

## SYLLABUS

### ECONOMICS 156 A

### ECONOMICS AND BUSINESS STATISTICS

SPRING TERM 2006

**INSTRUCTOR:** Dr. Linda L. Ravelle  
Comenius 217  
861-1453  
[mellr01@moravian.edu](mailto:mellr01@moravian.edu)

**HOURS:** M,W 10:30 AM – 11:30 AM  
T,Th 9:00 AM – 10:00 AM  
Also by appointment

**TEXT:** ESSENTIALS OF MODERN BUSINESS STATISTICS WITH  
MICROSOFT® EXCEL, 2e, Anderson, Sweeney, Williams; South-Western  
Publishing, 2004.

**COURSE OBJECTIVES:** This course is designed to introduce you to the field of statistics and its many applications in business and economics. The course uses lectures, class discussion, lab work, assignments and exams to help you develop critical thinking skills that will allow you to recognize, describe, and analyze economic problems using statistical tools. You will also learn to use Excel to help you solve these problems.

**CLASS TIMES:** M,W 5b (12:50 – 2:00); F 5a (12:50 – 1:40)

**GRADES:** The course grade is determined by the following formula:

Three midterm exams	45%
Final Exam	15%
Assignments	20%
Term Project	10%
Class Participation	10%

**EXAMS:** Exam dates are noted on the syllabus and will not be changed. Exams consist of problems, essays, and short answer questions. Formula sheets and tables will be provided, but you must bring calculators to all exams. You should buy a calculator that performs statistical functions, and know how to use it before you take an exam. You can NOT share calculators. Makeup exams are given only in EMERGENCY situations and are significantly different than the original exam. Cell phones must be turned off and kept out of sight during all exams.

**TERM PROJECT:** The term project will be handed out in class.

**ASSIGNMENTS:** Chapters should be read before class. Homework assignments are listed on the syllabus, and are due upon completion of relevant material, as announced in class. **YOU MUST SHOW ALL WORK.** Exercise and cases typed in **bold** **MUST** be done using Excel. The data sets for the Excel problems are contained in the CD that came with your textbook. Grades on late assignments (turned in after the class period in which they are due) will be reduced one letter grade per day late. If you miss class, you are responsible for finding out about due dates and changes in assignments. **PLEASE NOTE:** the dates, chapters, and assignments are subject to change. If you miss class, you are responsible for finding out about due dates and changes in assignments. Failure to attend class is **NOT** an excuse for turning in assignments late. Dates listed in bold numbers are shorter Friday classes.

**ATTENDANCE AND PARTICIPATION:** Please do not disrupt class by arriving late or leaving early. The class participation grade is determined by attendance (50%) and ability to answer questions and participate in class discussions (50%). This class will make extensive use of computers, but you may only use the computers when we are working on problems. You can only use the computers for classroom work. **DO NOT** use computer for non-classroom purposes (email, internet browsing, etc.) during class time or you will be asked to leave class.

**HONESTY:** All students are expected to adhere to the College's Policy on Academic Honesty as outlined in the Student Handbook. Students who violate the Policy must accept the consequences dictated by this policy. A copy of the policy can be found on the College web site at: <http://www.moravian.edu/studentLife/handbook/academic2.htm>. If you have any questions about this policy, please see me.

**CELL PHONES:** You may not use cell phones in class. Please turn them off before you come to class.

**OTHER:** If you have trouble with any of the material covered in this class, let me know as soon as possible. The material is cumulative, so you should not assume that you can skip the parts you do not understand, or that you can catch up later. If you need help beyond what I can provide, a departmental tutor is available.

DATE	TOPIC	CHAPTER	ASSIGNMENTS
Jan 16	Data and Statistics	1	
18	Descriptive Statistics I	2	13,39,43
<b>20</b>			<b>Excel: Case Problem</b>
23	Descriptive Statistics II	3	11,19,23,31,63,67,71
25			<b>Excel: Case Problem 1</b>
<b>27</b>			
30			
Feb 1	Introduction to Probability	4	7,19,29,35,43,59
<b>3</b>			<b>Excel: Case Problem</b>
6			
8	EXAM I		
<b>10</b>	Probability Distributions	5	15,19,31,37,45,49,55,65
13			<b>Excel: Handout 5a</b>
15			
<b>17</b>	Continuous Probability Distributions	6	3,19,21,33,37,43
20			<b>Excel: Handout 6a</b>
22			
<b>24</b>	Sampling Distributions	7	23,27,31,35,41,49
27			<b>Excel: 7</b>
Mar 1			
<b>3</b>	EXAM II		

DATE	TOPIC	CHAPTER	ASSIGNMENTS
Mar 13	Interval Estimation	8	3,13,23,27,33,41
15			<b>Excel: 11,47,53,Case 2</b>
<b>17</b>			
20			
22	Hypothesis Testing	9	7,17,21,43,51,55
<b>24</b>			<b>Excel: 47,57,Case Problem2</b>
27			
29	Comparison Involving Means	10	3,7,33,45
<b>31</b>			<b>Excel: 41, Case Problem 3</b>
Apr 3	EXAM III		
5			
7	Simple Linear Regression	12	13,21,29,45
10			<b>Excel: 7,11,37,51,57</b>
12			
19			
<b>21</b>			
24	Multiple Regression	13	3,13,21,33,39,41
26			<b>Excel: 9,17,25,43</b>
<b>28</b>	Quality Control	14	