CS 4033/5033 - Machine Learning Fundamentals

Dimitris Diochnos
The University of Oklahoma
School of Computer Science

Spring 2025

Time and Location

The course will meet at Sarkeys Energy Ctr N0202 on Mondays, Wednesdays, Fridays, 11:00am-11:50am.

Website: https://www.diochnos.com/teaching/CS4033-5033/2025S/index.php

Canvas: Homework assignments, project submission, and potentially other reading material.

Instructor

Dimitris Diochnos, 230 Devon Energy Hall (DEH), diochnos@ou.edu .

Teaching Assistants

We will not have any teaching assistants in this course.

Office Hours

Office hours will be held at DEH 230 on:

- **Mondays** between **2:00pm-2:50pm** and
- **Wednesdays** between **3:00pm-3:50pm**.

Alternatively, we can meet **by appointment**, but please send an email to arrange such a meeting.

A Guide on Sending Emails to Faculty and Teaching Assistants. Please see: http://bit.ly/2bbU7Ms.

Prerequisite Background (Prior Programming Experience is Assumed)

1. CS 2413 (Data Structures)
2. CS 2813 or MATH 2513 (Discrete Mathematics)
3. MATH 4753 or ISE 3293 or MATH 4743 (A course on Statistics)
4. MATH 3333 (Linear Algebra)
5. MATH 3113 or MATH 3413 (further mathematical maturity which can be exhibited by ODEs or another advanced mathematical course).

Course Overview

By taking this course, you will learn about current techniques that enable machines to learn and adapt their behavior over time and to new situations. You will take a small step into creating intelligent machines for the future by choosing and completing a team-based semester-long machine learning project. You will also gain experience at teamwork and at presenting your work professionally through the project and homework. The syllabus is continuously updated and subject to change.

Learning Objectives

The general/overall learning objectives are:

- Be able to explain the different types of ML methods and articulate why they are different and what types of problems each is aiming to solve
- Be able to implement any of the basic techniques in ML
- Select the ML solution best-suited for a novel domain and justify your choice
- Synthesize one area of machine learning in depth and apply it to a novel application
- Implement and evaluate the effectiveness of your ML method applied to a novel application
- Communicate ideas clearly to a variety of audiences both in oral and written form
- Function effectively in a team

The specific topics we will cover (not necessarily in this order) include:

Reinforcement Learning

- The RL problem
- Dynamic programming
- Temporal difference learning
- Function approximation

Supervised Learning

- Classification and Regression
- Nearest neighbors and naive Bayes
- Linear models for classification and regression
- Artificial neural networks and decision trees

General Techniques/Concepts and Other Content

- Ensemble methods including bagging, random forests, and boosting methods
- Overfitting and regularization
- Model assessment, complex performance measures
- Clustering

Course Catalog Description

Topics include decision trees, relational learning, neural networks, Bayesian learning, reinforcement learning, multiple-instance learning, feature selection, learning appropriate representations, clustering, and kernel methods. No student may earn credit for both 4033 and 5033.

Schedule of Classes

The syllabus is continuously updated and subject to change. We will cover the material at a pace that is comforable. Our **first meeting** is on **Monday, January 13, 2025** and our **last meeting** is on **Friday, May 2, 2025**.

The **spring break period** this year is **March 17 to March 21 (week 10)**.

The **final exam** is **in-class** (Sarkeys Energy Ctr N0202) on **Friday, May 9, 2025**, **1:30pm-3:30pm**. **I will not accommodate rescheduling of the exam because you have a coflict with another course. Be wise and enroll in this class only if you can have the final exam at the above date and time.**

A **rough outline** for the course, which is subject to change slightly depending on our pace, is shown in Table 1.

