

MGMT 3351 – Advanced Business Analytics

Course Description/Overview

This course builds on the basic data analytics course by including advanced topics in descriptive, predictive, and prescriptive analytics. Methods include using advanced data cutting and visualization, multiple regression, logistic regression, data mining, cluster analysis, and optimization. Applications extend to all area of business including marketing, operations, and finance.

Prerequisite Knowledge

MGMT 3332

Course Technology

ASU Blackboard, Windows-based MS Office 365, Internet, Jamovi. Note: Macs are not compatible with required software.

Class Meeting Times

100% online

Technical Support

The Technology Service Center (TSC) may be contacted by calling (325) 942-2911 or 1-866-942-2911 or by email at helpdesk@angelo.edu

Faculty/Instructor Information

Name: Andrew Tiger, Ph.D.
Title: M&M Department Chair and Associate Professor
Office: RAS 212
Phone: 325-486-6418
E-Mail: atiger@angelo.edu
Office Hours: MWF 8:30 to 10:00; TR 8:30 to 11:00 and by appointment

Course Objectives

Learning Objectives:

Upon completion of this course, students will be able to...

1. Understand the key concepts and issues of descriptive, predictive. and prescriptive analytics.
2. Apply quantitative and computer skills in descriptive, predictive, and prescriptive analytics.

Assessment Methods

Two projects (midterm and final), homework assignments, will be used to assess learning in this course.

Course Textbook and Required Readings

Business Analytics: Data Analysis and Decision Making, Albright & Winston, Cengage, ISBN: 9781133629603 (optional).

Grading Policies

This course employs the following to measure student learning.

Grade Calculations	Percent of Grade	Due
Average Homework Grade	50%	Weekly
Project #1	20%	April 26th
Project #2	20%	May 10th
Course Participation	10%	Weekly

Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale:

A = 90 – 100 %

B = 80 – 89 %

C = 70 – 79 %

D = 60 – 69 %

F = 59 % and below.

Response Time

I will respond to email questions within one business day, and homework will be graded and posted within one week after the due date.

Missed/Late Work

No late work will be accepted. Assignments are posted early with reasonable deadlines to provide adequate time to complete the homework.

Participation/Absenteeism

Your attendance and participation are essential for your learning. Participation includes watching videos and peer review of projects.

Final Exam

N/A

Project

Projects will be applying techniques discussed in class on real data. A final paper and video-based presentation will be required. Details will be posted in Blackboard.

Homework

Homework will be submitted through Blackboard. HW is always be due on the due date before class begins.

Course Policies

Academic Honesty and Integrity

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding and complying with the university Academic Honor Code, which is in both print and web versions of the ASU Student Handbook.

Academic integrity is expected. This includes, but is not limited to, any form of cheating, plagiarism, unauthorized sharing of work, or unauthorized possession of course materials. The professor assumes that all students can be trusted. Please do not violate this trust. Violation of academic integrity will result in a failing grade for the course.

It is the professor's intention to be as fair and impartial as is humanly possible. Therefore, all students will be asked to adhere to the same set of guidelines and rules UNLESS there are disabilities or documented extenuating circumstances that have been discussed with the professor and the Student Life Office. Please make sure you inform the professor as soon as any situation arises. Do NOT wait until the problem is compounded by poor class performance, poor attendance, etc.

Code of Ethics

Students, faculty, administrators and professional staff of the College of Business should always:

- Be forthright and truthful in dealings with all stakeholders
- Take responsibility for one's actions and decisions
- Serve as an example of ethical decision-making and behavior to others
- Admit errors when they occur, without trying to conceal them
- Respect the basic dignity of others by treating them as one would wish to be treated

Courtesy and Respect

Courtesy and respect are essential ingredients to this course. We respect each other's opinions and respect others points of view at all times while in our class sessions. The use of profanity and harassment of any

form is strictly prohibited (Zero Tolerance), as are those remarks concerning one's ethnicity, life style, religion, etc., violations of these rules will result in appropriate disciplinary actions.

Accommodations for Disability

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation.

Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student's responsibility to initiate such a request by emailing studentservices@angelo.edu, or by contacting:

Mrs. Dallas Swafford
Director of Student Development
Office of Student Affairs
University Center, Suite 112
325-942-2047 Office
325-942-2211 FAX
Dallas.Swafford@angelo.edu

Student absence for religious holidays

As stated in the Angelo State University Operating Policy and Procedures (OP 10.19 Student Absence for Observance of Religious Holy Day), a student who intends to miss class to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.

Course Drop

To view information about how to drop this course or to calculate important dates relevant to dropping this course, you can visit http://www.angelo.edu/services/registrar_office/course_drop_provisions.php.

Incomplete as a Course grade

As stated in the Angelo State University Operating Policy and Procedure (OP 10.11 Grading Procedures), the grade "I" is given when the student is unable to complete the course because of illness or personal misfortune. For undergraduates, an "I" that is not removed before the end of the next long semester automatically becomes an "F". A graduate student will be allowed one year to remove a grade of "I" before it automatically becomes an "F". To graduate from ASU, a student must complete all "I's".

Grade Appeal Process

As stated in the Angelo State University Operating Policy and Procedures (OP 10.03 Student Grade Grievances), a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, has experienced inequitable evaluation procedures, or inappropriate grading practices, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties

involved in the grade appeal process and the number of days allowed for completing the steps in the process, see Operating Procedure 10.03 at: <http://www.angelo.edu/content/files/14196-op-1003-grade-grievance>.

Course Outline

Wk	Dates	Topic	Comments
1	3/22	PivotTables & Dashboards	
2	3/29	PowerQuery	HW 1 Due 3/31
3	4/5	PowerQuery & Data Model	HW 2 Due 4/7
4	4/12	PowerPivot & Dax	HW 3 Due 4/14
5	4/19	Multiple Regression – Excel	HW 4 Due 4/21
6	4/26	Logistic Regression w/ Jamovi	Project Due 4/26 Peer Review Due 4/30 HW 5 Due 4/28
7	5/3	Project Work	HW 6 Due 10/7
8	5/10	Finals Week – Project Due 5/10	Project Due 5/10 Peer Review Due 5/12