



Southern Arkansas University Tech

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www.sautech.edu

ONLINE COURSE INFORMATION SHEET

Course Number: GBUS2013

Course Title: Quantitative Analysis I

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. Terry Hutson

Instructor Bio: I have taught Mathematics courses at Southern Arkansas University Tech as a member of the Arts and Sciences faculty since the fall 1991 semester. I earned my Ed. D. at the University of Memphis, my MS at the University of Arkansas, Fayetteville, and my BS at the University of Central Arkansas.

Prerequisite:

- CO0143 – Introduction to Language Arts
- MA1053 – College Algebra.

Textbook Information

- *Larson &, Farber, Elementary Statistical: Picturing the World, 5th edition, Prentice Hall, 2012* (**Note: Beginning Fall 2013, the textbook for this course will be in electronic format and available to students inside the online classroom.**)
- 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)

On-Campus Requirement

The final exam must be taken at an approved proctor site.

Modes of Interaction

- 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 Assessment

- 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

SAU Tech is an open admissions college; however, we have several items that you must provide in order to be admitted:

- Submit application for admission.
- Submit a high school transcript or GED, and official college transcripts from all previously attended colleges (if applicable).
- Provide proof of two immunizations against measles, mumps and rubella.
- Take a placement test. Students enrolling must submit ACT, SAT, ASSET or COMPASS scores. Students can take the ASSET or COMPASS test at SAU Tech.

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 \$5 drop fee is assessed for drops that take place after the registration period ends.

Admissions Office Website: <http://www.sautech.edu/studentResources/admissions.aspx>

Course Registration Website: <http://www.sautech.edu/studentResources/advising.aspx>

Technical Requirements and Resources: Students will need Internet access and have the ability to send and receive e-mail attachments using the e-mail within Blackboard.

Library Website: <http://www.sautech.edu/lrc/index.aspx>

Bookstore Website: <http://sautech.textbooktech.com>

Adult Learner Resources: Online library and bookstore services can be obtained at the library and bookstore websites. Advising services can be obtained at <http://www.sautech.edu/studentResources/advising.aspx>.

Student Support and Learning Resources: Online library and bookstore services can be obtained at the library and bookstore websites. Advising services can be obtained at <http://www.sautech.edu/studentResources/advising.aspx>.

Other Considerations

Students will need Internet access and have the ability to send and receive e-mail attachments using the e-mail within Blackboard.

All first time online students are required to complete Learning Strategies before they will be allowed to take their online course(s). The purpose of Learning Strategies is to teach students how to use Blackboard and provide information about other systems that students will use while a student at SAU Tech.

There are computer programs and other things that you will need if you are taking an online course from SAU Tech. To make it easier for you, we have compiled a list of these things. Before beginning your online course, you should go ahead and make sure each of these programs listed below are loaded on every computer that you will use while taking your online course(s).

- **Microsoft Word** – used to complete assignments and submit to instructor
 - Can be accessed via SkyDrive inside your student email account. **FREE**
 - Can be purchased from Wal Mart or other software vendor and will need to be loaded on to your computer
 - There is also a **free** product that works just as good as the Microsoft Office Suite. You can download it at <http://download.openoffice.fm/free/?pk=26976>
- **Adobe Reader 7.0 or higher** – used to read files in pdf format
 - Cost: Free
 - Can be downloaded to your computer from <http://www.adobe.com/products/acrobat/readstep2.html>
- **Adobe Flash Player (7 or higher)** – used to view study activities and demonstrations in Learning Strategies course
 - Cost: Free
 - Can be downloaded to your computer from http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=Shockway

eFlash

- Macromedia Shockwave Player 8.5.1 – used for interactive quizzes, animations and activities
 - Cost: Free
 - Can be downloaded to your computer from <http://www.macromedia.com/shockwave/download/download.cgi?>
- Windows Media Player – used to listen play audio files
 - Cost: Free
 - Comes as part of your Windows operating system
- Java – a technology that is required in order for Blackboard to function properly as well as some other programs that SAU Tech uses with its online classes (**Note: Only one version of Java can be running on your computer at a time.**)
 - Cost: Free
 - Can be downloaded to your computer from <http://javashopl.m.sun.com/ECom/docs/Welcome.jsp?StoreId=22&PartDetailId=jre->
- Microsoft Excel (optional)
 - There are many formulas in statistics that can be worked by hand or with the aid of statistical software. Excel (with the Analysis ToolPack Add-In) provides the statistical software sufficient to work problems for this course.
 - Can be purchased from Wal Mart or other software vendor and will need to be loaded on to your computer
- Real Player 10.0
 - Cost: Free
 - Can be downloaded to your computer from <http://www.real.com/>
- QuickTime 6
 - Cost: Free
 - Can be downloaded to your computer from <http://www.apple.com/quicktime/download/win.html>