CSCE 2100 Foundations of Computing
Syllabus: Spring 2024

Instructor: Bahareh Dorri
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Graders:

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IA: Deepak Adimoolam
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Office Hours: Fridays 12:00-2:00 pm

Communication Expectations

Connect with me through email and/or by attending office hours. You can call me Mrs. Dorri. I will strive to respond to your emails within 1 business day and make grades of each homework/exam within two weeks after the due date. Please write the course number and section number in your email subject line. If you contact me and do not receive a response within two business days, please send a follow up email. A gentle nudge is always appreciated.

All course related announcements will be on Canvas. Please setup your notification settings to avoid missing any announcements. Please check CLEAR Online Communication Tips at https://clear.unt.edu/online-communication-tips.
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.

Course Structure

This course takes place 100% in person. There are 16 weeks of content. I will open up a new module roughly every week.

Required Textbook

We will be using an online textbook this semester through zyBook.

zyBook: CSCE 2100: Foundations of Computing
zyBook code: UNTCSCE2100DorriSpring2024
zyBook ISBN: 979-8-203-28444-0

Optional Reference Textbook

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

Course Description

Introduces students to both data structures and formalisms used in computer science, such as asymptotic behavior of algorithms. Data structures and the formalisms used to both describe and evaluate those data structures simultaneously. By the end of the two-semester sequence of which this course is the first part, each student will have a solid foundation in conceptual and formal models, efficiency, and levels of abstraction as used in the field of computer science.
**Expected Student Outcomes**

Student Outcomes are measurable achievements to be accomplished by the completion of the degree. 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.

**Grading**

- zyBook Activities & Assignments 20%
- Practice Problems 10%
- Quizzes 15%
- Midterm Exam 1 & 2 30%
- Final Exam 25%

**A: 90-100; B: 80-89; C: 70-79; D: 60-69; F <60**

* Students are expected and encouraged to attend classes. Students will be responsible for any missing class or announcements. The absence reason could be anything including university sponsored events. Also, the student’s absence does not change the due date of any assignment.

Practice Problems will be done in recitation classes. Grades will be posted on Canvas throughout the semester to provide an ongoing assessment of student progress, but typically about 10-15 calendar days after the assignment was due. **Grading discussion should first go to the TA or IA graded your assignment in 5 calendar days after grades posted, but if a resolution cannot be reached between the student and the grader, then you should go to the instructor who will have the final decision on the grade. After 5 calendar days, barring an exceptional circumstance, grades will not be altered.**

Any work must be turned in on their due dates. Late submissions may be allowed up to 24 hours after the due date with a 20% penalty on the grade for that assignment. Submissions after the grace period will not be accepted!
It is the student's responsibility to check any given grade and make complaints within at most two weeks after the grades are announced. Grades will not be changed afterwards. Make-ups must need the instructor's special permission. In most cases, they are not allowed.

**We do not accept submissions by email.**

The final exam is on Tuesday, May 7 at 8:00 am – 10:00 am.

**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. Students are responsible for sending an email to the Dean of Students with a physical copy of a signed doctor's note. See the [UNT Attendance Policy](mailto:deanofstudents@unt.edu) 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](mailto: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 the assignment.

**Academic Integrity**

Standards in this course are consistent with UNT policy: STUDENT STANDARDS OF ACADEMIC INTEGRITY (18.1.16), or other related/existing UNT policies. 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, test questions, writing reports, or carrying any type of assignment, etc., without the permission of the instructor, or without complete and accurate and complete attribution/citation of the source, when applicable, is viewed as an academic misconduct.
Assignment 1 Already RELEASED: Please make sure to take the “Academic Integrity” quiz that is available on Canvas.
Due Date: Second session of the class.

Cheating Policy:
- Using information from a homework helper site (including AI based services like Chat GPT) is CHEATING
- Duplicating/nearly duplication answers from another student/another groups submission is CHEATING
- First Offence: 0 for the entire submission
- Second Offence: F for the course

Disabilities Accommodation

The University of North Texas complies with Section 504 of the 1973 Rehabilitation Act and with the Americans with Disabilities Act of 1990. The University of North Texas provides academic adjustments and auxiliary aids to individuals with disabilities, as defined under the law. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please see the instructor and/or contact the Office of Disability Accommodation at 940-565-4323 during the first week of class.

Syllabus Revisions

This syllabus may be modified as the course progresses should the instructor deem it necessary. Notice of changes to the syllabus shall be made through Canvas and/or in-class announcements.