu](mailto:Zeynep.Orhan@unt.edu)

Welcome to ADTA 5340/ADTA 4340. We are so excited to have you in this class and we look forward to working with all of you throughout the course.



**About the Professor:** Dr. Orhan has her MS and PhD degrees from Graduate School of Bilkent University, Ankara, Turkey and Istanbul University, Istanbul, Turkey. Her main fields of research are machine learning(ML), natural language processing(NLP), and data analytics. So far, she taught at Computer Engineering Departments of Bilkent University, Fatih University, and Istanbul University, Turkey, Information Technologies Department of International Burch University, Bosnia and Herzegovina, Computer Science Department of Union College, New York, and ADTA of UNT, Texas. She has been developing applications mostly in Turkish/English that analyze the widely available and accessible huge amount of unstructured textual and non-traditional data produced in the digital environment and provide user friendly, practical, and time-saving solutions. Sentiment analysis and opinion mining systems, responsible and ethical AI, healthcare (diagnosis, follow-up, treatment) applications, e-education tools, e-government services, and related intelligent strategy systems are in her research agenda.



**Your success is our success.** As your Professor and TA, we are here to help the students facilitate their learning process and to grow, gain knowledge and skills. Our goal is to support students throughout their academic journey.

## Communication

- The preferred way to contact me is via your **UNT email** (**not the Canvas email tool or Teams**).
- Emails will be answered as quickly as possible, usually in **one business day or less**.
- I understand that most graduate students work on assignments on the weekends; so, I will check my email **on Saturdays and Sundays until 5:00 PM** as well.
- **Urgent matters will be answered before Monday.**
- When sending an email, please include
  - **your full name and ID**
  - the **course and section** you are in
  - the **main point of your email in the subject line**
  - **any screenshot or documentation attached** so that I can prioritize your message.
- If I have not responded within **one business day**, please **resend** your message to my “unt- extended” email address as student emails may occasionally be routed to the junk folder.
- I expect emails to **follow professional etiquette standards** as these are formal communications between the instructor and the student.
- If your email is related to a course activity/assignment, please **attach appropriate files, or include screenshots**.
- Please let me know **in advance (24 hrs.)** if you intend to have an online meeting.
- Here is a great website provided by CLEAR to give you some communication tips for communicating online: CLEAR has [a webpage for students that provides Online Communication Tips \(Links to an external site.\)](#)



### Required prerequisite courses: NONE

This course introduces the fundamentals of data analytics and ML with big data. The goal of this course is to provide students with both theoretical knowledge and practical experience, leading to mastery of big data analytics and ML, using both small and large datasets. As

these fundamentals are introduced, exemplary technologies will illustrate how ML can be applied to real-world solutions. The problems are being considered in the context of big data analytics. Exercises and examples will consider both simple and complex data structures, and data ranges from clean and structured to dirty and unstructured.

The undergraduate class ADTA 4340, will follow along with this same syllabus but assignments and exams will be modified.

## Course objectives

**Upon successful completion of this course, students will be able to:**

- Develop an understanding of the fundamental concepts of big data and ML.
- Apply Exploratory Data Analysis concepts leveraging the Python programming language and the Jupyter Integrated Development Environment.
- Develop and articulate results from Supervised and Unsupervised Python ML models, including correctly identifying algorithms appropriate for the assigned data set.
- Apply skills and knowledge learned in class to real-world case study problems and develop ML models to solve problems.

