# C S 5483 – Network Science
# Fall 2025

**Instructor:** Dr. Sridhar Radhakrishnan (sridhar@ou.edu)

**Office Location** : SEC 1178
**Office Hours:** 4:30 P.M to 6:00 P.M (Tuesday and Thursday).

https://oklahoma.zoom.us/j/95606704172?pwd=G7IFEG4VRaKvq2AVDZUQP18YdLoGpQ.1&from=addon

**Course Timings:** Online; There will be announced **Wednesday** classes from 5:00 PM – 7:00 PM CST. This is for reviews, Project Proposal presentations, and other presentations.

https://oklahoma.zoom.us/j/98450424175?pwd=bJsDynqR4p6rtdqOxqaiNLW387RU2f.1&from=addon

**Learning Management System/Website**: https://canvas.ou.edu/courses/381982

| | |
|---|---|
| **Course Prerequisite Course** | CS/DSA 4413 or permission of the instructor |
| **Objectives** | The topics covered will include fundamental algorithms for network analysis, exploring network properties, learning community detection techniques, understanding methods for network inference, and studying the dynamics of networks. We will also examine concepts such as percolation, resilience, spreading phenomena, social influence, and cascades. These concepts will be applied across various contexts, including physical, informational, biological, cognitive, and social systems. |
| **Useful Course Material** | 1. *Networks:* Book by *Mark Newman*, 2nd Edition, Oxford University Press, 2021, ISBN-13: 978-0123850591, ISBN-10: 0123850592<br>2. *Social Media Mining*: *An Introduction*, Cambridge University Press New York, NY, USA ©2014 ISBN:1107018854 9781107018853<br>3. Material that will be placed on the canvas. |

**Course Requirements:** Students will be required to complete several quizzes throughout the course. These are timed. Once you start you cannot pause. No collaboration with others in the class. In addition, there will be a series of 0programming exercises using Python and the NetworkX library. Students will also be provided with a research paper, which they will read, prepare a presentation on, and submit a video recording of the presentation for evaluation. Additionally, there will be a final group project which will culminate in a presentation. Throughout the course, students will also be required to participate in peer reviews on many of the reequipments. Failure to complete the final project and its associated presentation will result in an automatic "F" as the overall course grade.

**Course Grading:** The course letter grade will be determined based on the overall percentage as follows: 90-100 (A), 80-89 (B), 70-79 (C), 60-69 (D), and below 60 (F). The breakdown of percentage allocations is provided below:

| Grading Elements | Grade Distribution |
|---|---|
| Quizzes | 15% |
| Python Programming Assignments | 20% |
| Peer Reviews (Approximately 6 Peer Reviews) | 15% |
| Final Project<br>• A proposal (5%)<br>• Recording of the Demonstration of the project (10%)<br>• Live Presentation for Q/A (5%) | 20% |
| Recording of the presentation of the research paper | 10% |
| Each week's video lectures must be watched and listened to within 14 days of posting to be counted. | 20% |

**Final Project and Milestones**

There are several ways in which this course project can be completed:
(1) Development of software to perform network analysis or modeling on very large networks.
(2) Reproduce some results of a paper based on different data or different methods.

All projects must involve some visualization. Here are the due dates. The evaluation percentages are also provided below.

