

Course	BUSN 5760 Applied Business Statistics	
Term	Spring 2, 2008	
Instructor	Instructor : Monte F. Hancock, Jr. Phone Number 321-723-1714 Email : mfhancock@aol.com Office Hours: By appointments	
Catalog Description	Students will examine the applications of statistical analysis, hypothesis testing, regression analysis and sampling as typically used in business decision-making applications. The course will focus on the utilization of statistical methods as applied to business problems and operations.	
Prerequisites	NONE INCOMING COMPETENCY OF STUDENTS EXPECTED BY INSTRUCTOR: <ul style="list-style-type: none"> • A working knowledge of Mathematics. • The students are assumed to be familiar with basic descriptive statistics and the idea of probability distributions. However, these subjects will be reviewed in detail at the beginning of the course as a refresher for students who may have forgotten some of the details. • A calculator will be required. However, you should be able to buy an adequate calculator with basic statistical functions such as mean and standard deviation for \$10 - \$12, if in doubt call the instructor. 	
Course Level Learning Outcomes	Outcome	Expectation
	1. Students understand the basics of data collection and random sampling.	Students can describe basic statistics concepts and apply proper sampling methods.
	2. Students understand basic calculations of descriptive statistics.	Students can compute basic descriptive statistics.
	3. Students understand the basic properties of the normal distribution and sampling distributions in general.	Student can describe a normal distribution and apply the concepts of the normal distribution to that of sampling distributions.
	4. Students understand confidence intervals.	Students can construct confidence intervals for both numerical and categorical data, and can apply to a real-world business scenario.

	5. Students understand hypothesis testing.	Students can use numerical or categorical data to assess the validity of statements made in a business setting.																												
	6. Students understand regression analysis.	Students can perform simple and multiple regression analysis.																												
	7. Students understand the expected wealth hypothesis.	Students can determine expected wealth in an uncertain business climate.																												
	8. Students understand the concept of forecasting.	Students can apply various advanced forecasting techniques.																												
Materials	<p>REQUIRED TEXTS: Basic Business Statistics: Concepts and Applications, Berenson, M. L., Levine, D. M., and Krehbiel, T. C., 10th Edition, ISBN: 0-13-167831-0, Prentice Hall. (Includes CD-ROM with PHStat2 to supplement Excel).</p> <p>SUGGESTED SUPPLEMENTAL READINGS: Current articles on the subject being studied.</p>																													
Grading	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">COURSE REQUIREMENTS:</th> <th style="text-align: center;">% OF GRADE</th> </tr> </thead> <tbody> <tr> <td>a. Quizzes</td> <td style="text-align: center;">25%</td> </tr> <tr> <td>b. Mid-Term Exam</td> <td style="text-align: center;">35%</td> </tr> <tr> <td>c. Final Exam</td> <td style="text-align: center;">40%</td> </tr> </tbody> </table> <p>Taking the numerical score from the formula above and converting it to the appropriate letter grade from the chart determine the student's letter grading for the course.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Letter Grade</th> <th style="text-align: center;">Numerical Score</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">96-100% (4.0)</td> </tr> <tr> <td style="text-align: center;">A-</td> <td style="text-align: center;">91-95% (3.67)</td> </tr> <tr> <td style="text-align: center;">B+</td> <td style="text-align: center;">87-90% (3.33)</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">82-86% (3.0)</td> </tr> <tr> <td style="text-align: center;">B-</td> <td style="text-align: center;">78-81% (2.67)</td> </tr> <tr> <td style="text-align: center;">C</td> <td style="text-align: center;">70-77% (2.0)</td> </tr> <tr> <td style="text-align: center;">F</td> <td style="text-align: center;">69 & below (0)</td> </tr> <tr> <td style="text-align: center;">I</td> <td style="text-align: center;">Incomplete (0)</td> </tr> <tr> <td style="text-align: center;">W</td> <td style="text-align: center;">Withdraw</td> </tr> </tbody> </table>		COURSE REQUIREMENTS:	% OF GRADE	a. Quizzes	25%	b. Mid-Term Exam	35%	c. Final Exam	40%	Letter Grade	Numerical Score	A	96-100% (4.0)	A-	91-95% (3.67)	B+	87-90% (3.33)	B	82-86% (3.0)	B-	78-81% (2.67)	C	70-77% (2.0)	F	69 & below (0)	I	Incomplete (0)	W	Withdraw
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Activities	<ul style="list-style-type: none"> • Lecture on new material from text • Perform in-class demonstrations using board and computer • Quiz each class period on material from previous lecture • Mid-term Examination • Final Examination/Project
Policy Statements: University Policies	<p>University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest:</p> <p>Academic Honesty</p> <p>The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it.</p> <p>Drops and Withdrawals</p> <p>Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund.</p> <p>Special Services</p> <p>If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.</p> <p>Disturbances</p> <p>Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course.</p> <p>Student Assignments Retained</p> <p>From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case,</p>