## Course topics

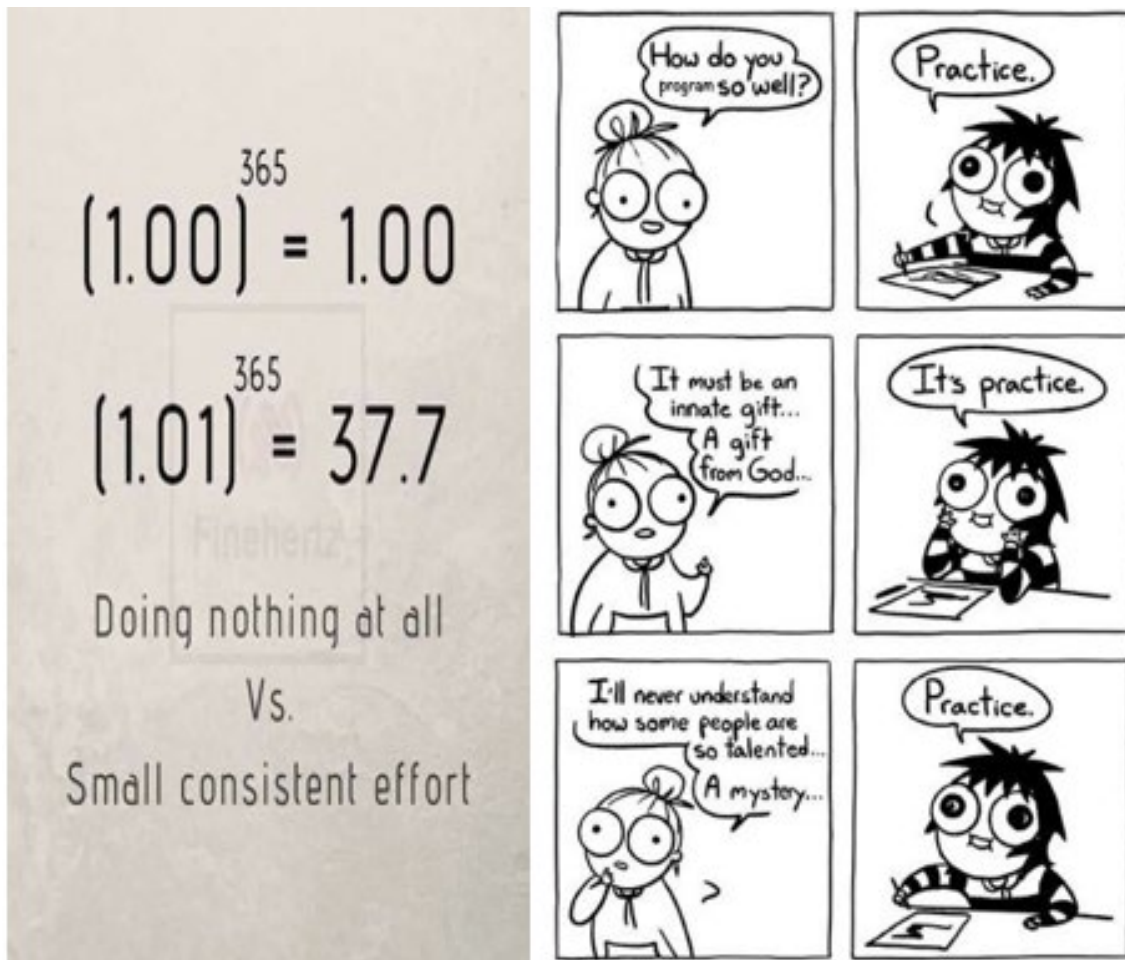
- Python Basics
- Data analytics life cycle
- Data preprocessing
- Exploratory Data Analysis (EDA)
- Big data analytics and ML: Overview
- Big data analytics and ML: Supervised Linear Algorithms.
- Big data analytics and ML: Unsupervised Algorithms
- Big data analytics and ML: Evaluating Algorithms
- Big data analytics and ML with NumPy, Pandas, Scikit-Learn in Python



## Course Structure

- The course is **in-person** in a 16-week format.
- We will meet **in-person every week** and **the lectures will not be recorded**.
- Besides attending the classes, students are **expected to** participate in various online activities such as
  - reading textbook and articles,
  - watching videos, and
  - asynchronous discussions
  - completing assignments and exams.

## Student Effort



### To be successful in this course you will need to:

- Devote considerable time per week to complete the course requirements.
- Check the deadlines of activities and plan to complete/submit before the deadline.
- Be prepared to face last minute glitches.
- Commit spending at least 12-18 hours a week
  - reading the assigned chapters and supplementary resources,
  - watching videos
  - working on assignments and exams,
  - working on the group project,
  - reflecting on the material covered,
  - participating in other activities throughout the course.
- Please use your time carefully.

- **Don't hesitate to ask** for help and always communicate.
- Be sure to **read your assigned readings**, be punctual,
- **Save** all your assignments (and back them up!)
- **Learn how to use Python and given statistical packages** to conduct statistical analysis.
- **Cite sources**, giving credit to where you obtain information.
- **Do not commit academic integrity violations!**