| Item | Assigned | Due |
|---|---|---|
| Prog. Assignment 1 (PA1) | Mon, Aug 25 | Sat, Sep 6, 11:59pm |
| Peer Review for PA1 (3 reviews/submission) | Sat, Sep 6 | Tue, Sep 9, 11:59pm |
| Quiz 1 | Mon, Sep 15 | Sat, Sep 20, Complete by 11:59pm |
| Prog. Assignment 2 (PA2) | Mon, Sep 22 | Sat, Oct 4, 11:59pm |
| Peer Review for PA2 | Sat, Oct 4 | Tue, Oct 7, 11:59pm |
| Final Project Proposal | Sat, Oct 4 | Sat, Oct 11, 11:59pm |
| Quiz 2 | Mon, Oct 13 | Sat, Oct 18, Complete by 11:59pm |
| Research Paper Selection | Sat, Oct 18 | Sat, Oct 25, 11:59pm |
| Prog. Assignment 3 (PA3) | Mon, Oct 20 | Sat, Nov 1, 11:59pm |
| Peer Review for PA3 | Sat, Nov 1 | Tue, Nov 4, 11:59pm |
| Quiz 3 | Mon, Nov 10 | Sat, Nov 15, Complete by 11:59pm |
| Recording of Research-Paper Presentation | Sat, Nov 8 | Sat, Nov 15, 11:59pm |
| Peer Review for Research-Paper Recording | Sat, Nov 15 | Wed, Nov 19, 11:59pm |
| Prog. Assignment 4 (PA4) | Mon, Nov 10 | Sat, Nov 22, 11:59pm |
| Recording of Final-Project Demonstration | Tue, Nov 18 | Tue, Nov 25, 11:59pm |
| Thanksgiving Break (no deadlines) | — | Nov 26–28 |
| Peer Review for PA4 | Sat, Nov 22 | Mon, Dec 1, 11:59pm |
| Quiz 4 | Thu, Nov 27 | Tue, Dec 2, Complete by 11:59pm |
| Live Final-Project Presentation (Q/A) | Mon, Dec 1 | Sat, Dec 6 |
| Peer Review for Final-Project Demo Recording | Sat, Dec 6 | Wed, Dec 10, 11:59pm |

**Lecture Videos**

Comprehensively watching all lectures is essential. Your engagement with the video lectures, which we will track through our media analytics where the videos are hosted, will account for 20% of your total grade in the class. Make sure to view them in their entirety. This participation will be documented in your Canvas GradeBook.

## Belonging Statement

The University of Oklahoma fosters an inclusive culture of respect and civility, belonging, and access, which are essential to our collective pursuit of excellence and our determination to change lives. The unique talents, perspectives, and experiences of our community enrich the learning, and working environment at OU, inspiring us to harness our innovation, creativity, and collaboration for the advancement of people everywhere.

## CS 5483: Network Science — Course Expectations

1. Programming and Assignments
    - All programming assignments will be completed in Python notebooks using libraries such as NetworkX.
    - Assignments are designed to reinforce both theoretical and applied aspects of network science. They will require thoughtful design, testing, and visualization, and cannot be completed at the last minute.
    - Submissions must follow good coding practices: clear documentation, organized structure, reproducibility, and well-tested code.
    - Assignments should be submitted on time via the designated platform (Canvas/Gradescope). Late submissions are not accepted unless explicitly approved.
    - Students may use Large Language Models (LLMs) and AI tools (e.g., GitHub Copilot, ChatGPT) as assistive tools, but they are responsible for verifying correctness. Any prompts or AI-generated content used must be documented and submitted along with the notebook.
2. Quizzes
    - The course includes four online, timed quizzes.
    - Quizzes must be completed individually without collaboration or external assistance.
    - Once started, quizzes cannot be paused.
3. Final Group Project
    - The final project is the only group-based component of the course.
    - Options include:
        1. Developing software to perform network analysis/modeling on large networks.
        2. Reproducing results of a research paper using different datasets or methods.
    - All projects must include visualization of networks.
    - Deliverables include:
        - A written proposal.
        - A recorded demonstration of the project.
        - A live group presentation with Q/A.
    - Failure to complete the project and presentation will result in an automatic "F" for the course.
4. Research Paper Presentation
    - Each student will select a research paper related to network science.
    - Deliverables:
        - Video-recorded presentation of the paper.
        - Peer reviews of classmates' recorded presentations (strict deadlines apply).
5. Peer Reviews
    - Students will complete six peer-review rounds:
        - Four programming assignments.
        - One research-paper presentation recording.
        - One final-project demonstration recording.
    - Each submission must be reviewed by 3 students, with reviews due on strict deadlines.
    - Missing peer reviews will directly reduce the Peer Review grade (15%).
6. Time Management and Work Ethic
    - Effective time management is essential: begin assignments early, allocate time for debugging, and avoid last-minute work.
    - Students should keep pace with weekly modules, engage in problem-solving, and ask questions during optional synchronous check-ins.
7. Online Conduct and Engagement
    - The class is asynchronous online. Weekly video lectures must be watched within 14 days of posting; completion is tracked and counts toward the grade.
    - Optional synchronous meetings may be held on Wednesday evenings for Q/A and discussion.
    - Respectful and professional communication is expected in all course forums and peer interactions.
8. Seeking Help

- The instructor and TAs are available during office hours (online).
- TAs will not debug code for students but will provide guidance on logic, concepts, and problem-solving strategies.