Table 1: Tentative Lecture Schedule

Period	**Topics**
Week 1	Module 0: About this Course
	Module 1: Introduction to Reinforcement Learning
Week 2	Module 1 (cont'd): Introduction to Reinforcement Learning
Week 3	Module 2: Dynamic Programming
	Module 3: Model-Free Methods and Prediction
Week 4	Module 3 (cont'd): Model-Free Prediction
	Module 4: Model-Free Methods and Control
Week 5	Module 4 (cont'd): Model-Free Control
	Module 5: Value-Function Approximation
Week 6	Preparation for midterm and **first midterm exam**
Week 7	Module 6: Introduction to Supervised Learning
Week 8	Module 7: Linear Models
Week 9	Module 8: Model Selection, Regularization, and Model Assessment
Week 10	**Spring Break**
Week 11	Module 9: Metrics Beyond Accuracy
Week 12	Module 10: Neural Networks
Week 13	Module 11: Decision Trees
Week 14	Preparation for midterm and **second midterm exam**
Week 15	Module 12: Ensemble Learning
Week 16	Module 13: Elements of Unsupervised Learning
	Advertisement for Computational Learning Theory
Finals Week	**Final Exam (in-class)**

Project Milestones (Tentative Schedule)

The class has a semester-long project which is composed of two parts. The first part is devoted to reinforcement learning (RL) and the second part is devoted to supervised learning (SL). Because the amount of modules for supervised learning covers more than half of the material of the class, the order of these two parts cannot change.

A schedule with the milestones for the semester-long project is shown in Table 2.

Table 2: Milestones for the semester-long project.

Student Milestone	Date	Instructor Milestone
RL Project Proposal	End of week 3	
	Beginning of week 4	Feedback on RL Project Proposal
RL Project Checkpoint	End of week 6	
	Beginning of week 7	Feedback on RL Project Checkpoint
SL Project Proposal	End of week 9	
	Beginning of week 10	Feedback on SL Project Proposal
RL Project is Due	End of week 10	
	(end of spring break)	
SL Project Checkpoint	End of week 12	
	Beginning of week 13	Feedback on SL Project Checkpoint
SL Project is Due	End of week 16	
	(end of semester)	

Textbook, Notes, and Related Reading Material

Required Material

The main references for our course are the following two books.

- *Reinforcement Learning: An Introduction* by Sutton and Barto [11]. The book is available online for free at http://incompleteideas.net/book/the-book-2nd.html.
- *Machine Learning* by Tom Mitchell [7]. The book is out of print. Despite its age, in my opinion, this is the best introductory book for traditional concepts of machine learning. Fortunately, the book is available online for free at http://www.cs.cmu.edu/~tom/mlbook.html. For a more modern treatment and insight into machine learning we will also be using the book called *An Introduction to Statistical Learning* that is mentioned below.
- *An Introduction to Statistical Learning (with Applications in Python)* by Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani [4]. The book is available online for free at https://www.statlearning.com.

Optional Material

Optional resources will be listed on Canvas, as well as on the class website:
`https://www.diochnos.com/teaching/CS4033-5033/2025S/index.php`.

Other Books of Interest

The above required books have all the information that you may want for this class (and even more than that)! This is why they are the required books for our class. Having said that, I have appreciated several books on machine learning throughout the years and I really like the exposition of certain topics in these other books.

- *Elements of Statistical Learning* by Hastie, Tibshirani, and Friedman [3]. The book is available online for free at http://web.stanford.edu/~hastie/ElemStatLearn/. This book used to be my primary reference for the course but I have now decided to substitute it with [4] which I believe is better suited for an introductory course in machine learning.

- *Mining of Massive Datasets* [6] by Jure Leskovec, Anand Rajaraman, and Jeffrey David Ullman. The book is available online for free at http://www.mmds.org.
- *Algorithms for Reinforcement Learning* [12] by Csaba Szepesvari. The book is available online for free at https://sites.ualberta.ca/~szepesva/rlbook.html.

If you appreciate theoretical justifications more, then the following two books have lots of technical explanations to some of the concepts that we will see in this class.