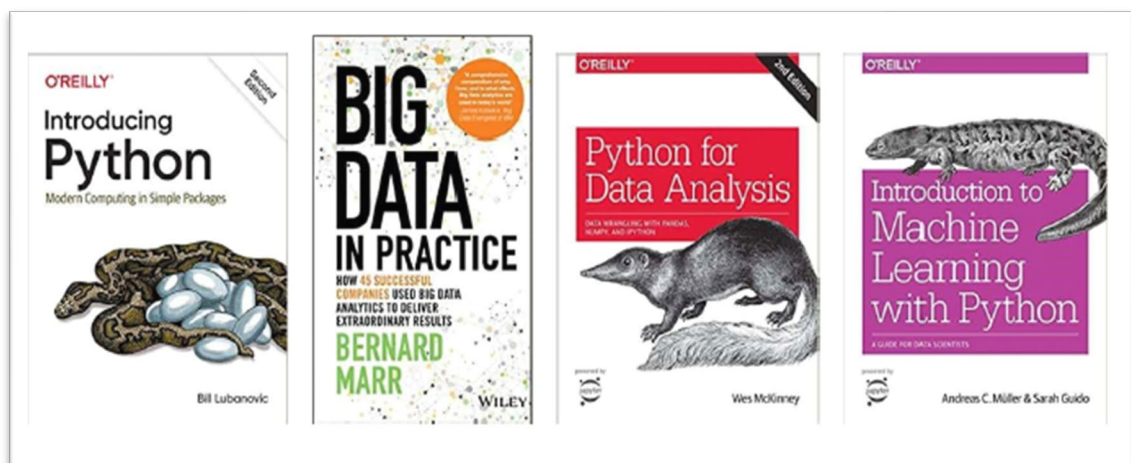
## Required/Recommended Materials

### Required textbook:

- **Zybook: ADTA 5340: Discovery and Learning with Big Data**
  - Sign in or create an account at [zybooks.com](https://zybooks.com)
  - Enter zyBook code: **UNTADTA5340OrhanFall2024**
  - Subscribe
  - A subscription is **\$89**. Students may begin subscribing on Aug 05, 2024 and the cutoff to subscribe is Dec 13, 2024. Subscriptions will last until Jan 14, 2025.
- We will have articles to read, podcasts to listen to, and videos to watch throughout the semester as well

### Optional:

- These books are NOT required, but you might find them beneficial for extra reinforcement of the material.
  - Lubanovic, B. (2014). *Introducing Python: Modern Computing in Simple Packages*. O'Reilly. ISBN: 9781449359362
  - Marr, B. (2016). *Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results*. Wiley. ISBN: 978-1119231387
  - McKinney, W. (2018) *Python for Data Analysis* O'Reilly. ISBN: 978-1-491-95766-0
  - Muller, A. & Guido, S. (2017). *Introduction to ML with Python*. O'Reilly. ISBN: 978-1449369415





## Online Access to Course Materials and Other Requirements

- This course was developed and will be facilitated utilizing the **CANVAS Learning Management System**.
- To get started with the course, please visit
  - <https://unt.instructure.com/login/ldap>
  - You can access student guides on Canvas at this site. 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: <https://ams.unt.edu/>
- The Canvas Student app has a **mobile version of Canvas** that helps students stay current with their courses anywhere. Download the Canvas Student app on Android and iOS devices.
  - For iOS devices, see: How do I download the Canvas Student app on my iOS device?  
<https://community.canvaslms.com/docs/DOC-9831-18561185379>
  - For Android devices, see: How do I download the Canvas Student app on my Android device?  
<https://community.canvaslms.com/docs/DOC-9758-18555199445>
- The student will access and follow all course instructions found in the syllabus, announcements, assignments, and all other class-related documents.
- I will use the CANVAS learning management system to post **important announcements, supplementary materials, and grades**.
- You must check **CANVAS regularly**.
- You are responsible for being aware of information and content posted to the course website in CANVAS.
- It is highly recommended that you **set up notifications in CANVAS to stay informed of course news and other course updates and adjust your CANVAS account settings** to receive essential information directly to **your email account or cell phone**.
- You are expected to check your **UNT email every day**, as I will occasionally send emails for important announcements or potential changes in the schedule.
- **Missing an important email announcement because you do not check your email regularly is not a valid excuse!**
- The student **must complete all the assessment tests and exams in the time frame specified in the class documents, including the course calendar. There are NO extensions for exams.** Please note receiving a zero for an exam will have a major impact on your final grade.
- The student **must complete all the class assignments in the time frame specified in the class documents, including the course calendar to participate effectively in-class activities.** Please note **NO extension will be granted unless prearranged with the professor.**

## Technology Requirements

This course has digital components. To **fully participate in this class**, students will need

- a laptop/computer with
- a webcam,
- a mic and
- reliable internet access to reference content
- on the Canvas Learning Management System,

While students can complete some work on their smartphones, this will not be sufficient in all instances, given the limitations of mobile devices. Hence, access to a computer is essential. 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>

In this class, students will extensively use the following applications:

- **Office 365** for access to UNT email and to Microsoft applications that we will use regularly (Outlook, Teams, Word, Excel, PowerPoint, etc.).
- **CANVAS** for accessing course materials and announcements. (<https://clear.unt.edu/supported-technologies/canvas/requirements>)
- **Python and Jupyter Notebook.**

## Assessing Your Work

The course grade will be determined based on the followings:

Grade Item	Submission Platform	%
Discussion(optional)	Canvas	0%
Assignments(python notebooks-optional)	Canvas	0%
Zybook(reading, activities, labs)	Zybook	20%
Data collection assignment	Canvas	5%
Midterm	Canvas	20%
Project	Canvas	20%
Final Exam	Canvas	35%

Your letter grade will be determined by the following overall grading scheme(**NO ROUNDING FOR ANY REASON**):

Course Score (%)	Letter Grade
90+	A
80-89.9	B
70-79.9	C
60-79.9	D
Below 60	F



In culinary school, "my dog ate my homework" was a legitimate excuse.



Sorry, I forgot to  
do my homework

Sorry, my dog  
ate my homework

Sorry, I ate  
my homework

Sorry, I ate  
my dog





### Zybook reading, activities and labs (20% of overall grade)

The textbook is an interactive and fun book. There are many activities you are expected to complete each week. There will be many lab assignments throughout the semester that are related to the materials covered in the textbook chapters. You will gain hands-on experience conducting statistical analyses usually using the auto-graded labs.

