

Angelo State University · Norris-Vincent College of Business

MGMT 3332 · Data Analytics

Spring 2022 Course Syllabus for Classroom Section 020

Instructor Contact Information

Instructor: Mark Lack, MBA.

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Class Meeting Times:

Wednesdays, 6-8:50 pm. Classroom RAS 117

Office Hours: by appointment

Course Communications

If you need to meet with me outside of class hours, we can use the Webex conferencing app. Just let me know when you would like to meet via email and I can set up a meeting with you. Webex allows for video and audio chat and will allow us share screens, so I can help you with questions that involve the software we will use in class.

Outside of class, the best way to contact me is via email or text. I will work hard to return all emails and texts received during business hours within 24 hours of receiving them. Emails received on weekends or during holidays will be replied to by the following Monday or the next working day in the case of holidays.

Please be professional in all email correspondence with me. This means that you have a subject line that is germane to what you are writing me about, a salutation (at least addressing me by name), a message that is well written in full sentences that are free of spelling and grammatical errors, and a proper closing (at least your name). Please also let me know which class you are in when you write, I'm teaching two different classes this term and that information is always helpful.

ASU Catalog Course Description

An introduction and overview of information resources commonly used in business including secondary and syndicated data resources. The focus of the course is enabling students to identify, locate, analyze, and report on business data sources both qualitatively and quantitatively.

Course Overview

Data analytics is a growing field within business and becoming more and more important as the amount of data available to researchers and managers grows. In this course students will learn basic concepts related to data analytics, some analysis techniques, and the practice and use of data analytics in several areas used frequently in business. Having a grasp of the basic data analysis terms and techniques is imperative for a student of any area of business and for new managers.

Course Prerequisite

MGMT 2331 (Applied Business Statistics)

Required Course Materials

Business Analytics: Communicating with Numbers, Jaggia et.al.

Harvard Business Review Coursepack <https://hbsp.harvard.edu/import/886702>

R Cookbook, available free at <https://rc2e.com/>

Optional, but helpful

Show me the Numbers, by Stephen Few

Course Technology

Blackboard will be the main repository for materials for this course. We will also use Microsoft Excel and Word in this class, along with an application called R. All of these software packages are available in the classroom. R can be downloaded for free from [Download R-4.1.2 for Windows. The R-project for statistical computing.](#) You should also download R Studio at [Download the RStudio IDE - RStudio.](#) R Studio is a “shell” program that makes R more user friendly.

Note that as an ASU student, you can obtain Microsoft Office for free through the ASU IT Department. These applications are also on computers in the MCS Lab on campus.

If you do not already have a way to download files so that you can take them with you (using a USB thumb drive, for instance) or access them from the cloud (as an ASU student, you have free space on Microsoft’s One Drive, a cloud storage tool) you should decide which tool is best for you and get it set

up. Saving files on the classroom hard drives is not an option if you want to work on things outside of class. Further, you can save files to your personal space on the University's computers (p: drive); however, if you are off campus, you cannot access these files. As we begin to work with the Tableau software, you will also have some space provided to save Tableau files to their servers; however, this too has limitations which we will cover in class.

Blackboard and university computer lab technical support is provided by the university's Technology Service Center by calling 325-942-2911 or 1-866-942-2911 or by email at

helpdesk@angelo.edu. The University does not supply support for Tableau.

Course Goals and Assignments

By the end of this course, students should be able to:

- Understand a problem and be able to use data to provide a solution
- Understand how to access, analyze and shape data for analysis
- Communicate data through visualizations
- Recognize how data and data analytics can be used by managers to make better decisions.
- Examine a data visualization and discuss its shortcomings and merits
- Use R to perform data analyses

Specific Learning Goals for this course are:

1. Explain how the data environment in business is changing and will continue to change in relation to management decision making.
2. Articulate the need and importance of decision making in business, its inherent difficulties and pitfalls, and the importance of proper data analysis in management decision making.
3. Classify data by its type and link the data to the proper methods of analysis depending on type.
4. Review basic statistical analysis techniques (descriptive statistics) and the graphical presentation possibilities in R.
5. Articulate the importance of data visualization and best practices when creating visualizations.
6. Find data from reputable sources and demonstrate proficiency in gathering data from sources such as the U.S. Census through census.gov, analyzing the data with visualization tools, and using that data to make a business decision.

Assessment

Students can expect the following assessments during the term:

Exams

Two exams will be given during the term. Students should expect these exams to consist of multiple choice. Questions on the exam will test knowledge and application of the student's knowledge. The tests will be given via Blackboard. Make up exams will be given only for reasons deemed legitimate by Instructor Lack and should be avoided if at all possible. If you have to miss the exam for any reason, you must notify Instructor Lack in advance, if you are ill or otherwise incapacitated a short phone message or email will suffice.

Class Assignments/Participation

Short assignments will be used throughout the term in order to get students practicing what is being covered in the class materials.

Homework Assignments

Longer homework assignments will also be given weekly.

