

BA 240: STATISTICAL ANALYSIS
Winter 2011 Sect D

INSTRUCTOR: DAN YAMASAKI
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CLASS LOCATION: D274C
CLASS HOURS: TTh 5:30-7:40 PM
ITEM: 5517
SECTION: D

COURSE OVERVIEW AND OBJECTIVES

The goal of this course is to provide a practical and applied view of the use of statistics. Understanding technical, contextual, and research applications are the aspects to be covered in this course. This course will also involve the use of Microsoft Excel software to solve statistical problems. This is a rigorous course, designed and applicable for transfer to 4-year universities.

Topics covered will include:

mean, median, mode
standard deviation, standard error, variance
probability
binomial distribution
normal distribution, central limit theorem
student's t distribution
hypothesis testing
confidence intervals
linear regression (simple, multiple)
correlation
chi square tests
analysis of variance

Additionally, we will be using the Microsoft Excel software package

TEXTS

1)) McClave and Sincich, Statistics, 10th Ed

REQUIREMENTS AND ASSIGNMENTS

There will be 800 points available in this course:

3 exams at 150 points each	450
4 EXCEL assignments at 40 points each	160
1 group project	110
<u>8 Homework assignments at 10 points each</u>	<u>80</u>
Total	800

There will be scheduled lab sessions on specified days in which students can work on their EXCEL assignments. These assignments may be done in pairs. If students wish to do assignments at other times, they can find open computers at N250.

There is a large amount of material to be covered. It is understood that a student may have to miss classes due to other commitments; although missing classes tend to be detrimental to the understanding of the material. Historically classroom attendance has been found to be very beneficial. Class notes are meant to

supplement, not substitute for attendance. **Students are held responsible for knowing what was said during class.**

GRADING POLICY

In conjunction with the Bellevue Community College grading policy, the following grading system will be used in this course:

GRADE	PERCENTAGE	NO. OF POINTS
A 4.0	96-100	768 - 800
A- 3.7	92-95.9	736 - 767
B+ 3.3	89-91.9	712 - 735
B 3.0	86-88.9	688 - 711
B- 2.7	84-85.9	672 - 687
C+ 2.3	81-83.9	648 - 671
C 2.0	78-80.9	624 - 647
C- 1.7	75-77.9	600 - 623
D+ 1.3	67-74.9	536 - 599
D 1.0	60-66.9	480 - 535
F 0.0	BELOW 60	BELOW 480

SPECIAL ACCOMMODATIONS

Students requiring any special accommodations for the class should make arrangements at the beginning of the term through advisors/counselors in B233, Student Services Building or by calling 641-2498

POLICY REGARDING PLAGIARISM, STEALING, AND CHEATING

To be clear regarding plagiarism, stealing, and cheating, this course outline includes policy on these matters.

Cheating includes, but is not limited to, copying answers on exams, glancing at nearby exams, turning in papers that have been used in other classes, and giving or receiving help during an exam.

Stealing includes, but is not limited to, taking the text, notes, exams, library books, or other personal property of others without their permission.

Plagiarism is presenting the words, ideas, and/or work of others as if it is an individuals own work. It includes, but is not limited to, using other's papers as one's own and including parts of published works without giving credit where credit is due.

If you choose to cheat, steal, or plagiarize, the following actions will be taken:

- 1) First instance: you will receive a 0 score for the entire test/project regardless of the extent of the cheating. **Students who receive help and students who give help will be considered equally guilty.**
- 2) Second instance: you will receive a failing grade for the course and a report of the incident will be forwarded to the Dean of Students. He/she may file the report in your permanent record and/or take further disciplinary action.

If you feel you have been unfairly accused of any of the above, you may appeal. For a description of the due process, see WAC 132H-120, available in the Dean's office.

CALENDAR

WEEK 1: Reading – Jan 04 Chapter 2.1-2.6 Jan 06: Chapter 3.1-3.8

Jan 04: Course Requirements, Overview (Lecture 1) Describing Data (Lecture 2); Project Discussion

Jan 06: Probability (Lecture 3)

WEEK 2: Reading – Jan 11: Chapter 4.1-4.2, 4.4 Jan 13: Chapters 5.3, 5.5, 6.3

Jan 11: Binomial Distribution (Lecture 4)

Jan 13: Normal distribution, Z-scores (Lecture 5); Central Limit Theorem (Lecture 6)

WEEK 3: Reading – Jan 18: Chapters 7.2-7.5 Jan 20: Chapters 8.1-8.5

Jan 18: Confidence intervals for Single Population (Lecture 7)

Jan 20: Hypothesis testing for Single Population (Lecture 8)

WEEK 4: Reading –

Jan 25: NO CLASS

Jan 27: NO CLASS

WEEK 5: Reading –

Feb 01: Examples (Practice 1, Review 1); Lab 1

Feb 03: Review for Exam 1 (Practice Problems for Exam 1); Teams selection and data selection due

WEEK 6: Reading – Feb 10: Chapters 9.2-9.3

Feb 08: EXAM 1

Feb 10: Confidence Intervals for Difference in Two Means (Lecture 9)

WEEK 7: Reading – Feb 15: Chapters 9.2-9.3 Feb 17: Chapters 9.4

Feb 15: Hypothesis Tests for Differences in Two Means (Lecture 10); Lab 2

Feb 17: Confidence Intervals and Hypothesis Tests for Difference in Two Proportions (Lecture 11);
Examples (Practice 2, Review 2);

WEEK 8: Reading –

Feb 22: (cont) Review for Exam 2 (Practice Problems for Exam 2)

Feb 24: EXAM 2

WEEK 9: Reading – Mar 01: Chapters 11.1-11.9, 12.1-12.3, 12.11

Mar 01: Regression and Correlation (Lecture 13)

Mar 03: (cont) Regression and Correlation; Lab 3

WEEK 10: Reading – Mar 10: Chapter 13.2-13.3

Mar 08: NO CLASS – COLLEGE ISSUES DAY

Mar 10 : Chi-square Tests (Lecture 12) There should be time for you to work with your project team)

WEEK 11: Reading – Mar 15: Chapter 10.1-10.2

Mar 15: Analysis of Variance (Lecture 14); Lab 4 (There should be time for you to work with your project team)

Mar 17: Review for Exam 3; Draft of project due

WEEK 12: Reading –

Mar 22: Project Due at beginning of class; EXAM 3

How to get to online files

when you log into MyBCC, there should be two boxes at top of page
in the left hand box, use the pull down menu to get "people"
in the right hand box type my name dan yamasaki
then hit the magnifying glass to get a search

you should be taken to a page with my name on it. select my name. There may be multiple occurrences. The exact match one should work.

on the next page which should be my home page, you should see a list on the left hand side. select shared documents

on the next page, select the ba 240 statistical analysis class

on the next page should be the list of files available