Your progress (reading, activities, and labs) will be available to me and I will grade them biweekly. It will be **cumulative** so **if you missed some parts, your progress will be counted in the next cycle, but the previous grades will not be changed.**

All assignments are **due no later than 11:59 pm (Central Time) on the designated deadline.** Any assignment submitted after the due date will receive a **ZERO unless preapproved by the instructor.**

### Data Collection (5% of overall grade)

This assignment will provide an opportunity to have a hands-on experience of real-life problems at the very early stages. You will collect, clean, and preprocess data for some interesting problems by using a collaborative approach.

All assignments are **due no later than 11:59 pm (Central Time) on the designated deadline.** Any assignment submitted after the due date will receive a **ZERO unless preapproved by the instructor.**

### Midterm (20% of overall grade)

There will be **one midterm exam that includes topics that are covered before the midterm.** You are expected to complete the exam without the assistance of classmates, friends, or tutors. Use of the internet other than python and Zybook and/or communication with anyone during the exam will be subject to the UNT honor code and conduct policies/actions.

### Project (20 % of overall grade)

The group project will give you **independent applied research experience** by using **real data and statistical methods.**

- **Project team selection (1% of overall grade):** You will complete the **project** in a team of at least 3 and at most 5 students. **All members are responsible for professional communication and contribution, timely submission without any academic integrity violation. No excuses will be accepted!**

- **Project proposal and data set (1% of overall grade):** As a team, you will decide on a project and a dataset that will serve as the basis for the remainder of the group project. You can use a dataset on an open data portal, from your workplace, or else, but this data set will include **at least 100,000 observations with 10 variables**. You will send your **project proposal and data set to the TA/professor for approval**. Your proposal (**about 2000 words**) will summarize your data set focusing on the variables, data source(s) as well as your target variable(s) and the main purpose of your project. In the end you will submit a video of your project presentation, your presentation file, project report, Python code, and dataset.
- **PowerPoint Slides and the Recorded Presentation (7% of overall grade):** Prepare **10-15 slides** introducing your project, explaining your methodology, key findings of your statistical analysis and recommendation(s) about what action should be taken based on your findings. You will then record your presentation that will last **at most 10 minutes**.
- **Project Report (7% of overall grade):** Write about **5000-words project report** outlining the methodology, key findings of your statistical analysis as well as the suggestions for how your intended audience should make use of your findings. Your project report should include the **title, abstract, and names of all group members along with their contribution on the front page** as well as the **table of contents and bibliography**. Your project report should include **4-6 charts and your Python code as an appendix**.
- **Feedback on your team members and progress(2% of overall grade):** You will submit the contributions of the team members and a meeting report that briefly describes your progress. If any group member does not contribute sufficiently, inform us immediately via these reports. In case the majority of the group members indicate that a specific group member did not contribute sufficiently I will grade the final project of that group member accordingly.
- **Evaluations of other projects(2% of overall grade):** You will submit 5 evaluations of the other projects after the project submissions.

All project components are **due no later than 11:59 pm (Central Time) on the designated deadline**. Any assignment submitted after the due date will receive a **ZERO**.

## Final Exam(35% of overall grade)

There will be **one final exam that includes all topics**. You are expected to complete the exam without the assistance of classmates, friends, or tutors. Use of the internet other than python and Zybook and/or communication with anyone during the exam will be subject to the UNT honor code and conduct policies/actions.

## Important Notes for the Final Project and Group Work

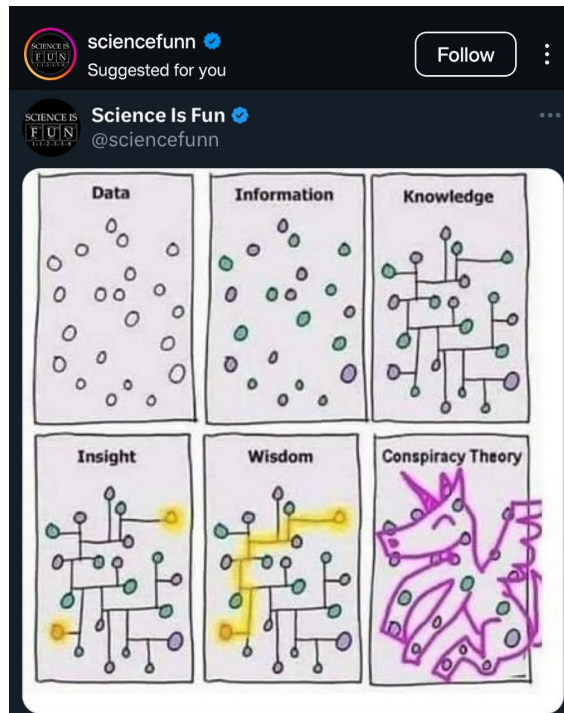
- Please ensure that all tools and topics included in your project are those that we

have discussed and learned about in this course. It's important not to introduce external resources that have not been covered. No need to venture into uncharted territory!

