CSCE 2100 Computing Foundations I[1]

Instructor: Dr. Yuan Li
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Office Location: Discovery Park, E250B

Meeting Time & Location: 001: 2:00 pm – 3:20 pm, Monday/Wednesday, Cury 104
003: 3:30 pm – 4:50 pm, Monday/Wednesday, Cury 104
Office hours: Mon & Wed 1:30 pm - 2:00 pm Main Campus GAB 330
Tuesday 10:00 am - 1: 00 pm DP E250B

Teaching Assistants & Instructional Assistant:

001: Karthik Venkatasivareddy Tu, Thu, Fri - 3:00 PM to 5:00 PM
KarthikVenkatasivareddy@my.unt.edu
Jawad Mohammed Mon,Wed - 11:00 PM to 01:00PM Tue -11:45 PM to 01:45 PM
JawadMohammed@my.unt.edu

003: Leif Messinger Monday 10:00AM to 12:00 PM (noon) E247D Tuesday 8:00AM to 10:00AM and 12:00PM to 2:00PM E247D LeifMessinger@my.unt.edu
Jiang Chang(TA Leader) Monday from 12:30 to 13:30 JiangChang@my.unt.edu

Course Description:

Conceptual and formal models, efficiency and levels of abstraction as used in the field of computing, big-Oh notation, combinatorics and conditional probability, basic operations of sets, functions, relations, trees and graphs, regular expressions, deterministic finite automata and non-deterministic finite automata to describe patterns in strings.
Prerequisite(s): CSCE 1040 or CSCE 1045, with a grade of C or better.
Corequisite(s): MATH 1710 Can be taken concurrently with CSCE 2110.

Communication Expectations:

This course will use the Canvas Learning Management system (LMS) to distribute course materials, post grades, and submit assignments. You are responsible for checking the Canvas course site regularly for class work and announcements. You may find the Online Communication Tips (https://clear.unt.edu/online-communication-tips) helpful. Should you have any questions about the course or material in general, you may attend your instructor's office hours or use your UNT e-mail address to e-mail your instructor directly at the e-mail address listed above with CSCE 2100-00X (or your specific course section) in the subject line. Every attempt will be made to answer e-mails within **24-48 hours**, but if no reply is received within this time frame, please follow up with your instructor again to ensure a response. Please do not expect a response over the weekend.

For assistance with assignments or questions about grading of a particular assignment, you may also contact the TAs or IAs assigned to this directly via e-mail or their office hours. This information will be available on Canvas under modules Start Here.

Grading Policy:

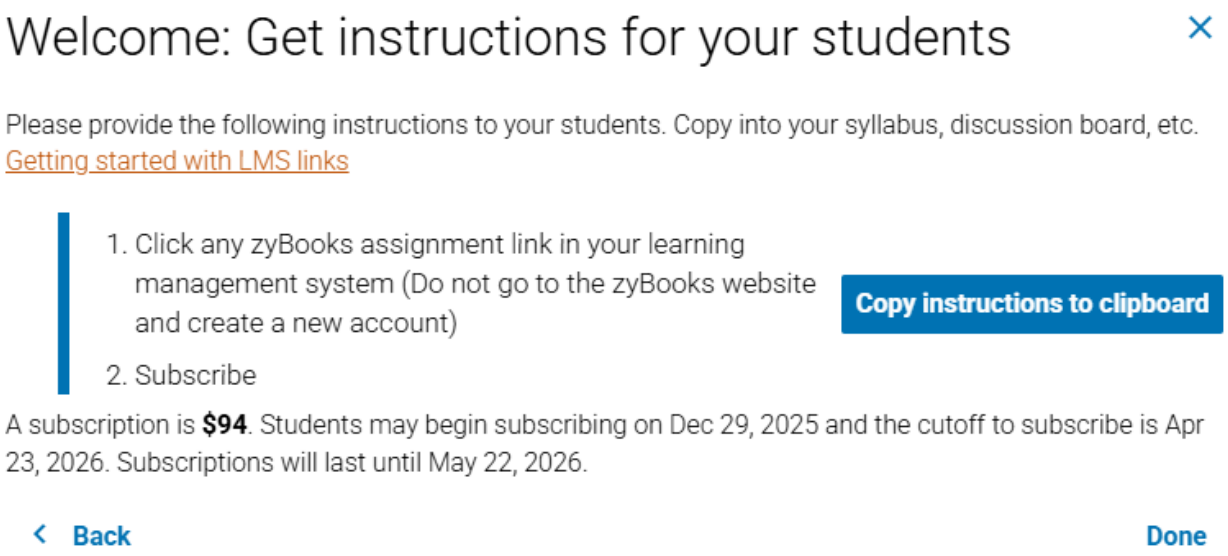
Students are responsible for all content presented in class and in Canvas. All Practices and projects must be submitted electronically via Canvas ONLY. Late submissions will incur penalties as follows: a 50% penalty for late submissions within 0-23 hours, a 75% penalty for submissions within 24-48 hours, and no acceptance of work beyond 48 hours. According to department policy, we are unable to accept submissions via email. Furthermore, submissions will not be accepted once solutions have been posted. All holidays and weekends will be counted as calendar days.