9. Critical Thinking and Problem-Solving
    - Students will learn to analyze, model, and visualize a variety of networks: technological, social, information, and biological.
    - Programming exercises and projects emphasize real-world applications of network science.
    - Ethical considerations in the use of data, algorithms, and AI tools will be emphasized throughout the course.

# Tentative Schedule (Weekly)

| Week of | Date / Notes | Topics |
|---|---|---|
| Aug 26, 2025 | Classes start Aug 25 | Module 0: About this Course and Introduction to Network Science<br>Module 1: Network Definition, Types of Networks, Programming with Python and NetworkX |
| Sep 2, 2025 | *Labor Day Sept 2 – no deadlines* | Module 2: Technological, Information, Social, and Biological Networks |
| Sep 9, 2025 | | Module 3: Fundamentals of Network Theory: Mathematics of Networks |
| Sep 16, 2025 | | Module 4: Fundamentals of Network Theory: Measures and Metrics |
| Sep 23, 2025 | | Module 5: Fundamentals of Network Theory: Graph Algorithms |
| Sep 30, 2025 | | Module 6: Fundamentals of Network Theory: Network Statistics and Measurement Error |
| Oct 7, 2025 | | Module 7: Fundamentals of Network Theory: The Structure of Real-World Networks |
| Oct 14, 2025 | | Module 8: Network Models: Random Graphs |
| Oct 21, 2025 | | Module 9: Network Models: The Configuration Model |
| Oct 28, 2025 | | Module 10: Network Models: Models of Network Formation |
| Nov 4, 2025 | | Module 11: Applications: Community Structure<br>Module 12: Graph Databases |
| Nov 11, 2025 | | Module 13: Graph Neural Nets<br>Module 14: Applications: Percolation and Network Resilience |
| Nov 18, 2025 | | Module 15: Applications: Epidemics on Networks |
| Nov 25, 2025 | *Thanksgiving Break (Nov 26–28)* | No new content / Catch-up week |
| Dec 2, 2025 | | Module 16: Advanced Topics |
| Dec 6 (Fri) , 2025 | 5:00–8:00 PM CST | Final Project Presentations (Live Q/A) |

**Course Reflection Survey**: You'll receive a Course Reflection Survey at the end of each semester for each course that you are enrolled in. I strongly encourage you to complete this survey. Your feedback can help me adjust my class for future semesters to help other students be successful. Your feedback is confidential and I will only receive it after final grades are due. Course Reflection Survey results may also factor into teaching evaluations and annual performance reviews and are shared with department and program chairs.

# CS 5483: Network Science — Course Policies

**Programming Assignments**

1. All programming assignments must be completed in Python notebooks using the NetworkX library and other approved Python tools.
2. All submissions are uploaded to Canvas, where they will also be distributed for peer review.
3. Deadlines are strict. Late submissions will not be accepted unless prior approval is granted for documented emergencies.
4. Each programming assignment must be clearly documented, including explanations of methods, inline comments in code, and visualization outputs. Submissions with poor or missing documentation may receive up to a 30% deduction.
5. Assignments that do not meet specifications may be penalized up to 50%. A partially working but well-documented notebook is preferable to no submission.
6. Students are responsible for ensuring that their notebook runs without errors before submission.
7. Programming specifications provided may not include all details. Students are expected to clarify questions early via Canvas discussions or during optional synchronous meetings.

**Peer Reviews**

1. Peer reviews are mandatory and constitute a significant part of the course grade (15%).
2. Each student submission (programming assignments, research paper presentation, and final project demonstration) must be reviewed by 3 peers.
3. Peer reviews are conducted on Canvas and are due by strict deadlines. Late peer reviews will receive zero credit.
4. Reviews should be constructive, professional, and reference the rubric provided.
5. Failure to complete peer reviews reduces both the Peer Review grade and, indirectly, the fairness of the course process.

