

Instructor - Sean Mackay (DEH 225*, snmackay@ou.edu)

Teaching Assistant – SJ Ajisegiri (Office Hours and location to be announced)

Class Meetings - Sarkeys Energy Ctr N0202, 4:30-5:45pm (Tues/Thurs)

Office Hours – Wednesday/Friday, 2:30pm-3:30pm, DEH 225*

Course Website - Access through <https://canvas.ou.edu>

*This location will be changing. I will update you all of this change when it happens.

Delivery Method - The course will be delivered by standard in-person lectures. Lectures will also be recorded and shared with students via Canvas. Class recordings must only be used as a complementary learning aid, and not as a replacement for live lectures (synchronous).

Recordings MAY NOT be reposted or shared by any other means, and only the instructor will have the authority to share media content beyond the scope of this course. Course materials include as slides, example files, sketches, and assignment instructions will be available for download in Canvas and **may not** be distributed (are considered property of the instructor and the University of Oklahoma).

All necessary Zoom links, if applicable, will be posted to Canvas.

Attendance Policy - In-person attendance is mandatory and highly encouraged (questions via Tophat will be given starting in the first week. They will not be graded until week 2).

Integrity - By taking this course, attending lectures, submitting quizzes and assignments, and taking the exams, you acknowledge that you have not sought external help, beyond reasonable means, to any question or graded problem. Furthermore, it is strictly prohibited to search for help by posting assigned graded questions to online sites and similar resources.

Cheating is strictly prohibited at the University of Oklahoma, because it devalues the degree you are working hard to get. As a member of the OU community, it is your responsibility to protect your educational investment by knowing and following the rules. For specific definitions on what constitutes cheating, review the Students Guide to Academic Integrity can be found at <https://www.ou.edu/integrity>

Generative AI Policy:

The use of Large Language Models (LLM's) without prior permission for the specific assignment is forbidden and will be considered a violation of course academic integrity policies, resulting in a grade of zero on the assignment. Using AI is forfeiting your creative sensibilities, your professional agency, and your unique perspective as a human individual that gives your solutions to problems unique qualities.

Textbook - No required book. However, different topics will be covered from the following books:

- Robert W. Sebesta. 2012. Concepts of Programming Languages (10th ed or 11th ed)*, Addison Wesley. (ISBN: 978-0-13-139531-2).

*11th edition is the preferred book (but it literally doesn't matter)

Required Work - The final grade consists of:

- **Tophat Questions (10%)** – We will be doing tophat questions throughout the semester during class, both as practice for you all as well as a method of collecting attendance. 5 days in total will be dropped. The first week does NOT count.
- **Programming Homeworks (15%)** – A series of three (3) homeworks will be given throughout the semester and will be due via Canvas. Please pay attention to Canvas for due dates and specifics. Your lowest-scoring homework will not count towards your final grade.
- **Language Project (25%)** – You will develop the components of an interpreted programming language based on a language specification document through three project components. You will have 2-4 weeks for each portion. You may work with one-two other classmates as a team, though you must both submit separately and credit your teammate in your code via a comment at the top of the file. Working in groups is not mandatory and may not be advantageous for you. You must work only with the student or two students you credit (e.g. you cannot work with two groups separately). I will be tracking this. See Canvas for specific dates and details. Details will be discussed as they come about.

Late Policy: The project consists of 3 parts with soft deadlines. The final portion's deadline is the HARD DEADLINE for the entire project. Use the soft part deadlines to keep on top of the work. This project is cumulative and thus you need to make sure you are staying on track.

- **Midterm (25%)** – The midterm will be during class-time (see course schedule for the date). The exam will be closed-book and on paper.
- **Final Exam (25%)** – The final exam is scheduled for Monday, December 15th from 4:30-6:30pm in Sarkeys Energy Ctr N0202 (the classroom). The exam will be closed-book on paper. The exam is cumulative and does not just cover material learned after the midterm.

Grading:

The following table indicates the number to letter grade mapping I will use to assign letter grades at the end of the course. I reserve the right to make adjustments to the letter grade cut-offs. If adjustments are made they will be adjusted lower (in your favour).

A	88-100
B	73-87
C	59-72
D	50-58
F	0-49

Learning Outcomes: -

- Introduction to theoretical foundations and paradigms of programming languages.
- Topics you will learn include:
 - Functional programming
 - The OCaml programming language
 - lexical analysis
 - syntax analysis
 - syntax-directed translation
 - type systems and semantics
 - intermediate code generation
 - memory management.

ABET Specific Outcomes of Instruction - By the end of the semester, the students will be able to apply computer science theory and software development fundamentals to produce computing-based solutions. For more information, see <https://www.abet.org/> .

Resources –**Mental Health Support Services:**

Support is available for any student experiencing mental health issues that are impacting their academic success. Students can either be 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 [TimelyCare](#). 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 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 [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 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](#) 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 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 [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 [website](#). 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 off 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](#)

Office of Access and Opportunity's Belonging Statement

Why You Belong at the University of Oklahoma: 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.

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.

Copyright Statement, for in-person or online courses

Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, privacy rights of others such as students, guest lecturers, and providers of copyrighted material displayed in the recording may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

Pre-Finals Week Policy

During pre-finals week, all normal class activities will continue; however, no assignment, test, or examination accounting for more than 3% of the course grade may be assigned, unless it is assigned in advance of pre-finals week and worth less than 10%, or scheduled at least 30 days prior if worth more than 10%. No activity or field trip may be scheduled that conflicts with another class. There are some exceptions and nuances, so please review the [Final Exam Policies](#) prior to designing your course schedule.