All assignments must be submitted on time through the Canvas system with all required components, and students are responsible for ensuring that the correct files are uploaded for each assignment. In certain cases, if an assignment is submitted on time to an incorrect assignment location (e.g., submitting Homework 03 to the Homework 02 Dropbox on Canvas), if the wrong files are submitted, or if the submission is incomplete

or missing required components, the assignment will not be accepted and will receive a grade of 0 once the due date has passed or once the solutions have been posted or discussed during class. If you have any questions or concerns about your submission, please work with your instructor, TA, or Peer Mentor to ensure that the correct file(s) and all required materials are submitted.

The final letter grade will be determined based on the following criteria: (It may be adjusted at the discretion of the instructors) A 90 – 100; B 80 – 89; C 70 – 79; D 60 – 69; F 59 and below.

Required Textbook:
We will be using an online textbook this semester through zyBook.
zyBook: CSCE 2100: Foundations of Computing
zyBook code: UNTCSCE2100LiSpring2026
zyBook ISBN: 979-8-203-17498-7



Optional Reference Textbook:
The Foundations of Computer Science, by Alfred Aho & Jeffrey Ullman
http://infolab.stanford.edu/~ullman/focs.html

Expected Course Outcomes:
Course Outcomes are measurable achievements to be accomplished by the completion of the course. These outcomes are evaluated as part of our ABET accreditation process.

1. Define and use the basic operations of sets, functions, and relations.
2. Define and demonstrate the basic properties of trees and graphs.
3. Use elementary graph and tree algorithms including traversals and searches.
4. Describe assertions in propositional logic form.
5. Describe simple circuits, I/O, and satisfiability using Boolean logic.
6. Use combinatorics and conditional probability in solving real-world problems.
7. Demonstrate a solid foundation in conceptual and formal models by describing loop structures in summation and/or product notation.
8. Demonstrate an introductory knowledge of finite state machines.

Attendance Policy:
Lecture Section: Attendance is mandatory and will check in class. Students are encouraged to attend all lectures on time in order to gain the full benefit of the course. You should attend every class unless you have a university excused absence such as active military service, a religious holy day, or an official university function as stated in the Student Attendance and Authorized Absences Policy (PDF) (https://policy.unt.edu/sites/default/files/05.053%20Time%20and%20Attendance%20Leave%20Records.pd

f). While I will be posting my slides before class, they will not contain all of the content discussed during class, nor all of the examples presented. If you cannot attend a class due to an emergency, please let me know. Your safety and well-being are important to me.

Recitation Section: Attendance is mandatory and will check. Students are expected to attend and be on time for their assigned weekly recitation section for the respective section. If you anticipate being unable to attend your regular recitation section with a valid excuse, please contact your instructor in advance of your recitation section to see if an alternate lab section is available that may be scheduled.

Students are expected to attend lectures and recitations regularly and to abide by the attendance policy established for the course. Any student who misses a class over two absences without informing the instructor of valid reasons, and obtaining approval, will lose the points for the quizzes.

Grade Dispute:

Students are responsible for reviewing their grades and raising any concerns within a maximum of 5 calendar days after the grades are announced. Grades will be posted on Canvas throughout the semester to provide continuous feedback on student progress, typically within 10-15 calendar days after an assignment is due. If a student wishes to dispute a grade, the concern should be directed first to the original grader (i.e., the TA or IA) within 5 calendar days of the grade being posted. Should the issue remain unresolved between the student and the grader, the matter will be escalated to the instructor, whose decision on the grade will be final.