**Quizzes**

1. The course includes four online quizzes, each timed and taken individually.
2. Quizzes must be completed in one sitting once started; they cannot be paused.
3. No collaboration is allowed.

**Final Project**

1. The Final Project is the only group project in the course.
2. Groups will submit:
    - A proposal
    - A recorded demonstration of the project
    - A live online presentation with Q/A (mandatory)
3. Projects may involve either:
    - Developing software for large-scale network analysis/modeling, or
    - Reproducing published results with different datasets/methods
4. All projects must include network visualization.
5. Failure to complete the final project and its presentation will result in an automatic "F" for the course.

**Use of AI and LLMs**

1. Students may use Generative AI tools (e.g., ChatGPT, GitHub Copilot) for idea generation, debugging, or coding assistance.
2. Any AI use must be explicitly acknowledged in the notebook (e.g., comments noting "Assisted by ChatGPT for code explanation").
3. Students must also submit a short document containing any prompts used for AI-generated content.
4. Directly copying AI-generated code without understanding or adaptation is prohibited and may be considered academic misconduct.
5. Students are fully responsible for correctness, efficiency, and readability of their submitted work.

**Attendance & Participation**

1. The course is asynchronous online, but students are expected to watch weekly lecture videos within 14 days of posting. Viewing is tracked via analytics and counts for 20% of the grade.
2. Optional synchronous meetings may be scheduled on Wednesday evenings for Q/A and discussion.
3. Professional, respectful communication is required in all forums, peer reviews, and group interactions.

**Academic Integrity**

1. Students may discuss concepts with peers but must not share or copy code.
2. All sources of external assistance (StackOverflow, GitHub, LLMs, discussions with peers) must be documented in the submission.
3. All programming assignments are individual unless explicitly designated as group work (Final Project).
4. Submissions will be checked for plagiarism and code similarity. Both provider and receiver of copied work will be subject to University of Oklahoma's Academic Misconduct Code (http://integrity.ou.edu).

**Incompletes**

The grade of "I" (Incomplete) is given only in rare cases where:

1. The request is made within the last two weeks of the semester.
2. The student has a grade of C or better at that time.
3. The inability to complete coursework is due to documented, compelling circumstances.

**Module 0: About this course and Introduction to Network Science**

0.1 Introducing your Professor
   a. Professor
   b. Contact Information
0.2 Course Contents
   a. About network science
   b. Textbooks used
   c. Topics to be covered
0.3 Course tools
   a. Python – GitHub, Jupyter, NetworkX, and visualization tools
0.4 Grading Policies
0.5 How to learn online

**Module 1: Network Definition, Types of Networks, Programming with Python and NetworkX**

1.1 Networks Definition and Examples
   d. What are networks? Nodes (vertices) and links (edges), directed, undirected
   e. Examples of various networks along with their sizes
1.2 Networks Classification and the Information it Conveys
   a. Classification of the types of networks: technology, information, social, and biological
   b. What can we learn from networks?
1.3 Properties of networks
   a. Degree, in-degree, out-degree, hubs, distance, radius, diameter, small-world effect (degrees of separation), clusters, communities
1.4 Python
   a. Python notebook, NetworkX, Simple visualization

**Module 2: Technological, Information, Social, and Biological Networks**

2.1 Technological Networks
   a. The Internet – How is it organized? How can we get its structure using TRACEROUTE? What are routing tables? How can be it used to understand the structure of the Internet?
   b. The Telephone Network: Circuit-Switched Network and Packet-Switched Networks
   c. Power Grids: How are they modeled? What are smart Grids?
   d. Transportation Networks: Modeling – Road network and train network
   e. Delivery and Distribution Networks
   f. Interdependent Networks
2.2 Information Networks
   a. The world wide web: A directed network
   b. Using a crawler to get WWW's structure: wget, Nutch, GRUB, and Sphinx
   c. Citation Networks, Peer-to-Peer Networks, Recommender Networks, and Keyword indexes
   d. Drug-drug interaction network
2.3 Social Networks
   c. Empirical study of social networks
   d. Constructing social networks: interviews and questionnaire, ego-centric networks, direct observation, archival data
   e. Affiliation networks
   f. Small-World Experiment
   g. Snowball sampling, contact tracing, and random walks
2.4 Biological Networks
   a. Metabolic networks, protein-protein interaction network, genetic regulatory networks

b. Networks in the Brain – Networks of neurons, networks of functional connectivity in the brain
c. Ecological networks: Food webs, Host-parasite networks, Mutualistic networks

