

Angelo State University · Norris-Vincent College of Business
MGMT 3332 · Data Analytics
Winter 2021-22 Course Syllabus

Please note that this course is 5-weeks in length, with time off for holidays. This course contains the same content as a 16-week course, but that content is condensed to fit into a short 5-week period.

Course Description

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) or another approved statistics course.

Contact Information

Instructor Contact Information

Instructor: Rex Moody, Ph.D.

Office: Rassman 212A

Phone: 325-486-6613 or 325-942-2283

E-mail: rex.moody@angelo.edu

Office Hours

Office Hours:

By Appointment

If you would like to meet please contact me or the Management & Marketing Office Coordinator to set up a time, to make sure that time will work with my schedule. I will be happy to meet with you in person, or virtually through Zoom or WebEx.

Communicating with Dr. Moody

We can meet in-person or using Zoom or WebEx. Just let me know when you would like to meet via email, and I can set up a meeting with you.

The best way to contact me during this class will be via email. I will work hard to return all emails received during business hours within 24 hours of receiving them. You should not expect quick email replies during the holidays built into this short course schedule (Christmas and New Year's).

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 four different classes this term and that information is always helpful. Emails that don't meet these standards will be returned with a note asking for corrections.

Course Materials

Required Materials

There are no materials that you have to purchase for this course. All readings, videos, and other materials needed for the course will be linked to or posted on the course Blackboard page. The one exception to Blackboard availability is for the Tableau software that we will use for class. You will be able to download the software for free when the time is right, and we will use training videos provided by Tableau that reside on their website.

Course Technology

Blackboard will be the main interface used for this course. We will also use Microsoft Excel and Word in this class, along with an application called Tableau. All of these software packages are available to you free of charge through either ASU or the vendor (Tableau). The applications are also available in campus computer labs (Tableau is only available on select machines in the MCS lab on campus).

Note that as an ASU student, you can obtain Microsoft Office for free through the ASU IT Department. You will also receive instructions on how to download Tableau, for free, onto your own computer when we begin using it later in the term.

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.

You will also need to use the Respondus LockDown Browser (this is part of Blackboard and is free to you) and have a web cam in order to take the exams for this course.

Netiquette & Discussion Expectations, Professionalism

You will have the opportunity to participate in online class discussions in this course; an open forum will be available on Blackboard for you to ask questions of one another related to class.

You should ask questions that you have or start discussion threads as you see fit within the discussion forums. By asking your questions in the forums, all students will be able to see the answers and if so desired can offer their opinion on the question. As long as you are not completing another student's work, helping one another through the class forums with class work is encouraged.

Overall, the expectation is for meaningful, professional-type discussions to occur on an on-going basis during the term.

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 act professionally when participating in class discussions. Inappropriate comments directed toward others in class and/or inappropriate comments in assignments will not be tolerated. Unless otherwise noted, written assignments should be word processed and be free of spelling and grammatical errors.

Course Outcomes

Course Learning Goals and Assessments

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

- Define what data is and explain the current and future data environment in business.
- Explain the practice of data analytics, its importance in business, and some of the key elements needed to succeed in the practice of data analytics.
- Classify data by its type and link the types to their proper methods of analysis. Demonstrate how to use different types of data when performing data analytics.
- Demonstrate how to prep data to prepare it for analysis in Tableau.
- Explain the merits and advantages of data visualization, along with the reasons why data visualization is an important practice.
- Identify the proper type of data visualization to use in different data and desired outcome scenarios.
- Demonstrate how to retrieve basic descriptive statistics in Tableau and explain their meaning.
- Using Tableau, conduct and explain a simple linear regression.
- Build and use calculations in Tableau.
- Create high-quality data visualizations, dashboards, and stories using Tableau.
- Use Tableau software to analyze data and provide information useful in decision making.
- Outline the fundamentals of the U.S. Census, and explain how data for the Census is collected. Demonstrate proficiency in gathering data from the U.S. Census through census.gov, analyzing the data with visualization tools, and using that data to make a business decision. Use third-party tools which are built in part using Census data to help inform decisions.

The above goals will be assessed through two exams; short, one-day assignments; and longer homework assignments; there will also be a quiz covering the course syllabus. Class discussions will also be used to critique and evaluate peer work and offer constructive criticism.

Deliverables

Students can expect the following assessments during the term:

Syllabus Quiz

During the first week of class you will take a quiz covering important points in the course syllabus. As you will for the course exam, you will need to use the Respondus LockDown Browser and a webcam for this short quiz.

Exams

Two exams will be given during the term. Students should expect these exams to consist of multiple choice and application questions (using the software we use in class). Questions on the exam will test knowledge and application of the student's knowledge. Exams will be online and will require the use of the Respondus Lockdown Browser and a webcam.

Make up exams will be given only for reasons deemed legitimate by Professor Moody and should be avoided if at all possible. If you have to miss the exam for any reason, you must notify Professor Moody in advance, if you are ill or otherwise incapacitated a short phone message or email will suffice.

Short Assignments

Short assignments will be used throughout the term in order to get students practicing what is being covered in the class materials. You will be allowed to miss one short assignment without penalty during the term.

Homework Assignments

Longer homework assignments will also be given during the term. Students will typically have three to four days to complete the longer homework assignments (based on the assignment date and the due date).

Ice Breaker Discussion Post

On the first day of class, you will introduce yourself to Dr. Moody and your peers on the class discussion board.