- We advise against the use of highly utilized websites like Kaggle for sourcing data and models, as these can increase the risk of plagiarism.
- It is essential to hold regular meetings with your group to ensure everyone is on the same page and to check your progress regularly. Please maintain a record of these meetings, documenting the date, time, attendees, and a brief summary of discussions, along with action items. We will request to see this file.
- All files submitted must be valid, accessible, and should be submitted on time. Adhering to these guidelines is crucial for the smooth processing of your work. We don't want anyone missing out on the opportunity to showcase their hard work.
- Please note that no extensions will be granted for group projects under any circumstances. To avoid any last-minute issues, plan accordingly and try to submit as early as possible. So, don't procrastinate!
- All documents should be written in a professional manner, free from spelling and grammar errors, and formatted and cited consistently using a widely recognized style.
- Your files should not be submitted solely as screenshots or images, nor as zipped or compressed files! Turnitin cannot check these files.
- Plagiarism is a serious offense and will not be tolerated. We'll be using Turnitin to check for any issues. It generates two reports: One for plagiarism and one for AI generation. Violations will result in severe consequences.
- One student from each team will be responsible for uploading your files to Canvas. However, all students are required to submit five evaluations of other projects individually.
- Every group member should thoroughly review the submitted materials and ensure they align with the rubric. There will be no exceptions for late submissions, missing items or failure to submit as required; all group members will be penalized if any discrepancies are found due to negligence, procrastination, failed cooperation or coordination, etc. We expect full responsibility and accountability from each member, with no excuses accepted.
- If a group member fails to respond or contribute to the project, it is crucial to report this behavior in a timely manner. The non-contributing member should be transparently removed from the group and will receive a grade of zero for their non-participation. The process should be clear, and all group members should be informed of any complaints. Additionally, failure to report such issues promptly, bullying, unprofessional communication, or inappropriate behavior among group members will be subject to further disciplinary action.
- Make sure to submit your project documents. In your presentation, the contributions of group members should be explicitly noted, both as a percentage that will be added up to 100% and task-wise. Ensure there are no inconsistencies with your contributions in the presentation and the feedback forms.
- Also, submit the link or media file of your presentation recording. We recommend

uploading recordings of the presentations as either a video or a publicly accessible link on platforms like YouTube if the file size is big.

- If applicable, submit your codes and their outputs. The teaching assistant may ask you to demonstrate them.
- Proof that the project was completed by your group is required, and one of the team member's accounts should be shown explicitly in all screenshots.
- Remember, this isn't a competition; it's an opportunity to demonstrate the skills you've learned during the course. Good luck with your final project, and don't hesitate to reach out if you have any questions or concerns!



## Weekly Schedule\*

Week	Start	End	Topics	Zybook Readings and Activities	Zybook Labs	Other Assignments
W 1	19-Aug	25-Aug	Intro to Data Science	Chapter 1		Optional Assignment 1 Set up
W 2	26-Aug	1-Sep	Python for Data Science	Chapter 2	2.9 LAB: List basics 2.10 LAB: Set basics 2.11 LAB: Importing packages	Project groups
W 3	2-Sep	8-Sep	Probability and Statistics	Chapter 3	3.8 LAB: Measures of center 3.9 LAB: Calculating probabilities using a normal distribution 3.10 LAB: One-sample hypothesis test for population proportion	Optional Assignment 2 Big data and Machine Learning Data Collection
W 4	9-Sep	15-Sep	SQL for Data Science	Chapter 4		
W 5	16-Sep	22-Sep	Data Wrangling	Chapter 5	5.7 LAB: Cleaning data using dropna() and fillna() 5.8 LAB: Structuring data using scale() and MinMaxScaler()	
W 6	23-Sep	29-Sep	Data Exploration	Chapter 6	6.8 LAB: Visualizing mpg data using matplotlib 6.9 LAB: Visualizing Titanic passenger statistics using bar charts	Optional Assignment 3 Python for Data Science
W 7	30-Sep	6-Oct	Regression	Chapter 7	7.8 LAB: Creating simple linear regression models 7.9 LAB: Performing logistic regression using LogisticRegression()	Project proposal and data submission for approval
W 8	7-Oct	13-Oct	Midterm(online) October 8 NO CLASS MEETINGS			
W 9	14-Oct	20-Oct	Evaluating Model Performance	Chapter 8	8.10 LAB: Evaluating linear regression using cross-validation	Optional Assignment 4 Regression and evaluation
W 10	21-Oct	27-Oct	Supervised Learning: KNN, Naïve Bayes and Support Vector	Chapter 9	9.6 LAB: K-nearest neighbors classification	Feedback on your team members and progress 1
W 11	28-Oct	3-Nov	Decision Trees: Regression Classification, Random Forests	Chapter 11	11.6 LAB: Creating a regression tree using mpg data	Optional Assignment 5 Supervised Learning
W 12	4-Nov	10-Nov	Unsupervised Learning: K-Means, DBSCAN, Hierarchical Clustering	Chapter 10	10.8 LAB: Grouping mammal sleep habits using k-means clustering 10.9 LAB: Analyzing factors in forest fire data using PCA	Optional Assignment 6 Unsupervised Learning
W 13	11-Nov	17-Nov	Artificial Neural Networks	Chapter 12	12.6 LAB: Single-layer perceptron	
W 14	18-Nov	24-Nov	Ensemble techniques	Chapter 13	13.6 LAB: Boosting using AdaBoostClassifier 13.7 LAB: Bagging using BaggingRegressor	Project Report, Presentation, Recording Submission Feedback on your team members and progress 2
W 15	25-Nov	1-Dec	Thanksgiving Project Evaluations NO CLASS MEETINGS			
W 16	2-Dec	6-Dec	Project Evaluations NO CLASS MEETINGS			
Final Exams	7-Dec	13-Dec	Final Exam (online) December 7 NO CLASS MEETINGS			

