Computer Science 3650
Analysis of Algorithms
Spring 2016

Meeting Time: 1:00 – 1:50 P.M., Monday, Wednesday, Friday
Meeting Location: Austin 303
URL: http://www.cs.ecu.edu/~rws/c3650/

Instructor: Dr. Ronnie W. Smith
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Office Hours: Mondays 10:00 – 11:30 A.M. and 2:30 – 3:30 P.M.
Wednesdays 10:00 – 11:30 A.M.
Fridays 8:15 – 8:45 A.M. and 12:15 – 12:45 P.M.
(or by appointment)

Course Goals
1. To learn techniques for expressing the time and space cost of an algorithm as it depends on the size of the problem instance.
2. To learn techniques for demonstrating that an algorithm correctly solves a given problem.
3. To be able to apply common techniques such as divide-and-conquer and dynamic programming to the design of efficient algorithms for given computational problems.
4. To learn the fundamental properties of known efficient algorithms for some important computational problems.

Prerequisite
CSCI 3200 or 3300; CSCI 2427

Text (required)

“We find that although you need to know how to apply techniques for designing and analyzing algorithms, problems seldom announce to you which techniques are most amenable to solving them.” (from page xvi of the Preface).

Evaluation Criteria
Homeworks - 25% (Must be worked in teams of two to four students)
Quizzes – 50% (5 of them, January 29, February 19, March 18, April 8, April 22, no makeups administered)
Final Exam – 25% (May 4, 11:00 A.M. – 1:30 P.M.)

Grading Scale
An absolute grading scale has not been set, but you can be assured of at least the following:

Final Average (x)  Grade will be at least
x ≥ 90  A-
80 ≤ x < 90  B-
70 ≤ x < 80  C
Late Work
No late assignments will be accepted without an official excused absence. All assignments are due at the start of class.

Class Attendance
Attendance is mandatory and will be checked. Each unexcused absence will reduce your final average up to 1 point.

If you are more than 5 minutes late and it is unexcused, your tardiness will be counted as an unexcused absence.

A dean's excuse or student health excuse is required for an absence to be considered excused.

Virtual Office Hours
Besides physical office hours noted on the previous page, virtual office hours are available on an ad hoc basis. This refers to times during the week when I will try to answer student emails. My policy for answering emails will be the following.

- First priority during physical office hours will be visitors and phone calls. Secondary priority will be answering emails.
- On weekday evenings, I will normally try to look at email at some point after 9:00 P.M.
- On weekends, I will normally try to look at email at some point on Sunday afternoons after 2:00.
- You should not rely on me answering emails quickly at other times, though I will sometimes be able and willing to do that.

Ethics
You must work on assignments in teams of two to four students. Teams should remain the same throughout the semester. The name of all team members should be provided when you turn in an assignment. Teams must be decided upon by January 20.

I may make a portion of some of your quizzes take-home. It is expected that all work on an exam is your own work and nobody else’s (not even teammates).

Hints for Success
1. Do the reading in advance and prepare thoughtful questions.
2. Bring book to class.
3. Work the practice problems.
4. Talk to your teammate(s) about assignments (and practice problems too).
5. Take advantage of my office hours.

University Mandated Syllabus Information
The university requests that we include information in each syllabus on retention requirements, student conduct, weather emergencies, and ADA compliance. This information is available on a separate page provided in the online syllabus at the course web site.