

ECONOMICS 260: INTRODUCTION TO BUSINESS STATISTICS

Section 1: Spring 2009 / MWF 10:00-11:25 / Pigott 200

Section 2: Spring 2009 / MWF 11:55 – 1:20 / Pigott 200

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OFFICE HOURS:
W 2:30-3:30 pm and
by appointment

Please read the syllabus carefully. “I did not read the syllabus” is not an acceptable excuse for missing a quiz, overlooking a reading, skipping a problem set, and so on. -Prof. Jones

COURSE DESCRIPTION:

Economics 260 introduces statistical concepts, procedures, and computer applications used in business and economics. The topics covered include descriptive statistics, probability, random variables, sampling, statistical inference, confidence intervals, and hypothesis testing. The prerequisite for this class is successful completion of a course in calculus: Math 130, 134 or the equivalent.

COURSE OBJECTIVES:

Successful students in the class will develop:

1. A robust understanding of fundamental concepts of statistics.
2. The ability to describe and analyze qualitative and quantitative data.
3. The ability to use a spreadsheet program such as Microsoft Excel to generate statistical results.
4. The ability to critically evaluate statistical findings.
5. An appreciation of the use of statistics in the analysis of business and economic issues.
6. The ability to communicate the results of statistical analysis accurately and concisely.
7. An appreciation of the complexity of interpreting and producing statistical information.

MATERIALS:

1. Anderson, Sweeney, and Williams. *Statistics for Business and Economics*, 10th ed or revised 10th ed. (ISBN 978-0-324-65837-8 (revised) or 978-0-324-36068-4).
2. Economics 260 Lecture Notes (available at the Copymart on Madison).
3. We will be using Microsoft Excel to analyze data. It is installed on university computers and is also available for purchase at a discount at <http://seattleu.e-academy.com>.
4. Other course materials will be distributed in class and/or made available on the website: <https://angel.seattleu.edu>.

COURSE REQUIREMENTS:

Your grade will be determined in the following manner:

Problem Sets (best 8 of 9)	10 percent
Quizzes (best 5 of 6)	15 percent
Community Research Project	25 percent
Midterm examination	25 percent
Final examination	25 percent

1. Problem sets: Working problems is essential to mastering the material in this class. The assigned problems should be considered a minimum rather than a maximum; you are encouraged to work additional problems from the text. You may work with other students on the problems, but must write up your own solutions, including any computer work. Full solutions to the self-test problems and brief solutions to the even-numbered problems are found in Appendix D of the textbook. Solutions to assigned problems will be made available on the class website.

2. Quizzes: There will be six short quizzes over the course of the quarter. There are no makeup quizzes (an exception is made for official university activities such as sports travel); however, the lowest quiz score will be dropped in determining your final grade. The purpose of the quizzes is to help both you and I know whether you are learning the material as we progress through the topics.

3. Midterm examination: The midterm exam will be held Monday, May 4. It will cover assigned readings and course material concerning chapters 1 through 5. The midterm may include short answer, multiple choice, and problem solving questions. There are no scheduled makeup exams (again, an exception is made for absence due to documented university responsibilities). Students who miss the midterm exam and who have an excuse approved by the instructor will be required to complete an additional assignment. If it is completed acceptably, their final exam will be weighted proportionately more. Excuses must be approved at least 24 hours prior to the scheduled exam.

4. Final examination: The final examination will be held in our class room on June 10 (section 1) and June 12 (section 2). It will cover assigned readings and course material concerning chapters 6 through 10. The final exam may include short answer, multiple choice, problem solving, and essay questions. There is no way to make up the final exam; if you cannot take the final exam at the scheduled time, do not take this course.

5. Community Research Projects: I believe that people learn best when they are **actively engaged** in the experience of learning, both inside and outside the classroom. As a requirement of this class, you will help to conduct a research project that uses statistical techniques to address a question concerning the broader community. Our community partner for the project is the Neighborhood Farmers Market Alliance (www.seattlefarmersmarkets.org).

GRADING SCALE:

The following grading scale represents minimum grades for given percentages:

A	94-100	C	74-76
A-	90-93	C-	70-73
B+	87-89	D+	67-69
B	84-86	D	64-66
B-	80-83	D-	60-63
C+	77-79	F	0-59

RESOURCES:

1. Loyola Learning Center: Provides learning style assessment, free tutoring, study skills information, and individual academic strategy sessions. Loyola Hall 100, www.seattleu.edu/student/lc, 296-5740.
2. Office of Information Technology: Helps with hardware and software issues, runs computer labs, and provides training and support. Information at www.seattleu.edu/oit , helpdesk in Engineering 313, or at helpdesk@seattleu.edu, 296-5517.
3. Writing Center: Assists with idea generation, organization and development of writing. Lemieux Library 204, www.seattleu.edu/academics/wrctr, 296-6239.