\* There may be changes due to unforeseen circumstances

## Technical Assistance

The technical assistance part of working in the online environment involves dealing with the inconveniences and frustration 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 technical issues.

### UNT Help Desk:

- *UNT Student Help Desk site* <http://www.unt.edu/helpdesk/index.htm>
- *Email:* [helpdesk@unt.edu](mailto:helpdesk@unt.edu)
- *Phone:* 940-565-2324
- *In Person:* Sage Hall, Room 130
- *Walk-In Availability:* 8am-9pm
- *Telephone Availability:*
  - Sunday: noon-midnight
  - Monday-Thursday: 8am-midnight
  - Friday: 8am-8pm
  - Saturday: 9am-5pm
- *Laptop Checkout:* 8am-7pm
- *For additional support, visit Canvas Technical Help*  
<https://community.canvaslms.com/docs/DOC-10554-4212710328>

## Diversity Statement

I value the many perspectives students bring to our campus. Please collaborate with me to create a classroom culture of open communication, mutual respect, and inclusion. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please let me know. We are all learning together.

## Course Policies

### Late Work Policy

Assignment due dates are posted in the syllabus and on Canvas. Any changes to due dates will be updated on Canvas and communicated in an announcement. All work for this course is due no later than 11:59 pm (Central Time) on the designated date.

**NO late submission of assignments, midterm, or project deliverables.**

**Late work will be assigned ZERO unless previously approved by the instructor. NO EXCEPTIONS!**

The University is committed to providing a reliable online course system to all users. However, in the event of **an 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**
- **contact the UNT Student Help Desk:**
  - [helpdesk@unt.edu](mailto:helpdesk@unt.edu) or
  - **940.565.2324** and
  - **obtain a ticket number.**

The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

### Make-Up Policy

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

### Attendance

Students are expected to attend class meetings regularly and to abide by the attendance policy established for the course. It is important that you communicate with the professor and the instructional team prior to being absent, so you, the professor, and the instructional team can discuss and mitigate the impact of the absence on your attainment of course learning goals. Please inform the professor and instructional team if you are unable to attend class meetings because you are ill, in mindfulness of the health and safety of everyone in our community.

If you are experiencing any symptoms of COVID, please seek medical attention from the **Student Health and Wellness Center (940-565- 2333 or [askSHWC@unt.edu](mailto:askSHWC@unt.edu))** or **your health care provider PRIOR to coming to campus**. UNT also requires you to contact the **UNT COVID Team at [COVID@unt.edu](mailto:COVID@unt.edu)** for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure.

### Grade Disputes

- You are required to **wait 24 hours** before contacting me or the TA to dispute a grade.
- Within that time, I expect that you will review the assignment details and reflect on the quality of the work you turned in.
- If you would still like to meet, **email TA first** to set up a meeting briefly describing the issue.
- You **should come to the scheduled meeting with specific examples** that demonstrate that you should earn a higher grade than you received.
- If you **may not solve the issue with TA** you can request to **meet with me**.
- **If you miss your scheduled meeting or you are late, you forfeit your right to a grade dispute.**

- **If you do not contact me to schedule a meeting within 7 days of receiving your grade, you also forfeit your right to a grade dispute.**