Final Project

You will complete a larger data analysis projects as the capstone to this class. The main focus of your work on the project will be data analysis and presentation of the results.

Course Grades

Please keep in mind that in MGMT 3332 you are graded on your performance on the graded elements of the course—you are not graded on effort. Your final class grade will depend solely on how you perform on all aspects of the course and no other factors.

The following cutoffs will be used to determine final grades in MGMT 3332:

A	90%
B	80%
C	70%
D	60%
F	Less than 60%

Your semester grade will consist of the following components.

	Points
Exams (2 @ 100points each)	200
In Class Assignments (7@ 25 pts. each)	175
Homework Assignments (7 @ 50 pts. each)	350
Final Project	275
Total	1000

Extra Credit Work

No extra credit work will be available for students in this class. Students should prepare for exams and assignments to the best of their ability. Attendance, participation, and solid work is expected from all students.

Late Assignments

Assignments are due in class or on Blackboard (depending on the instructions includes in the assignment) at the time and on the date listed in the syllabus and on the assignment. Assignments must be turned in by the deadlines given.

Professionalism

Students are expected to conduct themselves professionally in all matters related to this class. This means students should prepare all assignments in a professional manner and conduct themselves in a professional manner in class and online (in class-related emails). Inappropriate verbal comments directed toward others in class and/or inappropriate written comments in assignments will not be tolerated.

We are all expected to abide by the ASU Norris-Vincent College of Business

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

Academic Honesty

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

Students caught cheating on exams will be given a grade of zero for the exam and reported to the university's office of student conduct.

While you may work with others on the assignments for this course, you should not turn in work that is exactly the same as another student (except for group project work). Should two students turn in assignments that are exactly the same, the assignment will be scored in a normal manner and each of the two students will receive one-half of the resulting grade. If three students turn in the exact work the grade will be divided by three as it is assigned to each student, and so on.

Plagiarism

Plagiarism is a serious topic covered in ASU's Academic Integrity policy in the Student Handbook.

Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.

Students caught plagiarizing their own or another's work in this class will at a minimum receive a grade of zero on the assignment in question, depending on the extent of the issue, they may also be reported to the university's office of student conduct.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Policy on Disabilities

Angelo State University 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 Act of 2008 (ADAAA), and subsequent legislation.

The Office of 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 contacting Ms. Dallas Swafford, Director of Disability Services, at 325-942-2047 or through email at dallas.swaffod@angelo.edu.

Policy on Religious Observances

A student who intends 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. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

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.

March 26 is the last day to drop a course (with a W) during the fall 2019 semester.

Incomplete as a Course Grade

The incomplete grade, a grade of I is only given when the student is unable to complete the course because of illness or personal misfortune. An I that is not removed before the end of the next long semester automatically becomes an F. To graduate from ASU, a student must complete all I's. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.

Grade Appeal Process

A student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, 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 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>.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act

(VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based

harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manners:

Online: www.angelo.edu/incident-form

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

E-Mail: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report

incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: www.angelo.edu/title-ix.

General Policies

All students are required to follow the policies and procedures presented in these documents:

Angelo State University Student Handbook

Angelo State University Catalog

Course Syllabus Statement on Required Use of Masks/Facial Coverings by Students in Class At Angelo State University

As a member of the Texas Tech University System, Angelo State University has adopted the mandatory Facial Covering Policy to ensure a safe and healthy classroom experience. Current research on the COVID-19 virus suggests there is a significant reduction in the potential for transmission of the virus from person to person by wearing a mask/facial covering that covers the nose and mouth areas. Therefore, in compliance with the university policy students in this class are required to wear a mask/facial covering before, during, and after class. Faculty members may also ask you to display your daily screening badge as a prerequisite to enter the classroom. You are also asked to maintain safe distancing practices to the best of your ability. For the safety of everyone, any student not appropriately wearing a mask/facial covering will be asked to leave the classroom immediately. The student will be responsible to make up any missed class content or work. Continued non-compliance with the Texas Tech University System Policy may result in disciplinary action through the Office of Student Conduct.

Tentative Course Schedule

Date	Topic	Homework
1/19/2022	Intro to Data Analytics Chapter 1	Article: Competing on Analytics
1/26/2022	Discuss Article Intro to R Appendix C	R Practice Homework
2/2/2022	Chapter 2	Homework
2/9/2022	Chapter 3	Homework
2/16/2022	Chapter 4	Homework
2/23/2022	Chapter 5	Homework
3/2/2022	Chapter 6	
3/9/2022	Test 1	
3/16/2022	Spring Break	
3/23/2022	Intro to Big Data	Article: Big Data: The Management Revolution Digital Ubiquity: How Connections.....
3/30/2022	Discuss Articles Final Project Topics Due	
4/6/2022	Test 2	
4/13/2022	Work on Final Project	
4/20/2022	Work on Final Project	
4/27/2022	Work on Final Project	
5/4/2022	Final Project Presentations	
5/11/2022	Final Project Presentations	