COURSE: CSC 317, Data Structures and Algorithm Analysis

Practicum for CSC 317: CSC 401

I strongly recommend you enroll in CSC 401 Sec 01. The objective of CSC 401 is to implement *abstract data types*, use them to implement some of the algorithms taught in CSC 517, empirically evaluate their performances, and compare empirical observations with theoretically predicted performances.

SECTION/TIME: MWF 9:05 - 9:55 AM

PLACE: LC 130

OBJECTIVE: The objective of the course is to introduce different algorithm design techniques and analyze complexity of algorithms. For this purpose, first basic concepts of time and space complexity will be introduced, and then they will be used to study some classic algorithm design techniques.

CONTENTS: Design and analysis of divide-and-conquer, dynamic programming, and the greedy approach algorithms that utilize data structures, such as, arrays, records, linked lists, stacks, queues, trees, hash tables, set-of-sets, and various representation of graphs.

TEXT: Introduction to Algorithms by T. H. Cormen, C. E. Leiserson, R. L. Rivest, and C. Stein; 3<sup>rd</sup> edition.

**INSTRUCTOR:** Dilip Sarkar

OFFICE / HOURS: CC 310H / WR 11:00 AM – noon, and others by appointments.

## **COURSE POLICIES:**

- 1. No makeup of missed exams without proof of emergency or prior consent.
- 2. Students are encouraged to form study groups, but do NOT copy HWs from each other.
- 3. All HWs must be uploaded on the Blackboard in the pdf file format; HWs uploaded in any other format will **not** be **graded**. You will have about a week to complete each HW problem set. Unless otherwise stated, HWs are due by 10:00 pm on the designated day. HWs are available around midnight of the scheduled day.
- 4. No homework assignment is accepted late for grades.
- 5. Evidence of cheating will result in zeros in all papers / programs involved. If identical HWs are uploaded by two or more students, everyone will get a zero.

## **GRADING:**

1. Quizzes 72%

Six Quizzes, 20 minutes each, see the class schedule for dates

2. Homework --- 28%

Expect 10 to 12 HW problem sets.

No Midterm Exam and Final Exam