

GMTS5309 – Quantitative Analysis and Decision Theory for Business

Fall 2019 SESSION
ONLINE COURSE

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AVAILABILITY HOURS:

Via CHAT, EMAIL or PHONE,
Monday, Wednesday; 12 noon- 4:00 PM

GRADING: Grades will be determined as follows:

Discussions (15)	225 points
Assignments (2)	175 points
Midterm	100 points
Final	100 points
Total Points	500 points

A=500-451 points, B=450-401 points, C=400-351 points, D=350-301 points, F=0-300 points

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1. ONLINE COURSE PROCEDURES: It will be your responsibility to check the **Blackboard website frequently**. You are also required to check your Sul Ross email account since all individual communication will be sent to that address.

YOU ARE REQUIRED TO DOWNLOAD AND USE THE MOZILLA INTERNET BROWSER from Firefox OR Chrome by Google. The Microsoft Internet Explorer in the later versions has recently caused a variety of problems when taking these online exams. Mozilla is available as a free download. Click on the Help and Resources tab when you first log onto the course and then click on Downloads, Utilities, etc. If you need help with this download, contact our OIT department immediately.

Each week, you should read the assigned chapters and check for any new material, new assignments or weekly discussion threads

2. REQUIRED TEXT:

1. *Quantitative Analysis for Management* by Barry Render, Ralph M. Stair, Jr. Michael E. Hanna and Trevor S. Hale. Published by Pearson ISBN-13 9780133507331

3. **OFFICIAL COMMUNICATION:** All official communication by the University or me will be sent to your Sul Ross email account. As a result, you are required to activate your email account and check it from time to time for personal communication. I encourage you to email me if you have questions or comments, BUT PLEASE include your full name and the course for which you have questions. Even if you submit your email through the Blackboard site, I cannot tell which course you are in nor what your real name is (i.e., egar123) unless you put it in the body of your email.

4. TECHNOLOGY HELP: Obtain your SRSU email account name and password directly from the **Central Help Desk at 1-888-837-2882**. For most technology problems, first go to the Lobo Technology Assistance Center (LTAC). The quicklink to this site is available from our home page under the “My SRSU” tab. For specific help with any aspect of Blackboard, including problems with online exams, contact our Blackboard administrators in Alpine.

BLACKBOARD HELP: 432-837-8489

In addition you may visit with one of our on-campus technology resource personnel as follows:

Uvalde: Mr. George Hernandez phone: 830-279-3045
Email: ghernandez@sulross.edu

Del Rio: Creighton Nope III phone 830 703-4818

Eagle Pass: Mr. Juan Garza phone: 830-758-5010
Email: jgarza8@sulross.edu

I encourage you to email me if you have questions about any aspect of the course. Good luck and I look forward to “hearing” from you.

STUDENT LEARNING OUTCOMES:

1. Knowledge: Students will obtain the knowledge of decision-making under uncertainty, decision-making under risk, decision tress, utility theory, linear regression, time series forecasting models, linear programming (Graphical method and simplex method), and project management (PERT/CPM).

Assessment: Written assignments, exams and class discussion.

2. Comprehension: Students will be able to understand and explain the theories, principles, and concepts of the above topics.

Assessment: Written assignments, exams and class discussion.

3. Skills: Students will possess the mathematical and computer skills concerning the above topics.

Assessment: Written assignments, exams and class discussion.

4. Analysis: Students will be able to analyze a linear programming problem, probability distribution of returns, decision trees, and utilities

Assessment: Written assignments, exams and class discussion.

5. Prediction: Students will be able to do a forecast (of sales, profits, etc.) using the methods of linear regression, moving averages and exponential smoothing.

Assessment: Written assignments, exams and class discussion.

6. Evaluation: Students will be able to evaluate a distribution of returns and a decision tree in terms of monetary values and utilities. In addition, students will be able to evaluate the completion time and cost of a project using PERT/CPM.

Assessment: Written assignments, exams and class discussion.

7. Decision Making: Students will be able to apply the appropriate decision methods to various situations.

Assessment: Written assignments, exams and class discussion.

ADA STATEMENT:

*Sul Ross State University is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is the student's responsibility to initiate a request for accessibility services. Students seeking accessibility services must contact Kathy Biddick in Student Services, Room C-102, Uvalde campus. The mailing address is 2623 Garner Field Road, Rio Grande College-Sul Ross State University, Uvalde, Texas 78801. Telephone: **830-279-3003**. E-mail: kbiddick@sulross.edu*

DISTANCE EDUCATION STATEMENT

Students enrolled in distance education courses have equal access to the university's academic support services, such as Smarthinking, library resources, such as online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website. Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires secure login information to verify students' identities and to protect students' information. **[If the course requires students to take proctored exams or to purchase additional software or equipment, please describe those requirements here.]** The procedures for filing a student complaint are included in the student handbook. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as

described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website.

Schedule for QMTS5309 – Fall 2019

Week	Topic	Readings
Aug. 26	Introduction to Quantitative Analysis	Chapter 1
Sept. 2	Probability Concepts and Applications	Chapter 2
Sept. 9	Decision Analysis Assignment 1 due Sunday, September 15, 2019	Chapter 3
Sept. 16	Regression Models	Chapter 4
Sept. 23	Forecasting	Chapter 5
Sept. 30	Inventory Control Models	Chapter 6
Oct. 7	Linear Programming Models: Graphical and Computer Methods	Chapter 7
Oct. 14	Linear Programming Applications	Chapter 8
Oct. 21	Transportation, Assignment, and Network Models Midterm Due: Sunday, October 28, 2019	Chapter 9
Oct. 28	Integer Programming, Goal Programming, and Nonlinear Programming	Chapter 10
Nov. 4	Project Management	Chapter 11
Nov. 12	Waiting Lines and Queuing Theory Models Assignment 2 due, Sunday, November 17, 2019	Chapter 12
Nov. 18	Simulation Modeling	Chapter 13
Nov. 25	Markov Analysis	Chapter 14
Dec. 2	Statistical Quality Control	Chapter 15
Dec. 10	Finals Week Final Due: Tuesday December 11, 2019	