ACADEMIC HONESTY:

In keeping with the mission of the school and university, students are expected and required to conform to the norms of academic honesty. Academic misconduct will be dealt with harshly. Academic misconduct includes (but is not limited to) using written or electronic materials on a test or exam, copying another student's exam or allowing another student to copy yours, copying another student's problem set or allowing another student to copy yours, and passing off someone else's writing or ideas as your own in writing assignments. Possible consequences for academic misconduct range from zero credit on an assignment to failing the class.

SPECIAL ACCOMODATIONS:

If you have, or think you may have, a disability (including an 'invisible disability' such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff in the Learning Center, Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

UNIVERSITY MISSION:

Seattle University is dedicated to educating the whole person, to professional formation, to empowering leaders for a just and humane world.

CLASS CALENDAR

All dates are subject to change. Students are responsible for changes announced in class. Reading assignments should be completed by the day assigned.

<u>Date</u>		<u>Topic and Assignment</u>
<u>WEEK 1</u>		
3/30	Monday	<u>Chapter 1: Introduction to Data and Statistics</u> Read Chapter 1, all.
4/1	Wednesday	<u>Chapter 2: Descriptive Statistics: Tabular and Graphical Methods</u> Read Chapter 2, Sections 2.1, 2.2, 2.4, and Appendix 2.2.
4/3	Friday	Excel training session: meet in Pigott 328
<u>WEEK 2</u>		
4/6	Monday	<u>Chapter 3: Descriptive Statistics: Numerical Methods</u> Read Chapter 3, Sections 3.1, 3.2, 3.3, and 3.5.
4/8	Wednesday	Continue Chapter 3 PS1/2 due: Ch 1: 11, 15, 23; Ch 2: 5, 19, 33, 41, 53 Discuss Community Research Project.
4/10	Friday	Good Friday: no classes
<u>WEEK 3</u>		
4/13	Monday	<u>Chapter 4: Introduction to Probability</u> Read Chapter 4, 4.1-4.5 Quiz 1 on Chapters 1 and 2
4/15	Wednesday	Continue Chapter 4 PS3 due: Ch. 3: 9, 11, 19, 24, 31, 33, 51, 59
4/17	Friday	No class: Community Research Project work day
<u>WEEK 4</u>		
4/20	Monday	Continue Chapter 4 Quiz 2 on Chapter 3 Community Research Project 1 Data Analysis due.
4/22	Wednesday	<u>Chapter 5: Discrete Probability Distributions</u> Read Chapter 5, Sections 5.1 – 5.4. PS 4 due: Ch 4: 9, 13, 21, 25, 29, 31, 35
4/24	Friday	Continue Chapter 5
<u>WEEK 5</u>		
4/27	Monday	Continue Chapter 5 Quiz 3 on Chapter 4 Community Research Project 1 due.
4/29	Wednesday	<u>Chapter 6: Continuous Probability Distributions</u> Read Chapter 6, sections 6.1 - 6.2. PS5 due: Ch 5: 6, 11, 19, 23, 29, 37, 59
5/1	Friday	Continue Chapter 6
<u>WEEK 6</u>		
5/4	Monday	Midterm on Chapters 1-5
5/6	Wednesday	<u>Chapter 7: Sampling Distributions</u> Read Chapter 7: 7.1-7.6

5/8	Friday	Continue Chapter 7 PS 6 due: Ch 6: 3, 7, 9, 11, 19, 23, 47
<u>WEEK 7</u>		
5/11	Monday	Continue Chapter 7 Discuss Community Research Project 2
5/13	Wednesday	<u>Chapter 8: Interval Estimation</u> Read Chapter 8, all. PS 7 due: Chapter 7: 10, 11, 17, 21, 29, 31, 37, 41
5/15	Friday	Continue Chapter 8.
<u>WEEK 8</u>		
5/18	Monday	Continue Chapter 8 Quiz 4 on Chapters 6/7
5/20	Wednesday	<u>Chapter 9: Hypothesis Tests</u> Read Chapter 9, sections 9.1-9.5. PS8 due: Ch 8: 3, 7, 11, 19, 21, 27, 33, 41
5/22	Friday	Continue Chapter 9 Community Research Project 2 data analysis due
<u>WEEK 9</u>		
5/25	Monday	Memorial Day: no classes
5/27	Wednesday	Continue Chapter 9 Quiz 5 on Chapter 8
5/29	Friday	Continue Chapter 9
<u>WEEK 10</u>		
6/1	Monday	<u>Chapter 10: Comparing Two Populations</u> Read Chapter 10, all PS 9 due: Chapter 9: 1, 8, 9, 17, 23, 27, 33, 35, 39, 45 Community Research Project 2 due.
6/3	Wednesday	Continue Chapter 10 Quiz 6 on Chapter 9
6/5	Friday	Continue Chapter 10
<u>FINALS</u>		
6/8	Monday	Review and reflect. PS 10 due: Ch 10: 5, 11, 13, 17, 27, 28, 31, 35.
6/10	WED	Final Exam on Chapters 6-10: 12:00 – 1:50 pm (section 1)
6/12	FRI	Final Exam on Chapters 6-10: 10 – 11:50 (section 2)