2.5 Python
a. Downloading various types of networks and visualizing with python and graphViz

**Module 3: Fundamentals of Network Theory: Mathematics of Networks**

3.1 Networks and their representations:
a. Edge list, Adjacency Matrix, Adjacency List, Weighted Networks, Sparse vs Dense Graph

3.2 Varieties of graphs
a. Directed and Acyclic
b. Bipartite, Hypergraphs
c. Trees
d. Planar
e. Multilayer and Dynamic

3.3. Properties of Graphs: degree, density, sparsity, walks, paths, shortest paths, diameter
a. Degree, average degree, and moments
b. Density and Sparsity
c. Paths: walks, shortest paths, and diameter
d. Components: connected components, strongly connected components

3.3 Independent Paths, connectivity, cut sets, max flow, min cut
a. Vertex and edge disjoint paths
b. Connectivity: bi-connectivity and k-connectivity
c. Cut sets and relationship to connectivity, max flow and min cut on weighted networks

3.4 Graph Laplacian
a. Definition and properties
b. Graph Partitioning definition
c. Network Visualization
d. Random walks
e. Resistor networks

3.5 Python
a. Take a graph and show how the various properties, paths, cuts, connectivity, and graph Laplacian can be calculated

**Module 4: Fundamentals of Network Theory: Measures and Metrics**

4.1 Centrality
a. Degree Centrality
b. Eigenvector Centrality
c. Katz Centrality
d. Page Rank
e. Hubs and Authorities
f. Closeness Centrality
g. Betweenness Centrality

4.2 Groups of Nodes
a. Cliques
b. Components and K-Components

4.3 Transitivity
a. Clustering Coefficient
b. Reciprocity

4.4 Signed Edges and Structural Balance

4.5 Similarity
   a. Structural Equivalence
   b. Regular Equivalence
4.6 Homophily and Assortative Mixing
   a. Assortative Mixing by unordered characteristics
   b. Assortative Mixing by ordered characteristics
4.7 Python
   a. Take a graph's adjacency matrix and calculate various centrality measures
   b. Write a python code to determine a k-clique in a graph

**Module 5: Fundamentals of Network Theory: Graph Algorithms**

5.1 Running time and computational complexity
5.2 Representation of Networks: Edge List, Adjacency Matrix, Adjacency List
5.3 Depth First Search Algorithm: Finding Connected Components
5.4 Breadth First Search: Counting Triangles and Finding Diameter of a network
5.5 Single Source Shortest path algorithm – Dijkstra's
5.6 All-Pair Shortest path algorithm – Floyd's algorithm: Betweenness Centrality
5.7 Max-Flow and Min-Cut
5.8 K-disjoint paths algorithm
5.9 Finding maximal cliques in a graph
5.10 Python
   a. Using the NetworkX library and sample random graphs, determine compute the number of connected components in a graph.

**Module 6: Fundamentals of Network Theory: Network Statistics and Measurement Error**

6.1 Types and Sources of Errors
6.2 Estimating Errors: Statistical, Maximal Likelihood, Expectation Maximization Algorithm
6.3 Correcting Errors: Link Prediction, Node Disambiguation
6.4 Python
   a. Implement a link prediction algorithm using Phyton and NetworkX

**Module 7: Fundamentals of Network Theory: The Structure of Real-World Networks**

7.1 Real-World Networks and Features
7.2 Degree Distributions
7.3 Power laws and scale-free networks, Detecting and Visualizing power-laws
7.4 Distribution of Centrality measures
7.5 Clustering Coefficients
7.6 Assortative Mixing
7.7 Python
   a. Take a set of real-world graphs and show its degree distributions