- *Foundations of Machine Learning* [8] by Mehryar Mohri, Afshin Rostamizadeh, and Ameet Talwalkar. The book is available for free at https://cs.nyu.edu/~mohri/mlbook/.
- *Understanding Machine Learning: From Theory to Algorithms* [10] by Shai Shalev-Shwartz and Shai Ben-David. The book is available for free at https://www.cs.huji.ac.il/w~shais/UnderstandingMachineLearning/.

A good book for linear models, which is however not available for free online, is *Learning From Data* [1] by Yaser S. Abu-Mostafa, Malik Magdon-Ismail, and Hsuan-Tien Lin.

Not Technical but Interesting Books. Domingos in *The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World* [2], has a very nice (high-level) description, sometimes accompanied by historical anecdotes, on different aspects of machine learning. Valiant's book *Probably Approximately Correct: Nature's Algorithms for Learning and Prospering in a Complex World* [13] provides a good narrative for connections between evolution and learning. Finally, an unfortunate side of the ever-increasing influence that machine learning algorithms have in our daily lives is discussed in *Weapons of math destruction: How big data increases inequality and threatens democracy*, by Cathy O' Neil [9]. Along these lines the book by Michael Kearns and Aaron Roth, titled *The Ethical Algorithm: The Science of Socially Aware Algorithm Design* [5], is also highly recommended.

Grading

You will be learning and practicing many aspects of machine learning. What you get out of a course will depend on what you put into it! In order to give you a fair grade at the end of the semester, I will evaluate you using the following weighting:

- **30% homework assignments**,
- **30% exams** as follows:
  - 7.5% each midterm exam and
  - 15% the final exam,
- **40% semester-long project**.

Grades may also be adjusted slightly upward or downward depending on class participation. I expect grading to be along the lines shown in the table below:

Percentage	Grade
$\geq 90\%$	A
$\geq 80\%$	B
$\geq 70\%$	C
$\geq 60\%$	D
otherwise	F

Grades may be curved at the end of the semester, but grade thresholds will never be higher than those shown above. The only exception is the following very important rule:

One cannot obtain a final letter grade for this course that is more than one letter grade higher compared to the best letter-grade of all their exams.

For example, one cannot obtain a letter-grade for this course of B or higher if the best letter-grade of their exams is D. Their grade will be rounded down to C.

Students should submit one assignment per group. Below "we" refers either to the instructor or to the TAs (should TAs be available for the course).

- If a student submits more than one assignment we will take into account the latest one. Please note that there is no way for us to tell if you have submitted additional/other files in your previous submissions as these are overwritten on Canvas. So, you are responsible that you submit all files with your latest submission.
- If more than one student submits the assignment, the we are allowed to grade any one of them they like and this may very well mean that you will receive a smaller grade for your group compared to what you could receive with a full/latest submission.
- We are allowed to apply a small penalty (e.g., up to 8% of the maximum grade) for situation where multiple submissions are made per group. So, please make sure that only one person submits what is needed per group and that person should be responsible for making a complete submission each time.

Further clarification on grading follows.

Undergraduates: Students taking 4033 will have shorter homework assignments and a smaller project. The grade thresholds are not required to be the same for the two courses.

Grade Questions: To maintain fairness in grading, the items should be brought to the person who graded it. To maintain fairness, all disagreements about the grading of projects should be brought to our attention within one week of when the item was returned. **I will not consider issues that are more than one week old.**

Online Grade Summary: Canvas has a grade book that I will use to store all of your grades. It is your responsibility to verify that the grades on Canvas are correct. If an error is found, bring the document to me and I will correct Canvas.

Borderline Grades: Borderline final grades will be decided by your class participation which means that being an active participant in class can push you over a grade boundary.

Final Examination: In recent years many students are using generative AI for their answers and this makes it impossible to understand how much of the material the students understand. For this reason we have two midterm exams and one final exam and moreover we have the constraint that no student can obtain a final letter-grade that is more than one letter-grade compared to the average letter-grade of their exams.

Due Dates: To be fair to everyone and to minimize disruption to class, homeworks and projects are due at midnight on the day listed in the schedule.