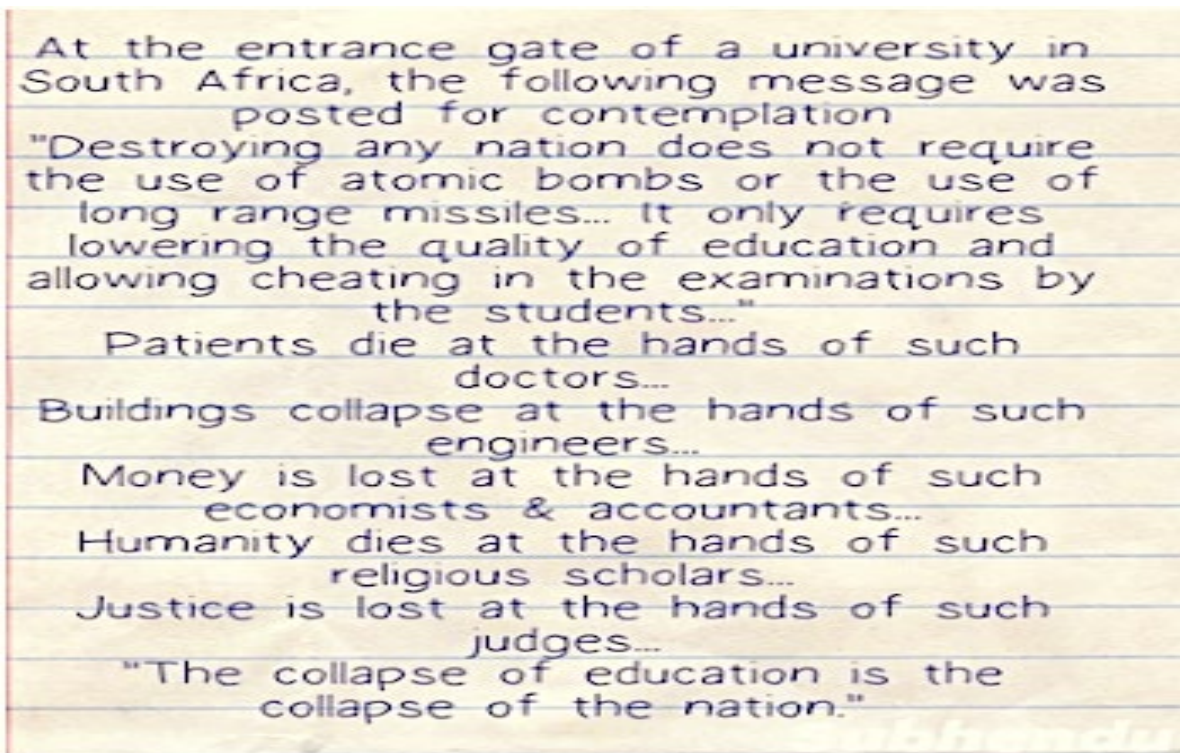
#### Extra Credit

There are no extra credit opportunities in this course.

#### Syllabus Change Policy

While the plan is to follow this syllabus as written, it is reasonable to expect that adjustments will be made if necessary due to events that are outside of my control. Any changes will be posted in the announcement section of our Canvas course. If these changes affect assignments or due dates, they will be communicated via email as well.

#### Academic Integrity Policies



The University of North Texas promotes the integrity of learning and embraces the core values of trust and honesty. Academic integrity is based on educational principles and procedures that protect the rights of all participants in the educational process and validate the legitimacy of degrees awarded by the University. In the investigation and resolution of allegations of student academic dishonesty, the University's actions are intended to be corrective, educationally sound, fundamentally fair, and based on reliable evidence. The UNT Student Academic Integrity Policy is found at <https://policy.unt.edu/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.**

#### Turnitin Notice

**Turnitin** is used as a tool to assist students in their scholarly writing **to address plagiarism and usage of AI tools issues**. 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 an advanced undergraduate/graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. It is also considered inappropriate and unethical to work together on individual assignments or share work that is to be created on an individual level. Work submitted at the senior/graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the lower undergraduate levels. It is recommended that students use the Turnitin resource to ensure their work is free of copyright issues prior to the final submission of their projects.

#### Advanced Data Analytics Integrity Policy

ADTA students must read and adhere to the university, department, and course Academic Integrity expectations. The consequences of violating Academic Integrity expectations are outlined below for ADTA students:

	Penalty	Other
1 <sup>st</sup> Academic Integrity Offense	The minimum penalty is a <b>0 for the assignment AND a deduction of one letter grade from the final grade for the course.</b> Other penalties may be assessed by the course instructor up to <b>course failure</b> , depending on the severity of the offense.	All Academic Integrity offenses will be reported to the UNT Academic Integrity Office.
2 <sup>nd</sup> Academic Integrity Offense	Suspension from the ADTA program.	A second offense is defined as a separately reported offense either in the same class as the 1 <sup>st</sup> offense or in a different course. <b>Students suspended for a second Academic Integrity violation will not be allowed to enroll in ADTA courses for 1 calendar year.</b> For students who had a single Academic Integrity violation prior to Fall 2023, a <b>second violation will result in suspension from the ADTA program.</b>
3 <sup>rd</sup> Academic Integrity Offense	Dismissal from the ADTA program.	Students committing a <b>3<sup>rd</sup> Academic Integrity offense will be dismissed from the program.</b> For students who had multiple Academic Integrity violations prior to Fall 2023, any additional violation will result in <b>dismissal from the ADTA program.</b>

## Policy on the Use of AI Tools in Coursework

### ❖ General Use

- Students are encouraged to use Artificial Intelligence (AI) tools to improve their learning and practice throughout this course. These tools can help students grasp complex concepts, engage in creative problem-solving, and get additional practice with course-related skills.