**Module 8: Network Models: Random Graphs**

8.1 Random Graphs
8.2 Mean Number of Edges and Mean Degree
8.3 Degree Distribution
8.4 Clustering Coefficient
8.5 Giant Component
8.6 Small Components
8.7 Path Lengths
8.8 Issues with Random Graphs
8.9 Python
   a. Write a program to generate various type of random graphs

**Module 9: Network Models: The Configuration Model**

9.1 The configuration model: Edge probability and Expected degree
9.2 Excess Degree distribution
9.3 Clustering Coefficient
9.4 Tree-Like Networks
9.5 Number of second neighbors of a node
9.6 Giant, Small Components, and Diameter
9.7 Python
   a. Take a large graph, run connected components algorithm, show the giant component by removing edges at random.

**Module 10: Network Models: Models of Network Formation**

10.1 Preferential Attachment – Price Model
10.2 Barabasi and Albert Model
10.3 Node-copying Model
10.4 Python
   a. Implement the preferential attachment model.

**Module 11: Applications: Community Structure**

11.1 Dividing Networks into groups
11.2 Modularity Maximization: Louvain Algorithm
11.3 Kernighan-Lin Algorithm
11.4 Spectral Partitioning
11.5 Other Community Detection Algorithms: Betweeness, Hierarchical Clustering,
11.6 Measuring Performance of Community Detection Algorithms
11.7 Python
   a. Implement and execute the Louvain algorithm on a chosen network

**Module 12: Graph Databases**

12.1 Relational Database System
12.2 Introduction to Graph Database
12.3 Queries on Graph Databases
12.4 Introduction to Neo4j, Amazon Neptune and Graph Studio by Oracle
12.5 Real-world use cases

**Module 13: Graph Neural Networks**

13.1 Introduction to Neural Networks
13.2 Graph Convolution Network
13.3 Applications of GNNs
13.4 Introduction to PyTorch and PyGeometry

**Module 14: Applications: Percolation and Network Resilience**

14.1 Percolation
14.2 Uniform Removal of Nodes
14.3 Percolation in Real-World Networks
14.4 Algorithm for Percolation
14.5 Python
   a. Implement and execute the percolation algorithm discussed

**Module 15: Applications: Epidemics on Networks**

15.1 Models of Spread of Infection
15.2 SI Model
15.3 SIR Model
15.4 SIS Model
15.5 SIRS Model
15.6 Outbreak Sizes and Percolation
15.7 Python
    a. Implement and execute SI and SIR model on a random network

**Module 16: Advanced Topics**

16.1 Time-Evolving Network Structures and Algorithms
16.2 Interdependent Networks, Resilience, and Restoration
16.3 Dynamics of Brain Networks
16.4 Financial Markets Meets Network Science

# University Policies

**Mental Health Support Services:**
Support is available for any student experiencing mental health issues that are impacting their academic success. Students can either been seen at the University Counseling Center (UCC) located on the second floor of Goddard Health Center or receive 24/7/365 crisis support from a licensed mental health provider through TELUS Health. To schedule an appointment or receive more information about mental health resources at OU please call the UCC at 405-325-2911 or visit University Counseling Center. The UCC is located at 620 Elm Ave., Room 201, Norman, OK 73019.

**Title IX Resources and Reporting Requirement**
The University of Oklahoma faculty are committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX. There are resources available to those impacted, including: speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you have (or someone you know has) experienced any form of sex or gender-based discrimination or violence and wish to speak with someone confidentially, please contact OU Advocates (available 24/7 at 405-615-0013) or University Counseling Center (M-F 8 a.m. to 5 p.m. at 405-325-2911).
Because the University of Oklahoma is committed to the safety of you and other students, and because of our Title IX obligations, I, as well as other faculty, Graduate Assistants, and Teaching Assistants, are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures that occur in: class discussion, writing assignments, discussion boards, emails and during Student/Office Hours. You may also choose to report directly to the Institutional Equity Office. After a report is filed, the Title IX Coordinator will reach out to provide resources, support, and information and the reported information will remain private. For more information regarding the University's Title IX Grievance procedures, reporting, or support measures, please visit Institutional Equity Office at 405-325-3546.

