University of North Texas at Dallas
Spring 2015
SYLLABUS

Computer Foundations II   CSCE2110   3 credit hours

Department of	Information Science	Division of	Liberal Arts and Science

Instructor Name:	Dr. Nassim Sohaee
Office Location:	Founders Hall - 230
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Office Hours:	Monday 9:00 AM – 10:00 AM, 1:00 PM – 2:30 PM Tuesday 9:00 AM - 2:30 PM Wednesday 9:00 – 10:00 AM, 12:00 noon – 2:30 PM
Virtual Office Hours:	

Classroom Location:	
Class Meeting Days & Times:	MW 10:00 – 11:20 AM W 11:30 – 12:20

Course Catalog Description:	Continuation of Computing Foundations I. Further introduces students to both data structures and formalisms used in computer science, such as asymptotic behavior of algorithms. Data structures and formalisms used to both describe and evaluate those data structures simultaneously. By the end of the two-semester sequence, each student has a solid foundation in conceptual and formal models, efficiency and levels of abstraction as used in the field of computer science.

Prerequisites:	**CSCE 2100**
Co-requisites:	

Required Text:	

Recommended Text and References:	1. http://infolab.stanford.edu/~ullman/focs.html

Access to Learning Resources:	UNT Dallas Library:
	     phone: (972) 780-3625;
	     web: http://www.unt.edu/unt-dallas/library.htm
	UNT Dallas Bookstore:
	     phone: (972) 780-3652;
	     e-mail: 1012mgr@fheg.follett.com

Course Goals or Overview:
Students will learn how to design algorithms efficiently and measure the efficiency of algorithms using Big Oh notation.

Learning Objectives/Outcomes:	At the end of this course, the student will
1	The ability to use proofs by induction to prove the validity of a statement
2	Application of Big-Oh notation to evaluating and comparing algorithms
3	An ability to apply combinatorics in solving real-world problems

Course Outline

Combination of the Theoretical Concepts of Computing Foundations I and Computing Foundations II. This course section has been pecifically designed for students who haven takenCSCE2100 to fulfill the Discrete Math requirement. By the end of the semester, 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.

Course schedule

This schedule is subject to change by the professor. Any changes to this will be communicated in class and/or posted on Black Board Learn.

	Topic
Week 1	Course Introduction
Week 2	Analysis of algorithms
Week 3	
Week 4	Searching and Sorting
Week 5	
Week 6	Trees
Week 7	
Week 8	Binary search Tree
Week 9	Spring Break
Week 10	Heaps and priority queues
Week 11	
Week 12	Sets and maps
Week 13	Multiway search tree
Week 14	Graphs
Week 15	
Week 16	Review

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

quizzes	10	Total of 8 quizzes - 80
Class participation	5	
Assignments	20	Total of 8 assignments - 160
Class discussion	10	
Final exam	45	
Total		300

Grade Determination:
A = 90% or better
B = 80 – 89 %
C = 70 – 79 %
D = 60 – 69 %
F = less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance):
The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:
The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

Assignment Policy:
The UNT Dallas cheating policy will be adhered to. Any student caught cheating will receive a grade of F for this course, and further disciplinary action will be taken. Cheating includes, but is not limited to, all forms of plagiarism and misrepresentation. See the UNT Center for Student Rights and Responsibilities web page for more information.

Exam Policy:
Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Absolutely NO make-up exam.

Academic Integrity:
Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.
In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:
On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Bad Weather Policy:
On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:
Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual

preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.