# Stat 248 H1S – Statistics for Computer Scientist

Lectures: Tuesday 10:10 - 12:00pm and Thursday 11:10 - 12:00pm (First Class at Jan 9th)

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#### **Course Materials:**

# **Course Description:**

This course is a survey of of statistical methodologies with emphasis on data analysis and application. The topics will cover the following (but not limited to):

- Descriptive statistics: sample and population
- Data collection and experiment design
- Statistical inference: test of significant, statistical power and confidence interval construction
- Linear regression model: simple linear regression and multiple linear regression
- Analysis of variance: ANOVAs
- (Optional) advanced topics

This course will also require students to use R and practice the basic programming skills.

## **Prerequisite:**

Stat 247/257, CSC 108/CSC 148

#### **Exclusion**

ECO220Y1/ECO227Y1/GGR270Y1/PSY201H1/SOC300H1/SOC202H1/SOC252H1/STA220H1/STA221H1/ST A250H1/STA255H1/STA261H1/STA288H1/EEB225H1

#### Textbooks:

Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences, 4th edition by J. Susan Milton and Jesse C. Arnold. We will be covering materials of chapters 6 through 11, 13, and 15. Answers to selected problems are included in the text's Appendix. A student solution manual is available for purchase from bookstores.

# **Evaluation:**

Item	Weight	Date
Assignment #1	7.5%	Due on Feb 12 <sup>th</sup>
Midterm	30%	TBD
Assignment #2	7.5%	Due on Mar 24 <sup>th</sup>
Final	55%	TBD

## **Assignment and Exam Policy**

Late assignments are not encouraged; 10% of marks will be deducted for each hour an assignment is late.

Only non-programmable calculators are permitted on the test and final. You must bring your student identification to the term test as well as the final exam. The final exam is cumulative.

If the midterm test is missed for a valid reason, you must submit appropriate documentation within one week of the test. If documentation is not received in time, your test mark will be zero. If the test is missed for a valid reason, its weight will be shifted to the final exam.

Requests for test remarking must be submitted at the time the test is returned back to you and no later than 2 weeks after the initial test return date. The request must contain a justification and will only be considered for tests which were written in ink.