

## Math 130-004 Finite Mathematics Winter 2012

10:00 – 10:50 Monday – Friday Bouillon 144

**Instructor:** Cen-Tsong Lin

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**Office Hours:** 11:00 – 11:50, Monday – Friday

**Course goals:** This course is designed to help students become capable of critical thinking, master the counting procedures, probability, random variables and their probability distributions. After finishing this course, students are expected to be able to apply those skills in quantitative decision makings and lay a solid background for statistics courses.

**Course description:** This course meets General Education "Basic Skills (4)" requirement and prepares student for introductory statistics courses in various departments. It covers the language of sets, counting procedures, introductory probability, decision-making, and introductory statistics.

**Required Text:** Bill Owen and Fred Cutlip, *Finite Mathematics: Introductory Probability and Statistics*, Hayden-McNeil

**Calculator:** A TI-83/84 Plus graphing calculator is **required**

### Course outlines:

- Introductory counting and probability
- More on counting and probability (including conditional probability, independence, Bayes' theorem)
- Random variables and their probability distributions (including binomial and normal distributions, normal approximation to binomial distribution)
- Introductory statistics

### Course Policies:

**Attendance:** Daily attendance is expected and considered necessary for success. You are responsible for any announcement made in class regarding homework, quizzes and exams.

**Homework:** Worksheet or homework assignment will be given each day. It is your responsibility to keep up with these assignments. Although the worksheet or homework will not be collected or graded, they form the basis for all of the quizzes and exams. The solutions of the worksheets and homework assignments are available at the following website: <http://www.cwu.edu/~ctl>.

**Quizzes:** Seven quizzes (20 points each) will be given on following Fridays: 1/6, 1/13, 1/27, 2/3, 2/17, 2/24 and 3/9. Best 5 quiz scores will be counted toward your course grade. **NO MAKE-UP QUIZZES** will be given.

**Tests:** Three 100-point tests will be given on following **Fridays:** 1/20 (Test 1), 2/10 (Test 2) and 3/2 (Test3). Make-up test will be given only when you can document a circumstance that is beyond your control and unexpectedly prevented you from taking the test.

### Grading:

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| • 5 quizzes                                                       | <b>100 points</b> |
| • 3 in-class tests                                                | <b>300 points</b> |
| • Final exam (comprehensive, Friday, March 16, 8:00 – 10:00 A.M.) | <b>150 points</b> |

Course grades will be assigned based on the following scale: (out of 550 total points)

	511 – 550: A	495 – 510: A-
478 – 494: B+	456 – 477: B	440 – 455: B-
423 – 439: C+	407 – 422: C	385 – 406: C-
368 – 384: D+	346 – 367: D	330 – 345: D-
0 – 329: F		