# CS 2970 – Data Structures Lab – Spring 2025

Syllabus

Instructor: Dr. Sridhar Radhakrishnan, sridhar@ou.edu

Office Location: Devon Energy Hall, DEH 244

Office Hours: 4:30 PM to 6:00 PM (Tuesday and Thursday).

Class Location: Felgar Hall 300

Class Time: 3:00 PM to 4:50 PM (Tuesday and Thursday)

Course Pre/Co-requisite: CS 2334 and (CS 2813 or MATH 2513 as a corequisite)

**Textbook:** Radhakrishnan, S., Wise L., and Sekharan, N. 2013. <u>Data Structures Featuring C++: A Programmer's Perspective (Links to an external site.)</u> This textbook is available on Amazon.

Course Format: Each two-hour session can begin with a quick warm-up activity, such as a coding quiz or a brief recap of previous concepts. Following this, a 20-minute explanation or demonstration, we will introduce the key concept or technique of the session, emphasizing implementation details. We will show sample code snippets and a live coding demonstration. Most of the lab (around 80 minutes) should be dedicated to hands-on programming. Students will work on one or two problems. The final 10-15 minutes will be used for debugging practices and reviewing solutions. Students will present their work in the lab session.

**Course Requirements**: Students are required to attend all lab sessions. We will take attendance. The final course grade will be determined based on the overall percentage, with the following scale: 90% and above for an "A," 80% to 89.9% for a "B," 70% to 79.9% for a "C," 60% to 69.9% for a "D," and below 60% for an "F." The allocation of percentages for each component of the course is provided below.

	Percentages
Attendance (class roll will be taken in each class via Top Hat)	30%
Performing Required Lab Work	70%

#### **ABET Outcomes of Instruction in CS 2413:**

- 1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
- 2. Design, implement and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

## **Course Policies**

**Programming Exercises:** Each lab will have one to two programming exercises. The TA will provide you with GradeScope, which you must submit using.

**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 shortly before the class's end. We 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.

Classroom Conduct: Because cell phones and laptops can distract substantially from the classroom experience, students are asked not to use either during class except when required as part of a classroom exercise. Disruptions of the class will also not be permitted. In the case of disruptive behavior, we may ask that you leave the classroom and charge you with violating the Student Code of Responsibilities and Conduct. 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 or teaching assistant direction.

**Proper Academic Conduct:** Feel free to discuss all assignments with the instructors or the TAs. Code (projects and assignment): you may discuss code solutions with other students. However:

- 1. You may not look at or share code with others;
- 2. If you discuss a solution with anyone, you must document their names in your assignment.
- 3. You must document this in your code if you use external resources (e.g., Piazza, StackOverflow.com, ChatGPT, or other LLMs).

Make sure that your computer account is properly protected. Use an appropriate password, and do not give your friends access to your account or computer system. Do not leave printouts, computers, or thumb drives around a laboratory where others might access them.

Programming projects will be checked by software designed to detect collaboration. This software is extremely effective and has withstood repeated reviews by the campus judicial processes.

Upon the first documented occurrence of inappropriate collaborative work or of taking a solution from a network resource, the instructors will report the academic misconduct to the Campus Judicial Coordinator. The procedure is documented in the University of Oklahoma Academic Misconduct

Code (http://integrity.ou.edu). The provider and receiver of a solution will be treated equally in the misconduct process.

# **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 <u>OU Advocates</u> (available 24/7 at 405-615-0013) or <u>University Counseling Center</u> (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 <u>Institutional Equity Office</u> 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 <u>submit your semester accommodation request through the ADRC</u> 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 <u>ADRC's pre-registration form</u> 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 <u>Register with the ADRC</u> 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 <u>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.

- 1. <u>Look</u> for 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. <u>Wait</u> for official notice to resume normal activities. Additional <u>Weather Safety Information</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 <u>one.ou.edu</u>.

**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

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