Projects: Your final project will be due the last week of classes. Per university policy, you may turn this project in prior to pre-finals week if you have completed the project.

Examinations

- We will have **two midterm exams**, both are going to be in-class.
- The **final exam** is **in-class** on **Friday, May 9, 2025**, **1:30pm-3:30pm**.
- The final exam is comprehensive per university rules.
- All the exams will be closed-book written exams.

- **No electronic help is allowed for the exams**, including no calculators and no cell phones, unless we decide otherwise with an explicit announcement that may allow such a use.
- No notes can be used for the exams.

Important: You will not be able to take the exam another day because you have a conflict with another course. Make sure you understand this now and choose wisely the courses in which you enroll.

Homework Assignments

There will be six homework assignments with a tentative schedule as shown in Table 3.

Table 3: Tentative Homework Schedule

Homework	Assigned	Due
1	Week 2 (beginning of week)	Week 3 (mid-week)
2	Week 4 (beginning of week)	Week 6 (beginning of week)
3	Week 7 (beginning of week)	Week 8 (end of week)
4	Week 8 (end of week)	Week 11 (mid-week)
5	Week 11 (mid-week)	Week 13 (beginning of week)
6	Week 13 (mid-week)	Week 15 (end of week)

The contribution for your grade based on homework will be computed by adding up all the points that you receive from the individual homework assignments and then dividing by the maximum amount of points that you could gather from all these assignments. I expect the assignments to be weighted roughly evenly.

Programming Language. The programming language is Python. Your submissions are expected to run by using the command line on the main file of your submission using a recent Python interpreter (e.g., Python 3.12).

Same is true for your project; it has to be written in Python and that we can compile the main program of your submission using the command line without any issues.

No exceptions will be made to this policy. If you write in a different language, or submit a Jupyter notebook, or ...., then you may automatically receive a zero for your submission.

Course Policies

Academic Integrity

Academic misconduct hurts everyone but particularly the student who does not learn the material. All work submitted for an individual grade should be the work of that single individual and not his/her friends. It is fine to ask a fellow student for help as long as that help does not consist of copying any computer code, or solutions to other assignments. Students working on joint projects (e.g., the groups you form for homework) may certainly help one another and are expected to share ideas, code, and solutions within their group. However, they may not share beyond their group.

1. For the homework, you may form study groups so long as each homework is in your own words. Write your study partners' names on your homework when you turn it in.

2. Do not show another student (or group) a copy of your homework (resp., work for the project) before the submission deadline. The penalties for permitting your work to be copied are the same as the penalties for copying someone else's work.
3. Make sure that your computer account is properly protected. Use a good password, and do not give your friends access to your account or your computer system. Do not leave printouts or thumb drives around a laboratory where others might access them.

Upon the first documented occurrence of academic misconduct, I will report it to the Campus Judicial Coordinator. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code. In the unlikely event that I elect to admonish the student, the appeals process is described in `http://www.ou.edu/integrity`. For specific definitions on what constitutes cheating, review the Student's Guide to Academic Integrity (https://www.ou.edu/integrity/students).

Collaboration Policy

Collaboration is encouraged for homework and is required for projects. No collaboration will be allowed on exams.

For the projects, you will work within your group. You are required to form a group of size two (including yourself) for the project and in one or two rare situations I may allow the formation of a group of three students working on the project, but this will be some last resort measure so that someone will not have to work alone. Please write your partners' names on your project submissions when you turn them in.

Regarding homework assignments, unless otherwise specified, students may discuss problem sets with one another. However, students should afterward write the solutions on their own. Collaborators (people you speak to about an assignment) must be named at the top of the assignment. You cannot share code even if you plan to write the name of your friend with whom you discussed a homework assignment at the top of your submission.

General Remarks. Please note the following two.

- **If you are unsure if something is permitted, consult with me before doing it.**
- **For exams** (whether midterms or final), **students are required to work alone** and follow the stated rules exactly.

