

Economics and Business Statistics
ECON 156 A MWF 12:50 – 2:00, PPHAC 112
ECON 156 B MWF 2:20 – 3:30, PPHAC 112
Spring 2007
Moravian College

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Office Hours: MWF 10:30 am – 12:00 nn

Course Goals:

1. Develop a research topic that is feasible and that you are interested in examining.
2. Collect a data set, identify the sampling method used, and recognize potential bias.
3. Describe the dataset with tabular, graphical, and numerical methods.
4. Test various hypothesis and construct confidence intervals.
5. Scrutinize and interpret your results and draw meaningful conclusions.
6. Present your data and results in a way that is concise, visually appealing, and provides information to the reader.

Course Topics:

1. Introduction to Statistics
 - Introduction to Research
 - Developing Hypotheses
 - Normal Probability Distributions
 - Populations and Samples
 - Sampling and Sampling Distributions
 - Statistics Terms
2. Descriptive Statistics
 - Tabular and Graphical Methods
 - Numerical Methods
3. Statistical Inference
 - Interval Estimation
 - Hypothesis Testing
 - Comparisons Involving Means
4. Regression Analysis
 - Simple Linear Regression
 - Multiple Linear Regression

Learning Materials:

Textbook: “Essentials of Modern Business Statistics with Microsoft Excel,” 2e, Anderson, Sweeney, and Williams; South-Western Publishing, 2004.

Supplementary Reading: “Freakenomics,” by Steven D. Levitt and Stephan J. Dunbar (HarperCollins Publishers).

Assessment: (see semester calendar on the next page for dates)

Exams: Four exams will contribute to 60% of your final grade (15% each).

Research Projects: Four projects and one final research project will contribute to 30% of your final grade (5% for each project and 10% for the final project).

Assignments: Assignments will be made periodically and will contribute to 5% of your final grade. Assignments may include in-class work that you will need to be present to complete.

Participation and Professionalism: This includes attending class, being on time, being prepared, being attentive, asking questions, contributing to discussions, communicating with me and fellow students, and conducting yourself in a respectful and considerate manner. Participation and professionalism will contribute to 5% of your final grade.

Grades will be assigned to exams, projects, and assignments as follows:
(The grading scales may be adjusted during the semester.)

<u>Exams and Graded Assignments</u>		<u>Projects</u>		<u>Assignments for Completion</u>	
A	92-100%	A+	100%	√ +	100%
A-	89-91%	A	95%	√	85%
B+	86-88%	B	85%	√ -	70%
B	82-85%	C	75%	X	0%
B-	79-81%	D	65%		
C+	76-78%	F	0%		
C	72-75%				
C-	69-71%				
D+	66-68%				
D	62-65%				
D-	59-61%				
F	58% or below				

Academic Honesty Policy: Please refer to the College's Policy on Academic Honesty in the Student Handbook. www.moravian.edu/studentLife/handbook/academic2.htm.

Colleagues: Introduce yourself to two fellow students and exchange contact information

Name: _____ # _____ email: _____

Name: _____ # _____ email: _____

Economics and Business Statistics

Semester Calendar:			Material (tentative):	Important dates (tentative):
January	15	M	Syllabus	
	17	W	Introduction to Statistics	
	19	F	Computer/Discussion/Application	Freakonomics Introduction
	22	M	Introduction to Statistics	
	24	W	Introduction to Statistics	
	26	F	Computer/Discussion/Application	Freakonomics Chapters 1 & 2
	28	M	Introduction to Statistics	
February	31	W	Introduction to Statistics	
	2	F	Computer/Discussion/Application	Freakonomics Chapters 3 & 4
	5	M	Introduction to Statistics	
	7	W	Project 1, Review	Project 1 due
	9	F	Exam 1	Exam 1
	12	M	Tabular and Graphical Methods	
	14	W	Tabular and Graphical Methods	
	16	F	Computer/Discussion/Application	Freakonomics Chapters 5 & 6
	19	M	Numerical Methods	
	21	W	Numerical Methods	
	23	F	Computer/Discussion/Application	Freakonomics Epilogue
	26	M	Numerical Methods	
March	28	W	Project 2, Review	Project 2 due
	2	F	Exam 2	Exam 2
	5	M	No Class (Spring Recess)	
	7	W	No Class (Spring Recess)	
	9	F	No Class (Spring Recess)	
	12	M	Interval Estimation	
	14	W	Interval Estimation	
	16	F	Computer/Discussion/Application	
	19	M	Hypothesis Testing	
	21	W	Hypothesis Testing	
	23	F	Computer/Discussion/Application	
	26	M	Comparisons Involving Means	
	28	W	Comparisons Involving Means	
	30	F	Computer/Discussion/Application	
April	2	M	Project 3, Review	Project 3 due
	4	W	Exam 3	Exam 3
	6	F	No Class (Easter Recess)	
	9	M	No Class (Easter Recess)	
	11	W	Simple Linear Regression	
	13	F	Computer/Discussion/Application	
	16	M	Simple Linear Regression	
	18	W	Multiple Linear Regression	
	20	F	Computer/Discussion/Application	
	23	M	Multiple Linear Regression	
	25	W	Project 4, Review	Project 4 due
	27	F	Exam 4	Exam 4
FINAL EXAM	TBA		Final Research Project	Final Research Project due