Please note that discussions regarding final letter grades will only be accommodated during a designated time frame (2-5 hours), and this process will not adhere to the general grading dispute policy outlined above.

Make-up Work Policy:

For most situations there will be no make-up work for any assessment in this course. However, in the event of an unavoidable absence for one of the reasons below, email me as soon as possible so we can work out a solution. The following events are grounds for make-up work: being a participant in a conference in which you are presenting; being in an athletic or other UNT associated event in which you are an active participant; a family emergency; a severe illness; military duty; or in certain cases and with some restrictions a religious event. Additionally, in the case of a missed assignment due to illness, make-up work will only be allowed by the instructor to receive further notification from the Dean of Students. Student are responsible to send email to the Dean of Students with a physical copy of a signed doctor's note. See the UNT Attendance Policy for more information.

A student is responsible for requesting an excused absence in writing, providing satisfactory evidence to the Dean of Students(deanofstudents@unt.edu) to substantiate excused absence, and the Dean of Students will send the notification to the faculty member assigned to the course for which the student will be absent. When an absence is excused, the faculty member will provide a reasonable time after the absence for the student to complete an assignment, for an examination missed will duplicate the highest exam grade that the student had. Any student who misses a class over two absences without informing the instructor of valid reasons, and obtaining approval, will lose the chance for the bonus credit.

Reasonable Makeup Policy:

To apply for a makeup exam, assignment, or quiz due to medical reasons, you must adhere to the following policy:
Doctor's Note Requirements:

- The doctor's note must be issued by a recognized U.S. medical facility, such as the UNT Student Health and Wellness Center, urgent care, emergency room, or hospital.
- The note must include the following details:
    1. The name and title of the medical facility.
    2. The doctor's name and professional title (e.g., DO, MD).
    3. Your full name.

4. Specific information explaining why the doctor recommends an adjustment to your academic schedule.
5. The doctor's signature.

Submission Deadlines:

- For Exams: The doctor's note must be submitted at least 5 days before the exam. For example, if the Midterm Exam is scheduled for 07/29/24, the doctor's note must be submitted between 07/25/24 and 07/29/24.
- For Practices: The doctor's note must be submitted within the period from 5 days before the due date to 5 days after the due date. For example, if an assignment or quiz is due on 07/29/24, you must submit the doctor's note between 07/25/24 and 08/03/24.

Failure to submit the doctor's note within the specified timeframes will result in the forfeiture of the opportunity to make up the missed work. Please note that only medical reasons are considered valid for makeup requests; personal reasons will not be accepted.

Special Notes on the use of AI Tools and work performed by Others

Students taking this course implicitly agree to uphold the UNT honor code:
"I commit myself to honor, integrity, and responsibility as a student representing the University of North Texas community. I understand and pledge to uphold academic integrity as set forth by UNT Student Academic Integrity Policy, 06.003. I affirm that the work I submit will always be my own, and the support I provide and receive will always be honorable."

It is highly important that you are familiar with the University's academic integrity policy and the CSE department's guidelines on academic integrity:
UNT Academic Integrity Policy (PDF)
CSE Academic Integrity Guidelines

Academic Integrity Guidance on GenAI

Prohibited Use

In this course, the use of GenAI tools is not permissible. No matter the approach, any attempt to represent GenAI output as a student's own work will be considered fabrication, cheating, and/or academic dishonesty as determined on a case-by-case basis.
In this course, I want you to engage deeply with the materials and develop your own critical thinking and writing skills. For this reason, the use of Generative AI (GenAI) tools like [e.g., Claude, ChatGPT, Gemini, GitHub CoPilot, Cody, Ghostwrite and others] is not permitted. While these tools can be helpful in some contexts, they do not align with our goal of fostering the development of your independent thinking. Using GenAI to complete any part of an assignment, exam, or coursework will be considered a violation of academic integrity, as it prevents the development of your own skills, and will be addressed according to the Student Academic Integrity policy.
Additionally, tools like [e.g. Grammarly, spellcheck, predictive text, speech-to-text, and translation tools] are not allowed as they blur authorship and misrepresent your independent work. All work must be your own.

