# **Recent Announcements**

C S-4413-001 - Fall 2025

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## CS/DSA 4413--001: Algorithms Course Information

Instructor: Dr. Lauren Grimley, Office: PHSC 529

Contact information: <a href="mailto:lgrimley@ou.edu">lgrimley@ou.edu</a> (mailto:lgrimley@ou.edu)

Class Time: TR 10:30 AM -11:45 AM, Class Location: Dale Hall 206

Office Hours (Student hours): Student hours are for you. They are time reserved to meet with the instructor to ask questions about class, seek help, find additional resources, have a pleasant conversation, or provide me with insight on how I can better support you in the class. Should these times conflict with your course schedule, you can reach out to arrange another time to meet.

#### Tuesdays 12:30-1:30 PM and Fridays 10:30-11:30 AM

**TA:** The TA for the course is Brianna Patten. She will be holding office hours in DEH 115 unless otherwise noted:

Mondays from 3:00-5:00 PM, Tuesdays from 9:00-11:00 AM (virtual), Wednesday 4:00-6:00 PM

#### **Content Information**

**Course Description and Prerequisites:** (Crosslisted with DSA 4413) Prerequisites: C S 2413 and C S 2813; or MATH 2513; or C S 5005. Design and analysis of algorithms and measurement of their complexity. This course introduces various algorithm design strategies: divide and conquer, greedy principle and dynamic programming to solve a variety of problems using algorithms of various types - deterministic and randomized, serial and parallel, centralized and decentralized, program based and circuit based.

**Learning Outcomes:** By the end of this course, students will be able to: produce a proof that a given algorithm is correct; identify an appropriate algorithm for an operation and argue its appropriateness in terms of runtime; calculate bounds on runtime for an algorithm; write pseudocode algorithms; implement algorithms in a programming language; apply algorithms to practical applications.

Required Text: "Introduction to Algorithms" (4th edition) by Cormen, Leiserson, Rivest, and Stein.

# Grading

Grades are determined by the following grade categories, weighted as specified:

- Quiz [25%]
- Interview Preparation [15%]
- Midterm [25%]
- Final Exam [25%]
- Best Exam (the highest grade between the Midterm and Final) [10%]

The *minimum* grade you need in order to attain each letter grades is:

Α	В	С	D	F
90	80	70	60	0

Any estimated final grade calculated by Canvas are not to be considered official grades.

Late work will not be accepted without advance approval. Your lowest two quiz scores will be dropped. These benefits are provided for you to take care of personal emergencies and other irregularities. No make-up quizzes will be provided.

#### **Attendance**

It is important to attend class regularly and engage in the material. Quizzes will be conducted regularly in class for the purpose of encouraging active involvement with the material.

#### Quizzes

Quizzes will be administered during many class days, without prior notice. Students should be prepared to answer questions based upon material discussed in class and/or requested readings. The purpose of the quizzes is to provide immediate formative assessment to inform both the instructor and the students of the student's current level of understanding. While most quizzes will be open-note, open-textbook, they will require quick responses.

We will primarily use Top Hat for our quizzes. Top Hat is a student response system (think "clickers") that we will use during most class periods. I will pose some sort of question (multiple choice, true/false, numerical answer, etc.), and you will respond using the Top Hat app or the Top Hat website. You will want to bring your cellphone or laptop to class for this purpose. Occasional paper quizzes will also be given.

# **Interview Preparation**

Many of the skills we will be developing in this course are features of a technical interview, in which you must put the algorithms and algorithm analysis we'll learn to practice. Points in this category will be determined by a range of activities which you may pick and choose from including solutions to leetcode problems, running time analysis of solutions, and mock interviews. More information can be found here.

#### **Exams**

There will be one midterm, in addition to a cumulative final exam. The exam will take place in class, October 14. Should we need to deviate from this schedule to better serve the goals of the course, students will be notified in advance. The cumulative final exam will be, as officially scheduled, December 18 from 8:00-10:00 AM.

Exams, taken during the scheduled time, will be graded as follows. Scores will begin at 50. The remaining 50 points (out of 100) will be determined by students' responses to 5 questions, worth 10 points each. Should a student unexpectedly miss the scheduled midterm exam without prior approval, the midterm will be determined by the student's percentage out of 50, with scores beginning from 0. Grades will not typically be curved, and grade adjustments on a case-by-case basis will not be made (and so please do not ask).