**Reasonable Accommodation Policy**
The University of Oklahoma (OU) is committed to the goal of achieving equal educational opportunity and full educational participation for students with disabilities. If you have already established reasonable accommodations with the Accessibility and Disability Resource Center (ADRC), please submit your semester accommodation request through the ADRC as soon as possible and contact me privately, so that we have adequate time to arrange your approved academic accommodations.
If you have not yet established services through ADRC, but have a documented disability and require accommodations, please complete ADRC's pre-registration form to begin the registration process. ADRC facilitates the interactive process that establishes reasonable accommodations for students at OU. For more information on ADRC registration procedures, please review their Register with the ADRC web page. You may also contact them at (405)325-3852 or adrc@ou.edu, or visit www.ou.edu/adrc for more information.
Note: disabilities may include, but are not limited to, mental health, chronic health, physical, vision, hearing, learning and attention disabilities, pregnancy-related. ADRC can also support students experiencing temporary medical conditions.

**Religious Observance**
It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty.

**Persons with Disability or Special Accommodation or Accommodation for any reason:**
**The Accessibility and Disability Resource Center is committed to supporting students with disabilities to ensure that they can enjoy equal access to all components of their education. This includes your academics, housing, and community events. If you are experiencing a disability, a mental/medical health condition that has a significant impact on one or more life functions, you can receive accommodations to provide equal access. Possible disabilities include, but are not limited to, learning disabilities, AD(H)D, mental health, and chronic health. Additionally, we support students with temporary medical conditions (broken wrist, shoulder**

**surgery, etc.) and pregnancy. To discuss potential accommodations, please contact the ADRC at 730 College Avenue, (ph.) 405.325.3852, or adrc@ou.edu.**

**Adjustments for Pregnancy/Childbirth Related Issues**

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact the Accessibility and Disability Resource Center at 405/325-3852 and/or the Institutional Equity Office at 405/325-3546 as soon as possible. Also, see the Institutional Equity Office FAQ on Pregnant and Parenting Students' Rights for answers to commonly asked questions.

**Final Exam Preparation Period**

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy.

**Emergency Protocol**

During an emergency, there are official university procedures that will maximize your safety.

**Severe Weather:** If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather.

1. Look for severe weather refuge location maps located inside most OU buildings near the entrances.
2. Seek refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
3. Go to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
4. Get in, Get Down, Cover Up
5. Wait for official notice to resume normal activities.

Additional Weather Safety Information is available through the Department of Campus Safety.

**The University of Oklahoma Active Threat Guidance**

The University of Oklahoma embraces a Run, Hide, Fight strategy for active threats on campus. This strategy is well known, widely accepted, and proven to save lives. To receive emergency campus alerts, be sure to update your contact information and preferences in the account settings section at one.ou.edu.

**RUN**: Running away from the threat is usually the best option. If it is safe to run, run as far away from the threat as possible. Call 911 when you are in a safe location and let them know from which OU campus you're calling from and location of active threat.

**HIDE:** If running is not practical, the next best option is to hide. Lock and barricade all doors; turn of all lights; turn down your phone's volume; search for improvised weapons; hide behind solid objects and walls; and hide yourself completely and stay quiet. Remain in place until law enforcement arrives. Be patient and remain hidden.

**FIGHT:** If you are unable to run or hide, the last best option is to fight. Have one or more improvised weapons with you and be prepared to attack. Attack them when they are least expecting it and hit them where it hurts most: the face (specifically eyes, nose, and ears), the throat, the diaphragm (solar plexus), and the groin.

*Please save OUPD's contact information in your phone.*

**NORMAN** campus: *For non-emergencies call (405) 325-1717. For emergencies call (405) 325-1911 or dial 911.*

**TULSA** campus: *For non-emergencies call (918) 660-3900. For emergencies call (918) 660-3333 or dial 911.*

**Fire Alarm/General Emergency: (required)**

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates:

1. *LEAVE* the building. Do not use the elevators.
2. *KNOW* at least two building exits
3. *ASSIST* those that may need help
4. *PROCEED* to the emergency assembly area
5. *ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues.*
6. *WAIT* for official notice before attempting to re-enter the building.

*OU Fire Safety on Campus*