Class meetings  section 010:  MWF 11:00–11:50 in MCS 110

Instructor  Rob LeGrand
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office location: MCS 205I
office hours: MTWRF 2:00–4:00 and by appointment


Description  An in-depth study of computer algorithms, including those for hash tables, trees and graphs; analysis of time and space requirements of algorithms; NP-completeness and undecidability of problems.

Prerequisites  CS 2336 (Data Structures and Algorithms) is a prerequisite and MATH 2305 (Discrete Mathematics I) is a co-requisite for this course. Please see me if you haven’t taken CS 2336 or if you’re unsure about your proficiency in data structures and/or discrete math.

Grading breakdown  
40% assignments/quizzes/homework
60% exams (three or four, including final)

Student learning outcomes  After successful completion of this course, students will be able to
• demonstrate proficiency in analyzing time and space complexity of iterative and recursive algorithms.
• demonstrate proficiency in programming algorithms for hash tables, trees and graphs.
• demonstrate an understanding of the theory of NP-completeness.

Class format  This class will usually have a lecture/discussion format, with homework and programming assignments done primarily outside of class. It is very important that you do all assigned reading before class and come with relevant questions. There may be in-class quizzes over reading and lecture material.
Discussion and giving and receiving help are generally encouraged when working on assignments, but you must list everyone you worked with, helped and/or got help from on each assignment. Failure to do so is considered taking credit for work not done and thus cheating. In-class exams and quizzes must be completed independently. Many exam questions will be similar to questions you will see on the Major Field Test.

Class attendance is important. You have a duty to inform me as soon as you know that you’ll have to miss a class. Missing class can hurt your grade both directly and indirectly.

Blackboard (http://blackboard.angelo.edu/) will be used to keep track of grades and assignments.

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Final exam

The final exam for this course is scheduled for Wednesday, December 11th, 10:30–12:30.

Academic honesty

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. By remaining enrolled in this course you agree to adhere to the Academic Honor Code. It and the Student Handbook are easily found on the ASU website.

Accommodations

Persons with disabilities which may warrant academic accommodations must contact Student Services in order to request and to implement academic accommodations. For ASU’s policy on absences due to religious holy days, please see OP 10.19 at http://www.angelo.edu/opmanual/.