Project code. Your project code and writeups must be written exclusively by you or your group. **Use of any downloaded code or code taken from a book (whether documented or undocumented) is considered academic misconduct and will be treated as such. The same is true for code written by some generative AI program such as ChatGPT.** Exceptions from this policy (such as a project that builds on an existing open-source project) may be granted but you MUST speak with me first.

Please read below the section about generative AI for more information about that particular topic.

Late Work Policy

You can postpone once your homework submission by 24 hours without any penalty. After the first time that you have a late submission, a 10% (of the maximum possible grade) penalty will be applied for every day that is late – the maximum delay can be 3 days (including the first time that you have a late submission). This penalty is applied of course to every member of the group where you belong to.

We will be using an electronic system (Canvas) for the students' submissions and therefore it is your responsibility to turn in your homework (or an exam, should this be the case) on time. You are allowed to upload multiple copies of your work, so always make sure that you have submitted something.

Please coordinate within your group and make one submission per group.

Chegg and Other Online Tutoring Sources

There are a wide variety of tutoring resources available through paid websites. Many of these sites have students upload assignments and solutions and surreptitiously provide these documents to other students. What appears to be a session with a tutor may be, behind the scenes, the tutor doing a search of their company database of solutions to share. By using these sites you risk being charged with academic misconduct, either by supplying other students with answers they did not author or by receiving someone else's answer that you did not author. Since these companies are not open with students about their practices, you cannot know whether a tutor is providing meaningful support (for example, identifying misunderstandings of content and explaining them) or simply feeding you someone else's solution a bit at a time. The tutor's actions can result in different students submitting answers that are identical, which may be flagged as academic misconduct during grading.

Use of Generative Artificial Intelligence

This course focuses on how people learn to implement computer programs. Having a computer program automatically generated by another computer program instead of being generated from a student's mind does not demonstrate student learning. Students who learn to rely on generative AI technology may not be able to write programs independently, as is necessary for examinations in this course and for future programming. Amongst other problems, generative AI tools are not fact checkers and do not necessarily produce correct solutions to problems. They are sensitive to small changes in prompts. They do not quote and cite sources properly. Students who copy generated AI results into assignments are committing plagiarism, just as if they had copied from another student.

- Use of generative AI tools is only allowed when the assignment specifically permits it. **If the assignment is silent on the use of generative AI tools, they are not allowed.**
- If a generative AI tool is used in an assignment, the student must provide a summary of how the tool was used. This would include the name of the tool (including version) and a detailed description of how it was used and what work the student contributed to the assignment. Students must substantially contribute to the solution to avoid plagiarism.
- When AI tools are allowed on an assignment, students may request an alternate assignment if they have an objection to using these tools.
- If there is a question about whether a student completed work independently or with the use of these tools, I will invite the student to my office to explain the assignment in detail. **Students who choose to not come or who cannot explain the work they submitted will be charged with an academic integrity violation.**

Make-Up Midterms

In some rare cases I can offer a makeup midterm to a student (subject to my schedule and availability as well). However, if the student misses their rescheduled midterm, the percentage points of the midterm as a contribution towards their final grade will transfer to their final exam. For example, if in a class each of two midterms contributes 7.5% to the total final grade and the final exam contributes 15% of the total final grade, then missing one midterm would cause the final exam to contribute 22.5% towards the final (overall) grade that the student will receive in the class.

Furthermore, for every midterm that a student misses beyond one (e.g., a student misses both makeup midterms), then for every such midterm apart from one, the student will receive a zero.

Not Showing Up on Midterms

Not showing up on a midterm without a reasonable justification that can explain why you have no arranged ahead of time a make-up midterm, will immediately lead to a ZERO (0) for your grade.

Claiming that you were not aware that we had a midterm on a particular day and you scheduled another appointment, or you just decided not to come to class simply because you did not want to come to class one day, is not a valid excuse. It is your responsibility to make sure that you receive all the notifications from Canvas. Additionally, a rough expectation regarding when the midterms will take place is announced in this syllabus in the tentative schedule of classes (Table 1) as well as in the webpage that we are maintaining for the course. Again, the latest and greatest information for the exam will be communicated via Canvas and also discussed in class. So, there are no cheap excuses for no-shows on the day a midterm is scheduled to take place.

