
Required Calculator: *Casio fx-991MS* or *fx-991MS PLUS*

Marking scheme:  
- Term test: 30%
- WebCT quizzes: 10%
- Final exam: 60%

The two WebCT quizzes with the lowest marks will be dropped from the calculation of the final grade.

Outline:
- Techniques to summarize and display univariate and bivariate data
- Measures of location and dispersion, Chebyshev’s Theorem
- Probability: independence, conditional probability, Bayes’ Theorem, expectation
- Probability distributions: discrete, binomial, hypergeometric, Poisson, normal
- Sampling distributions, standard error of the mean, Central Limit Theorem
- Estimation, confidence intervals, parametric hypothesis testing for means, variances, and proportions in one-sample and two-sample situations
- ANOVA: one-way, and introduction to two-way analysis of variance
- Regression and correlation: simple linear regression and introduction to multiple regression
- Non-parametric hypothesis testing: sign test, Mann-Whitney U test

What you are responsible for in the text:
- Chapters 1 to 5: all
- Chapter 6: all, (in 6.7 you are only responsible for the situation A and B; not A, B₁, B₂, etc.)
- Chapter 7: do 7.1 only
- Chapter 8: omit 8.4, 8.6
- Chapter 9: omit 9.1, do the rest but you are only responsible for knowing what normal probability plots are, why you do them, and what you look for in them – not producing one.
- Chapter 10: omit 10.2, 10.3, 10.4, 10.5, 10.10
- Chapter 11 to 13: all
- Chapter 14: omit 14.1
- Chapter 15: do 15.1, 15.2, 15.3; in 15.8 & 15.9 only to the extent considered in class
- Chapter 16: do 16.1, 16.2, 16.3; in 16.4 only to the extent considered in class
- Chapter 17: do 17.1, 17.2, 17.3 (in 17.3 you are to do the t test, not the Z test)
- Chapter 18: do 18.2 and 18.5 only