Instructor:
Dr. H. Zahedi  (Office: DM 403C, Phone: (305)348-2927, Fax: (305)348-6895, Email: zahedih@fiu.edu, WebPage: http://faculty.fiu.edu/~zahedih, Blackboard login: http://online.fiu.edu/login_uts.html

Formal Office hours: 
Tuesdays and Thursdays  (4:00 PM - 4:50 PM)
Other Times: (by appointments ).
Feel free to consult with me as often as you need and whenever problems arise.

Text Book:

Coverage & Objectives:
We will cover most of the topics in chapters 1, 4, 5, 6, 8, 9, 10 and some of the topics in chapters 2, and 3. of the text book, plus some additional related topics in form of class notes. This is an introductory, calculus based, undergraduate course in basic probability and statistics inference for Computer Science and Engineering Majors.
The course is intended to teach these students some basic ideas and techniques in descriptive statistical analysis, random events and probabilities, commonly used univariate discrete and continuous probability models, point estimations, interval estimations and testing hypotheses for some most commonly used parameters.
(See the course syllabus on the second page for details.)

Assignments:
1. Weekly Homework, 8-12 problems each. Please see Blackboard for the list of suggested problems from the text book.
2. Chapters’ Review Problems posted in Blackboard.

Tentative Exams Dates:
Quizzes: TBA
Exam I: Thursday, May 18
Exam II: Thursday June 1
Final Exam*: Thursday June 15
* You should not register for courses that have a final examination conflict with this course.

Grading:
20 % Quizzes & Attendance, 25% Exam I; 25% Exam II; 30% Final Exam.

Note:
This course outline is subject to possible changes. In case of any possible changes you will be notified in advance.

Some Important Dates:
May 8 Monday: Classes Begin
May 12 Friday: Last day to drop courses or withdraw from the University without incurring financial liability for tuition and fees.
May 22 Monday: Last day to withdraw from the University with a 25% refund of tuition.
May 29 Monday: Memorial Day Holiday (University closed)
June 5 Monday: Last day to drop a course with a DR grade. Last day to withdraw from the University with a WI grade.
June 16 Friday: Classes end/ End of Summer A Semester
June 22 Tuesday: Grade report for Summer Term A available to students by web.
For further information and other important dates please visit the Florida International University’s Home Page at http://www.fiu.edu .
Text Book:

Additional Reading if needed:

Topics Coverage:
Statistics:
Introduction, Basic ideas and tools for displaying and analyzing data sets.
(Approximately 1.5 weeks) / 2

Probability:
Probability and counting rules, conditional probability and independence, rules of probability.
(Approximately 2 weeks) / 2

Discrete Probability Distributions:
Concepts of a random variable, probability distribution of a discrete random variable, cumulative distribution function, and mathematical expectation; Bernoulli Distribution, Binomial Distribution, Geometric Distribution, Negative Binomial Distribution, Poisson Distribution, Hypergeometric Distribution.
(Approximately 2 Weeks) / 2

Continuous Probability Distributions:
(Approximately 2 weeks) / 2

Statistics and Sampling Distributions:
Sample Mean and Sample Variance, Sampling Distribution of Sample Mean, Central Limit Theorem, Normal Approximation to the Binomial Distribution, Sampling Distribution of Sample Variance.
(Approximately 1.5 week) / 2

Estimation:
Point and Interval Estimators, Unbiasedness, Confidence intervals for means, proportions and variances. Prediction intervals.
(Approximately 1.5 Weeks) / 2

Hypotheses Testing:
Testing the mean, the proportion p, the variance; testing the difference between two means, the difference between two proportions, paired t-test, testing the ratio of variances.
(Approximately 2 Weeks) / 2