Final Exam Rescheduling

The final exam cannot be rescheduled. If you miss it you will get a zero (0).

Classroom Conduct

Disruptions of class will not be permitted. Examples of disruptive behavior include:

- Allowing a cell phone or pager to repeatedly beep audibly.
- Playing music or computer games during class in such a way that they are visible or audible to other class members.
- Exhibiting erratic or irrational behavior.
- Behavior that distracts the class from the subject matter or discussion.
- Making physical or verbal threats to a faculty member, teaching assistant, or class member.
- Refusal to comply with faculty direction.

In the case of disruptive behavior, I may ask that you leave the classroom and may charge you with a violation of the Student Code of Responsibilities and Conduct.

Class Web Page

The main web page for the class is

https://www.diochnos.com/teaching/CS4033-5033/2025S/index.php

Login to the Canvas website using your 4+4 (first four letters of your last name followed by the last four digits of your student number), using your standard OU password. If you have difficulty logging in, call 325-HELP. This software provides a number of useful features, including a list of assignments and announcements, an electronic mailing list, newsgroups, and grade book. All handouts are available from Canvas. You should check the site daily. When I update the site, I will post an announcement telling you what has been added and where it is located.You are responsible for things posted on the site with a 24 hour delay.

Student's Feedback for the Course

The College of Engineering utilizes students' feedback as one of the bases for evaluating the teaching effectiveness of each of its faculty members. The results of these forms are important data used in the process of awarding tenure, making promotions, and giving salary increases. In addition, the faculty uses these forms to improve their own teaching effectiveness. The original request for the use of these forms came from students, and it is students who eventually benefit most from their use. Please take this task seriously and respond as honestly and precisely as possible, both to the machine-scored items and to the open-ended questions.

Class Email Alias

Urgent announcements will be sent through email. It is your responsibility to:

- Have your university supplied email account properly forwarded to the location where you read email.
- Make sure that your email address in Canvas is correct, and forwards email to the place where you read it. I'll send out a test message during the first week of class. If you do not receive this message, it is your responsibility to get the problem resolved immediately.
- Have your email program set up properly so that replying to your email will work correctly the first time. You can send email to yourself and reply to yourself to test this.

If you need assistance in accomplishing any of these tasks, contact 325-HELP.

Newsgroups and Email

The newsgroup on Canvas should be the primary method of communication, outside of class. This allows everyone in the class to benefit from the answer to your question. If you email me a question of general interest, I may post your question and my answer to the newsgroup. Matters of personal interest should be directed to email instead of to the newsgroup, e.g. informing me of an extended personal illness. Posting guidelines for the newsgroup are available on Canvas.

Incompletes

The grade of I is intended for the rare circumstance when a student who has been successful in a class has an unexpected event occur shortly before the end of the class. I will not consider giving a student a grade of I unless the following three conditions have been met.

1. It is within two weeks of the end of the semester.
2. The student has a grade of C or better in the class.
3. The reason that the student cannot complete the class is properly documented and compelling.

Add/Drop/Withdrawal Deadlines. Please consult the OU academic calendar (as well as the policies of the School of Engineering) for the following deadlines:

- **Add a course**
- **Drop a course without penalty (course removed from transcript)**
- **Drop a course with a W on transcript**

University Policies

The instructor reserves the right to add, remove, or change any element of class policy at any time and for any reason, within the limits of University policy.

OU is committed to creating a learning environment that meets the needs of its diverse student body. If you anticipate or experience any barriers to learning in this course, please feel welcome to discuss your concerns with me.

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. [See Faculty Handbook 3.15.2]

Adjustments for Pregnancy and Related Issues

Should you need modifications or adjustments to your course requirements because of pregnancy or a pregnancy-related condition, please request modifications via the Institutional Equity Office website or call 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

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

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