CSE5311 Syllabus, Fall 2018

No: CSE 5311-003

Title: Design and Analysis of Algorithms

Instructor: Dr. Song Jiang, Associate Professor of Computer Science and Engineering

Office Hours: 10:00-11:00am M/W at ERB 101 (or by appointment)
Email: song.jiang@uta.edu
Meeting Time: M/W 1:00pm – 2:20pm
Meeting Location: WH 308
Web Page: http://ranger.uta.edu/~sjiang/CSE5311-fall-18/index.htm

Course Description

This course introduces students to the analysis and design of computer algorithms. Upon completion of this course, The course will cover classic problems (e.g., sorting, traveling salesman problem), classic algorithm design strategies (e.g., divide-and-conquer, greedy approaches), and classic algorithms and data structures (e.g., hash tables, heap, Dijkstra's algorithm). It will analyze algorithm complexity using asymptotic nations. It will touch on issues of tractability, such as "NP-Completeness".

Prerequisites

1) CSE 2320 Algorithms and Data Structures or its equivalents
2) Programming skills on a high-level language, such as C and Java

Textbook:

Grading Policy

Grading scale

1) A: [90, 100]
2) B: [80, 90)
3) C: [70, 80)
4) D: [60, 70)
5) F: below 60

Distribution of Points:

1) Class attendance: 5%
2) Homework assignments: 30%
3) Quizzes: 20%
4) Midterm exam: 20%
5) Final exam: 25%

* Bonus credits may be offered for voluntarily and correctly answering in-class questions.

Makeup Exams

No make-up exams will be given except for university sanctioned excused absences. If you miss an exam (for a good reason), it is your responsibility to contact instructor before the exam.

Late Assignments

Late assignments will be accepted with a 20% penalty applied for each day late up to 2 days. Assignments submitted later than 2 days after the original due time will not be accepted.

Collaboration Policy

Students are allowed and encouraged to collaborate on homework assignments. However, You must write up each problem solution by yourself without assistance, even if you collaborate with others to solve the problem. If you obtain a solution through research (e.g., on the Web), acknowledge your source, but write up the solution in your own words. It is a violation of this policy to submit a problem solution that you cannot orally explain to the instructor or GTA.
Course Policy

Americans with Disabilities Act

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112 -- The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans With Disabilities Act - (ADA), pursuant to section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

Academic Integrity

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22)

Please acknowledge the following Honor code in all submissions:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

Drop Policy

Students may drop or swap (concurrently add and drop) classes through MyMav self-service throughout the registration period. After the late-registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw, if he/she does not plan to attend after registering.

Emergency Exit Procedures

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members
and instructional sta_ will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities. How best to exit the building will be explained on day one. (See also http://www.uta.edu/campus-ops/ehs/fire/Evac_Maps_Buildings.php and http://www.uta.edu/police/EvacuationProcedures.pdf.)

Student Support Services

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php.