Plagiarism

Plagiarism of any kind will automatically result in a grade of F for the course. Academic Integrity Standards in this course are consistent with UNT policy: STUDENT STANDARDS OF ACADEMIC INTEGRITY (18.1.16), or other related/existing polices. The work that you turn in to be graded, including any underlying ideas, must be your own individual work. Usage of unauthorized material and sources, or depending on any unauthorized assistance, to answer homework problems, tests questions, writing reports, or carrying any type of assignment, etc., without the permission of the instructor, or without complete and accurate and complete attribution/citations of the source, when applicable, is viewed as an academic misconduct. If you have any doubts if you have specific questions, feel free to ask the instructor.

Academic Integrity and Collaboration:

UNT policy 06.003 defines the following breaches of academic integrity:

1. **Cheating.** "Cheating" means the use of unauthorized assistance in an academic exercise, including but not limited to:
    a. use of any unauthorized assistance to take exams, tests, quizzes or other assessments;
    b. use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
    c. use, without permission, of tests, notes, or other academic materials belonging to instructors, staff members, or other students of the University;
    d. dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor;
    e. any other act designed to give a student an unfair advantage on an academic assignment.

2. **Fabrication**. "Fabrication" means falsifying or inventing any information, data, or research outside of a defined academic exercise.

3. **Facilitating Academic Dishonesty**. "Facilitating academic dishonesty" means helping or assisting another in the commission of academic dishonesty.

4. **Forgery**. "Forgery" means intentionally falsifying or altering a score, grade, or official academic University record or the signature of another.

5. **Plagiarism**. "Plagiarism" means use of another's thoughts or words without proper attribution in any academic exercise, regardless of the student's intent, including but not limited to:
    a. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgement, or citation, or
    b. the knowing or negligent unacknowledged use of materials prepared by another person or by an agency engaged in selling term papers or other academic materials

6. **Sabotage**. "Sabotage" means acting to prevent others from completing their work or willfully disrupting the academic work of others

Cheating of any sort will not be tolerated in this course. Failure to adhere to these strict standards will be cause for disciplinary action that could be as severe as expulsion from the university. If it is determined a student cheated on any assignment in this course, they will receive an F for their final course grade and an academic integrity report will be filed with the Office of Academic Integrity. Further, UNT is now maintaining a database recording any acts of academic dishonesty that is available to employers.
For more information see the UNT Student Academic Integrity Policy.

Collaboration Policy:
For each assignment, exam, and quiz, all work is expected to be your own and no collaboration is allowed. However, for the weekly practice problems and any non-graded, practice assignments, students are encouraged to work together to solve problems.

ODA:
The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of

Disability Accommodation website at *http://www.unt.edu/oda*. You may also contact them by phone at **940.565.4323**.

Assessment Policy:

For each graded exam and quiz, you are not allowed to use your cell phones for any reason during an exam or quiz. For exams, a note sheet will be allowed, and the specifics of this will be discussed during the exam review.

Grading Breakdown:

Assignments & Examinations	Total Percentage
zyBook Activities	**10%**
Recitation Problems	**10%**
Assignment (drop lowest one)	**20%**
Quizzes(pop)	**10%**
Exam 1 & 2	**25%**
Exam 3	**25%**

Important Dates: please find the detail in the following link:

https://registrar.unt.edu/registration/spring-registration-guide.html

Tentative Course Schedule:

Course	Topics
1	Syllabus, Abstraction, Sets
2	Relations
3	Graphs - 1
4	Graphs – 2 & Review Exam 1
5	Trees; Exam 1
6	Propositional Logic - 1
7	Propositional Logic - 2
8	Propositional Logic – 3
9	Spring Break
10	Boolean Logic - 1
11	Boolean Logic - 2; Review Exam 2
12	Automata Theory & Exam 2
13	Combinatorics and Counting
14	Summation and Series
15	Exam 3 Review
16	**Exam 3: 04/27 Cury 104**

Student Perceptions of Teaching (SPOT)

Student feedback is an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The SPOT survey will be available from April 14 – April 30 to provide you with an opportunity to evaluate how this course is taught. For the spring 2025 semester, you will receive an email on April 14 (12:01 a.m.) from "UNT SPOT Course Evaluations via IASystem Notification" (noreply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete your survey. Once you complete the survey you will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website at www.vpaa.unt.edu/spot or email spot@unt.edu.

[1] This syllabus and any study materials provided to students in the course are subject to change at the discretion of the instructor. I reserve the right to modify course policies, the course calendar, assignment or project point values, and due dates.