

# CMPE130

## Midterm Exam 1 Study Guide

Please read the exam regulations . Only material covered in the lectures will be included.  
Topics are rated as:

- (1) Extremely important. Must be completely familiar with all aspects.
- (2) Important. Must understand all aspects.
- (3) Moderately important. Must have a understanding of major topics.

### Topics:

Ch. 1

No questions will be asked on Ch. 1

Ch. 2

UNIX directory structure (1), devices as files (3), redirection (3)

Ch. 3

Disk structure and encoding (2), calculating time of a disk access (1), storage hierarchy (2), journey of a byte (1), buffering (3), file systems (3), FAT (2), i-nodes (2)

Ch. 4

Fields (1), records (1), canonical form (2)

Ch. 5

Sequential search (1), header records (2), metadata (2)

Ch. 6

Compression (2), reclaiming space (1), avail list (1), binary search (1)

Ch. 7

Indexing (1), primary and secondary indexes (1), implementing the four basic database operations (search, add, delete, modify) (1)

Lab 1

Pseudocode, data structures and implementation (1)

*You may bring a calculator and one sheet of notes (8½" × 11", one side).*