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| Course | BUSN 5760/63 – Applied Business Statistics | |
| Term | Summer 2008 | |
| Instructor | James R. Williams decision1@cfl.rr.com Office Hours: Thirty minutes before class | |
| Catalog Description | The student examines the application of statistical analysis, hypothesis testing, and regression analysis in business decision making. The course should focus on the utilization of statistical methods as applied to business problems and operations. | |
| Prerequisites | NONE | |
| 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 | REQUIRED TEXTS: Basic Business Statistics, Concepts and Applications Prentice hall 10 th . Ed. ISBN 0-13-153686-9, by Berenson, Levine, Krehbiel | |

A statistical calculator is necessary. A very adequate one such as the TI 30Xa can be purchased for about \$10. Be sure to bring it to the first class.

SUGGESTED SUPPLEMENTAL READINGS None

Grading

| COURSE REQUIREMENTS: | % OF GRADE |
|-----------------------------|-------------------|
| a. Quizzes | 60% |
| c. Mid-Term Exam | 20% |
| d. Final Exam | 20% |

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.

| 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 |

Activities

There will be a quiz at each class meeting which will review the subjects discussed at the last meeting.

Policy Statements:

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:

University Policies

Academic Honesty

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.

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| | <p>Drops and Withdrawals 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 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 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 From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, 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> |
| <p>Course Policies</p> | <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> |
| <p>Week 1 Schedule</p> | <p>PREPARATION FOR CLASS: Bring a statistical calculator. Review Ch. 1 Pages (1.1-1.9).</p> <p>CLASSROOM DISCUSSION TOPICS: Introduction and overview of course. Discuss class format, assignments, examinations and grading policy. Presentation and discussion of Ch.1 and Ch. 2 Pages (22 - 42), Introduce Ch. 3.</p> |

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| Week 2 Schedule | PREPARATION FOR CLASS: Read in Ch.3 pages (72 - 91). Work problems 3.1-3.5. CLASSROOM DISCUSSION TOPICS: Weekly quiz. Presentation of Ch. 3. Work problems in Ch. 3. |
| Week 3 Schedule | PREPARATION FOR CLASS. Review Ch.3 Pages (94 -106) CLASSROOM DISCUSSION TOPICS: Weekly quiz. Review quiz, and introduce linear and non linear regression. Discuss the rest of Ch. 3. |
| Week 4 Schedule | PREPARATION FOR CLASS: Read Ch. 4 Pages (126 – 141) and work problems 4.1 and 4.2. CLASSROOM DISCUSSION TOPICS: Weekly quiz. Review quiz, and introduce the MTBF concept and time dependant probability. Work several problems. Review for the Mid Term examination. Chapters 1 through 4. |
| Week 5 Schedule | PREPARATION FOR CLASS: Prepare for Mid Term Exam. CLASSROOM DISCUSSION TOPICS: Mid Term Exam. |
| Week 6 Schedule | PREPARATION FOR CLASS Read Ch.6 Pages (192 - 207). CLASSROOM DISCUSSION TOPICS: Weekly quiz. Review quiz, and introduce Ch. 6, Sampling distributions and confidence intervals. Work several relevant problems. |
| Week 7 Schedule | PREPARATION FOR CLASS. Read Ch.7 Pages (229 - 241). CLASSROOM DISCUSSION TOPICS: Weekly quiz. Review quiz. Present Ch. 7 and 8. Work selected problems. |
| Week 8 Schedule | PREPARATION FOR CLASS: Review for final exam. CLASSROOM DISCUSSION TOPICS: Class review for final exam. Work several problems. |
| Week 9 Schedule | PREPARATION FOR CLASS: Review for final exam. 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

MBS Direct Website: 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)

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, April 15, 2008

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