### **Academic Integrity**

Unless there are explicit instructions to the contrary, all work for the class will be entirely your own work. The use of work done by others without giving credit or having permission is considered plagiarism. A violation of these policies is an immediate and serious breach of the academic integrity policies of the University

Cheating is strictly prohibited at OU. It is the instructor's professional obligation to report academic misconduct. Sanctions for academic misconduct can include expulsion from the University and an F in this course. Typically, all work on exams and quizzes must be yours and yours alone without any outside help. It is your responsibility to know and follow the rules set by the instructor.

# **Generative AI Policy**

As stated in the paragraph above, all work on exams and quizzes must be yours and yours alone without any outside help, including the use of generative AI. Unless otherwise stated, students are not permitted to use AI on any component of the interview preparation assignment, including using code assistants like copilot to aid in the creation of code and using writing assistants to complete the narrative.

## 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 <a href="TimelyCare">TimelyCare</a> (<a href="https://www.ou.edu/studentaffairs/resources/timelycare">https://www.ou.edu/studentaffairs/resources/timelycare</a>). To schedule an appointment or receive more information about mental health resources at OU please call the UCC at 405-325-2911 or visit <a href="University Counseling Center">University Counseling Center</a> (<a href="https://www.ou.edu/ucc">https://www.ou.edu/ucc</a>). 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 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-based discrimination or violence and wish to speak with someone confidentially, please contact <a href="OU Advocates">OU Advocates</a> (<a href="https://www.ou.edu/advocates">https://www.ou.edu/advocates</a> (available 24/7 at 405-615-0013) or <a href="University Counseling Center">University Counseling</a> Center (<a href="https://ou.edu/ucc">https://ou.edu/ucc</a> (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 sex-based violence that has been disclosed to us to the Institutional Equity Office. This means that we are obligated to report sex-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 (https://www.ou.edu/eoo) at 405-325-3546.

#### 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 <u>Institutional Equity Office</u> (<a href="https://www.ou.edu/eoo/pregnancy-and-parenting">https://www.ou.edu/eoo/pregnancy-and-parenting</a>) website or call the Institutional Equity Office at

405/325-3546 as soon as possible. Also, see the Institutional Equity Office <u>FAQ on Pregnant and Parenting Students' Rights (https://www.ou.edu/content/dam/eoo/documents/faqs/faqs-pregnant-and-parenting-students.pdf)</u> for answers to commonly asked questions.

## 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 log into iAdvise to request your semester accommodations 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 <a href="mailto:ADRC's pre-registration form">ADRC's pre-registration form (https://cm.maxient.com/reportingform.php?UnivofOklahoma&layout\_id=350">Id=350</a>)

(https://cm.maxient.com/reportingform.php?UnivofOklahoma&layout\_id=350) 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 website (https://www.ou.edu/adrc). You may also contact them at (405)325-3852 or adrc@ou.edu (mailto:adrc@ou.edu), or visit www.ou.edu/adrc (http://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] (https://apps.hr.ou.edu/FacultyHandbook/#3.15.2)

#### 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 <a href="Final Exam Preparation Period policy">Final Exam Preparation Period policy</a> (<a href="https://www.ou.edu/registrar/academic-records/">https://www.ou.edu/registrar/academic-records/</a> academic-calendars/final-exam-

policies#:~:text=Exams%20may%20not%20be%20given,prior%20to%20pre%2Dfinals%20week.) .

### **Emergency Protocol**

During an emergency, there are official university <u>procedures (https://www.ou.edu/campussafety/policy-and-procedures)</u> 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.

- Lookfor severe weather refuge location maps located inside most OU buildings near the entrances.
- 2. <u>Seek</u>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. <u>Go</u>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. Waitfor official notice to resume normal activities.

Additional <u>Weather Safety Information (https://www.ou.edu/campussafety/divisions#management)</u> 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 <a href="mailto:one.ou.edu/">one.ou.edu/</a>).

**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. KNOWat 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 (https://vimeo.com/125093634)

# Course Summary:

Date	Details	Due
Fri Oct 10, 2025	One interview preparation submission (https://canvas.ou.edu/courses/443476/assignments/3184457)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184459)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184460)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184461)	due by 11:59pm

Date	Details	Due
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184462)	due by 11:59pm
Tue Oct 14, 2025	Midterm Exam (https:// canvas.ou.edu/courses/443476/ assignments/3184926)	due by 10:30am
	Completing problems during TA office hours (https:// canvas.ou.edu/courses/443476/ assignments/3184548)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184509)	due by 11:59pm
Fri D 5, 2005	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184538)	due by 11:59pm
Fri Dec 5, 2025	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184539)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184541)	due by 11:59pm
	One interview preparation submission (https://canvas.ou.edu/ courses/443476/ assignments/3184543)	due by 11:59pm

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