

BA 240: STATISTICAL ANALYSIS
Winterl 2012

INSTRUCTOR: DAN YAMASAKI
DAY PHONE: (425) 918-4471
E-MAIL: Dan.Yamasaki@Premera.com

CLASS LOCATION: D 274C
CLASS HOURS: TTh 5:30-7:40 PM
ITEM: 5516
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
8 Homework assignments at 10 points each	80
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.**

Make-up Exams are on a case by case basis at the instructor's discretion. Documentation supporting reason may be required. If allowed, typically done within a couple of days during business hours (M-F 8A-5P) in the Social Science office, D110. Students are responsible for making necessary arrangements with employers.

Laptop computers **cannot** be used during exams.

Any class information can only be e-mailed to official Bellevue College e-mail address.

Group projects are to be done in groups, 2-4 students. Single student projects are on a case by case basis and must be approved by the instructor. Datasets need to be approved by instructor. Once a data set is approved for a group, that dataset is no longer available for any other group. Projects that had been turned in prior quarters **cannot** be used.

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
A-	3.7	92-95.9
B+	3.3	89-91.9
B	3.0	86-88.9
B-	2.7	84-85.9
C+	2.3	81-83.9
C	2.0	78-80.9
C-	1.7	75-77.9
D+	1.3	67-74.9
D	1.0	60-66.9
F	0.0	BELOW 60

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 individual's 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 03 Chapter 2.1-2.8

Jan 05: Chapter 3.1-3.8

Jan 03: Course Requirements, Overview (Lecture 1) Describing Data (Lecture 2); Project Discussion

Jan 05: Probability (Lecture 3)

WEEK 2: Reading – Jan 10: Chapter 4.1-4.2, 4.4

Jan 12: Chapters 5.3, 5.5, 6.3

Jan 10: Binomial Distribution (Lecture 4)

Jan 12: Normal distribution, Z-scores (Lecture 5); Central Limit Theorem (Lecture 6)

WEEK 3: Reading – Jan 17: Chapters 7.2-7.5

Jan 19: Chapters 8.1-8.5

Jan 17: Confidence intervals for Single Population (Lecture 7)

Jan 19: Hypothesis testing for Single Population (Lecture 8)

WEEK 4: Reading –

Jan 24: Examples (Practice 1, Review 1); Lab 1

Jan 26: Review for Exam 1 (Practice Problems for Exam 1) ; Teams selection and data selection due

WEEK 5: Reading –

Jan 31: NO CLASS (Professional Development Day)

Feb 02: EXAM 1

WEEK 6: Reading – Feb 07: Chapters 9.2-9.3

Feb 09: Chapters 9.2-9.3

Feb 07: Confidence Intervals for Difference in Two Means (Lecture 9)

Feb 09: Hypothesis Tests for Differences in Two Means (Lecture 10); Lab 2

WEEK 7: Reading – Feb 14: Chapters 9.4

Feb 14: Confidence Intervals and Hypothesis Tests for Difference in Two Proportions (Lecture 11)

Feb 16: Examples (Practice 2, Review 2); Review for Exam 2 (Practice Problems for Exam 2)

WEEK 8: Reading –

Feb 21: (cont) Review for Exam 2 (Practice Problems for Exam 2)

Feb 23: EXAM 2

WEEK 9: Reading – Feb 28: Chapters 11.1-11.9, 12.1-12.3, 12.11

Feb 28: Regression and Correlation (Lecture 13)

Mar 01: NO CLASS (College Issues Day)

WEEK 10: Reading – Mar 08: Chapter 13.2-13.3

Mar 06: (cont) Regression and Correlation; Lab 3

Mar 08 : Chi-square Tests (Lecture 12) There should be time for you to work with your project team)

WEEK 11: Reading – Mar 13: Chapter 10.1-10.2

Mar 13: Analysis of Variance (Lecture 14); Lab 4 (There should be time for you to work with your project team)

Mar 15: Review for Exam 3; Draft of project due

WEEK 12: Reading –

Mar 20:

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