	<p>should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p>Contact Hours for this Course It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</p>
Course Policies	<p>Attendance at all class sessions is expected.</p> <p>Late weekly write-ups and written case assignments will be accepted if prior arrangements have been made with the instructor, but will be given reduced points based upon the number of class sessions it is late.</p>
Week 1 Schedule	<p>PREPARATION FOR CLASS. Bring a calculator. Preview material in Chapters 1 and 2 of text.</p> <p>CLASSROOM DISCUSSION TOPICS: Introduction and overview of course. Discuss class format, assignments, examinations and grading policy. Presentation and discussion of data and its representations.</p>
Week 2 Schedule	<p>PREPARATION FOR CLASS: Review material in Chapters 1 and 2 of text. Preview material in Chapter 13 of text. Work assigned problems.</p> <p>CLASSROOM DISCUSSION TOPICS: Weekly quiz. Introduction to single and multiple linear/non-linear regression. Project Discussion and demonstration.</p>
Week 3 Schedule	<p>PREPARATION FOR CLASS: Review material in Chapter 13 of text. Preview material in Chapter 3 of text. Work assigned problems.</p> <p>CLASSROOM DISCUSSION TOPICS: Weekly quiz. Presentation and discussion of concepts of probability theory, probability distributions. Review for the Mid Term examination.</p>
Week 4 Schedule	<p>PREPARATION FOR CLASS: Review material in Chapter 3 of text. Preview material in Chapter 4 of text. Work assigned problems.</p> <p>CLASSROOM DISCUSSION TOPICS: Weekly quiz. Presentation and discussion of multi-stage experiments, conditional probability, Decomposition Theorem, Bayes' Theorem.</p>
Week 5 Schedule	<p>PREPARATION FOR CLASS: Review for Mid-Term exam.</p> <p>CLASSROOM DISCUSSION TOPICS: Mid Term exam.</p>

Week 6 Schedule	PREPARATION FOR CLASS: Review material in Chapter 13 of text. Work assigned problems. CLASSROOM DISCUSSION TOPICS: Project working session, in-class exercises.
Week 7 Schedule	PREPARATION FOR CLASS: Preview material in Chapters 5 and 6 of text. Work assigned problems. CLASSROOM DISCUSSION TOPICS: Weekly quiz. Presentation and discussion of sampling, sampling distributions. Discuss Project.
Week 8 Schedule	PREPARATION FOR CLASS: Preview material in Chapters 8 and 9 of text. Work assigned problems. CLASSROOM DISCUSSION TOPICS: Weekly Quiz. Presentation and Discussion of statistical inference. Review for final exam.
Week 9 Schedule	PREPARATION FOR CLASS: Prepare for Final Examination. CLASSROOM DISCUSSION TOPICS: Final Examination.

PURCHASING TEXTBOOKS--Most textbooks can be purchased through **MBS Direct**. Check the syllabus for textbook information. Give MBS Direct the campus location (for the purpose of ordering books the campus is **Space Coast Campus**, course name, number and section number (i.e. Space Coast Campus, COMP5000/64) and most important, the **title, author, edition, and ISBN** of the book you are ordering. MBS Direct will buy back your book at the end of the term should you elect not to retain it as a reference book. Order by phone or online. Orders should be placed no earlier than 4 weeks prior to the start of the term.

MBS Direct: 1-800-325-3252

www.mbsdirect.net/webster

Monday-Thursday 7am-10pm(Central Time)

Friday 7am-6pm (Central Time)

Saturday 8am-5pm (Central Time)

Sunday noon-4pm (Central Time)

MBS Direct Website is

In order to meet the course objectives this syllabus may be modified at the discretion of the instructor without approval of the students.

Original approved by:

Dr. Calvin D. Fowler Academic Dean Space Coast Region, January 14, 2008

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