### ❖ Use in Assignments

- **Discussion Assignments:**
  - AI tools may be used freely in discussion assignments. Students are not required to attribute the use of AI tools in these contexts, allowing for straightforward integration and experimentation with the technology to deepen understanding and engagement with the course material.
- **Graded Homework and Final Project:**
  - The use of AI tools is permitted in completing graded homework

assignments and the final project. However, students must follow these guidelines:

- **Attribution:** Clearly state the use of AI tools in your submissions.
- **Documentation:** Include a copy of the prompts used in interactions with AI tools as part of your assignment submission. This transparency is essential to maintain academic integrity and to allow for proper evaluation of your understanding and original contributions. **Citing only AI or ChatGPT is insufficient in any academic writing assignment (e.g., a project report). Students must provide the references used - articles, textbook chapter, etc.**
- **Spell Checking and Grammar Corrections:** Students may use AI tools for spell checking and grammar corrections in any written work. Students are **allowed to improve writing originally produced by themselves** by using **AI tools to edit, paraphrase, and proofread**. However, **if the percentage attributed to AI by the AI writing detector for a graded assignment is scored high** (on the answers) then the work should be reviewed further for a possible plagiarism violation. It is required that students clearly state:
  - **Tools Used:** Identify the AI tools utilized for spell checking and grammar corrections.
  - **Application:** Specify the sections or parts of the assignment where these tools were used. This information should be explicitly stated in the assignment submission.

#### ❖ Examinations

- **Midterm and Final Exams:** The use of AI tools is strictly prohibited during both the midterm and final exams. These assessments are designed to evaluate individual knowledge and problem-solving skills without the aid of external AI assistance.
- **Policy Violation Consequences:** Any student found using AI tools during these exams will be considered in violation of the course's academic integrity policies. Such violations will be reported and may result in disciplinary action in accordance with the university's standards.

#### ❖ Responsibility

- Regardless of whether AI tools are used, students are completely responsible for ensuring the authenticity and originality of their work submitted for academic evaluation. This includes a full understanding of the material and the ability to discuss and defend all submitted work, irrespective of the tools used in its creation.

## 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 individuals’ 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.

## University Policies

### 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. **Student Perceptions of Teaching (SPOT)** is the student evaluation system for UNT and allows students the ability to confidentially provide constructive feedback to their instructor and department to improve the quality of student experiences in the course. Students will receive an email from "UNT SPOT Course Evaluations via System Notification" [no-reply@iasystem.org](mailto: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/> or email [spot@unt.edu](mailto:spot@unt.edu). SPOT responses are anonymous to instructors/administrators, and they will be able to access results only after they have submitted final grades. Before final grade submission, instructors will not be able to see any responses.



## ADA Policy

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](https://studentaffairs.unt.edu/office-disability-access) website <https://studentaffairs.unt.edu/office-disability-access>
- You may also contact ODA 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, 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.

### 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> to learn more.

### Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at [my.unt.edu](http://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>

### 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](mailto: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](mailto:oeo@unt.edu) or at (940) 565 275**

### 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 <http://www.ecfr.gov/> 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 education 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:

- (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](mailto: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 <https://policy.unt.edu/policy/07-002> and Distance Education Courses <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 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 the above criteria, then the University office or department using the work must obtain the student's written permission.

### Transmission and Recording of Student Images in Electronically Delivered Courses

- 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.
- In the event an instructor records student presentation, 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.
- 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. 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 be reused in future course offerings. If you do not want your image to appear, turn off your camera prior to the start of the recording.

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 this 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.**

### Grades of Incomplete

Grades of Incomplete will only be given per university policy as outlined by the Office of the Registrar <https://registrar.unt.edu/grades/incompletes>.

## 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>
- Counseling and Testing Services <https://studentaffairs.unt.edu/counseling-and-testing-services>
- UNT Care Team <https://studentaffairs.unt.edu/care>
- UNT Psychiatric Services <https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry>
- 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>
- Financial Aid <https://financialaid.unt.edu>
- Student Legal Services <https://studentaffairs.unt.edu/student-legal-services>
- Career Center <https://careercenter.unt.edu>
- Multicultural Center <https://idea.unt.edu/multicultural-center>
- Counseling and Testing Services <https://studentaffairs.unt.edu/counseling-and-testing-services>
- Pride Alliance <https://idea.unt.edu/pridealliance>
- UNT Food Pantry <https://studentaffairs.unt.edu/food-pantry>

#### **Academic Support Services**

- Academic Resource Center <https://clear.unt.edu/canvas/student-resources>
- Academic Success Center <https://success.unt.edu/asc>
- UNT Libraries <https://library.unt.edu>
- Writing Center <https://writingcenter.unt.edu>
- Math Lab <https://learningcenter.unt.edu/math-lab>