

Southern Arkansas University Tech
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www.sautech.edu

Online Course Information Form

Course Number: GBUS2013

Course Title: Quantitative Analysis

Course Description: An introduction to applied statistics including measures of central tendency, measures of dispersion, probability, sampling, estimation, and distribution.

Topics include:

- Unit 1. Identify appropriate methods of Data Collection, organize data in tables and charts and calculate numerical descriptive measures
- Unit 2. Work basic probability problems; calculate discrete probability distribution, and normal distributions.
- Unit 3. Calculate sampling distributions and confidence interval estimations; Use the fundamentals of hypothesis testing for one sample tests and two-sample tests with numerical data
- Unit 4. Create scatter diagrams, calculate the correlation of two variables, and perform simple linear regression

Instructor: Dr. Hilda Marino Black

Instructor Bio:

Dr. Black is originally from New Orleans. She is married and has a young son. She enjoys music, singing, reading, and sometimes sewing. She received a Bachelor of Science in Secondary Mathematics Education from the University of New Orleans, a Master of Science Teaching in Mathematics from Loyola University, a Master of Science in Statistics from Louisiana Tech University, and a Doctor of Philosophy in Computational Analysis and Modeling (mathematics, statistics, and computer science) from Louisiana Tech University. She started her career many moons and degrees ago in the Catholic school system in New Orleans as a high school mathematics teacher. She has taught for West Monroe High School in Ouachita Parish and for Louisiana Tech University. This is her 3rd year at SAU Tech. She loves mathematics and statistics and enjoys helping others figure out how to do math and statistics. She is intrigued and challenged to find a simpler way to do just about everything.

Prerequisite: CO0133 - Reading and MA1053 – College Algebra.

Textbook Title:

- *Larson, Farber, Elementary Statistical Methods*, 4th edition, Pearson, 2010
- My Math Lab (MML) Account: www.coursecompass.com - can be accessed from any computer with internet capabilities. A link for My Math Lab is also located in Blackboard under the Begin Here icon. Students will need an email address to create an MML account. You may use your personal email address or SAU Tech email address. Assignments and chapter tests will be assigned through MML. A student access code is bundled with textbook purchase and a course code will be provided by your Instructor.

Learning Outcomes:

Students maintaining a 70% average or better in all Quantitative Analysis topics will be able to:

- Unit 1. Identify appropriate methods of Data Collection, organize data in tables and charts and calculate numerical descriptive measures
- Unit 2. Work basic probability problems; calculate discrete probability distribution, and normal distributions.
- Unit 3. Calculate sampling distributions and confidence interval estimations; Use the fundamentals of hypothesis testing for one sample tests and two-sample tests with numerical data
- Unit 4. Create scatter diagrams, calculate the correlation of two variables, and perform simple linear regression (and complete a Proctored Final exam)

Teaching Methodology, including description of interaction between student and instructor:

- Students should expect to spend at least 3 hours per week for the equivalent 3-hour credit that a student on campus would spend in class. The student should spend an additional 3 to 6 hours per week for studying and working in the online environment, which would correspond to homework and study time for a campus student.
- Instructor utilizes MyMathLab, an online learning tool affiliated with Pearson publishing for the following: homework, chapter quizzes, mid-term exam, and proctored final exam.
- Instructor utilizes web applets to enhance visual learning of statistical skills. The student will submit answers in the Assignment Tool in Blackboard.
- Instructor utilizes a comprehensive, **proctored** final exam located in MyMathLab.

Methods of Testing:

- Discussion and web applets will be completed in Blackboard.
- Homework, quizzes, midterm, and proctored final will be completed in MyMathLab. These tests consist of a combination of multiple choice and open response questions.

Enrollment Procedures:

Non-degree seeking students applying for admission to SAU Tech must submit an application for admission, appropriate placement test scores or, if applicable, official college transcript(s) with proof of Composition I and Intermediate Algebra (having earned a letter grade of "C" or better).

Full-time degree seeking students and part-time degree seeking students applying for financial aid applying for admission to SAU Tech must submit an application for admission, appropriate placement test scores, immunization record (if born after 01/01/1957), high school transcript or GED scores, and official college transcript(s), if applicable. (Note: Part-time students not applying for financial aid do not have to submit immunization record.)

Students are responsible for all tuition and fees at the time of registration. Students must officially drop by written notice or in person in order to reduce their balance owed. If students never attend class, he/she will still be assessed partial tuition and full student processing fees, unless completely he/she completely withdraws during the 100% refund period.

In order for a student to drop a class, he/she must complete a drop form or send written request to his/her advisor. A \$10 add/drop fee is assessed for adds/drops that take place after classes start.

Special Attendance Requirements (student contact with instructor, proctored examinations, etc.):

This course utilizes Blackboard and MyMathLab.

Access to Learning Resources:

Students will receive all required discussion materials through the Internet, links to texts, and the electronic mail with Blackboard. Students will be required to purchase the course textbook, if applicable, and Learning Resource Center access is encouraged but not required to be successful. Textbooks can be ordered online. The Bookstore number is (870) 574-4510. The Library number is (870) 574-4518.

Other Considerations (writing ability, assignments/projects, time considerations, etc.)

Remove "the passkey for Eduspace that comes bundled with the textbook (if the student purchases a used textbook a new passkey must be purchased to access Eduspace) and replace with "the student ID for MyMathLab that comes bundled with the textbook.