Evaluation

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% of the possible points in the course
- B 80% of the possible points in the course
- C 70% of the possible points in the course
- D 55% of the possible points in the course
- F Less than 55% of the possible points in the course

Your semester grade will consist of the following components.

	<u>Points</u>
Exams (2 @ 100 points each)	200
Syllabus Quiz	20
Short Assignments (top 5 @ 50 pts. each)	250
Homework Assignments (4 @ 100 pts. each)	400
Course Ice Breaker Discussion	30
Total	900

Other Course Policies

Methods of Instruction

Since this course is delivered online, students are responsible for understanding the assignments and learning the material. If questions arise, it is important to ask the instructor immediately for help since many of the tasks build on one another. Course design includes a combination of learning activities to strengthen the academic and professional competence of student's knowledge and skills related to marketing management.

Late Work or Missed Assignments

Late work is not generally accepted in this course. Documented medical or personal emergencies resulting in late work will be reviewed on a case-by-case basis.

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. However, while I do offer extra credit work, there will be some chances for bonus points during the term.

Professionalism

As noted above, 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 homework or exams will be given a grade of zero on the assignment or exam and reported to the university's office of student conduct.

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 work, 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.

Material you create for class 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.

Student Disability Services is located in the Office of Student Affairs and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website at www.angelo.edu/ADA. The employee charged with the responsibility of reviewing and authorizing accommodation requests is: Dallas Swafford, Director of Disability Services, Office of Student Affairs, at 325-942-2047 or through email at dallas.swaffod@angelo.edu Houston Harte University Center, Room 112.

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.

The last day to drop a course in this Winter-Mini Session is Tuesday, January 4.

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. The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance. This is done in order to connect students with resources and options in addressing the allegations reported. As a student, you are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Title IX Coordinator. You may do so by contacting:

Michelle Miller, J.D.

Director of Title IX Compliance / Title IX Coordinator

Mayer Administration Building, Room 210

325-942-2022

michelle.miller@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the *University Health Clinic at 325-942-2171, Counseling Services at 325-942-2371* or the *ASU Crisis Helpline at 325-486-6345*.

The Office of Title IX Compliance also provides accommodations related to pregnancy (such as communicating with your professors regarding medically necessary absences, modifications required because of pregnancy, etc.). If you are pregnant and need assistance or accommodations, please contact the Office of Title IX Compliance utilizing the information above.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).

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

Tentative Course Schedule

Note that this is a FIVE week course that ends on Friday, Jan. 14.

Module 1

Learning Goals Covered in this Module:

- Define what data is and explain the current and future data environment in business.
- Explain the practice of data analytics, its importance in business, and some of the key elements needed to succeed in the practice of data analytics.

Date	Topic(s)	Activities
Monday, December 13	Course Introduction	Carefully read and review syllabus Complete introductory, "Ice Breakers" Forum Post
Tuesday, December 14	Introduction to Big Data and Analytics	Video Lessons Review PowerPoint Slides Assigned Readings Take syllabus quiz. Note that you will need a computer with a web cam and the Respondus Lockdown Browser to do this.

Module 2

Learning Goals Covered in this Module:

- Classify data by its type and link the types to their proper methods of analysis. Demonstrate how to use different types of data when performing data analytics.
- Demonstrate how to prep data to prepare it for analysis in Tableau.

Date	Topic(s)	Activities
Wednesday, December 15	Data and Types of Data Working with Data in Excel Introduction to Tableau	Video Lessons
Thursday, December 16	Continue with above materials	Short Assignment #1 Due, 11:59 p.m.
Friday, December 17	Working with Data in Tableau	Video Lessons Short Assignment #2 Due, 11:59 p.m.
Monday, December 20	Working with Data in Excel & Tableau	Short Assignment #3 Due, 11:59 p.m. Start Homework #1
Tuesday, December 21	Working with Data in Excel & Tableau	Homework #1 Due, 11:59 p.m.
Wednesday, December 22	Holiday	
Thursday, December 23	Holiday	
Friday, December 24	Holiday	

Exam 1, Covering Modules 1 & 2 will be on Tuesday, December 28

Module 3

Learning Goals Covered in this Module:

- Explain the merits and advantages of data visualization, along with the reasons why data visualization is an important practice.
- Identify the proper type of data visualization to use in different data and desired outcome scenarios.

Date	Topic(s)	Activities
Monday, December 27	Data Visualization and Building Visualizations in Tableau	Video Lessons Review PowerPoints Assigned Readings
Tuesday, December 28	Data Visualization and Building Visualizations in Tableau	Exam 1 covering Modules 1 & 2
Wednesday, December 29	Data Visualization and Building Visualizations in Tableau	
Thursday, December 30	Holiday	
Friday, December 31	Holiday	
Monday, January 3	Data Visualization and Building Visualizations in Tableau	Short Assignment #4 Due, 11:59 p.m.
Tuesday, January 4	Data Visualization and Building Visualizations in Tableau	Homework #2 Due, 11:59 p.m.

Module 4

Learning Goals Covered in this Module:

- Demonstrate how to retrieve basic descriptive statistics in Tableau and explain their meaning.
- Using Tableau, conduct and explain a simple linear regression.
- Build and use calculations in Tableau.

Date	Topic(s)	Activities
Wednesday, January 5	Statistics and Linear Regression in Tableau	Video Lessons Assigned Readings Short Assignment #5 Due, 11:59 p.m.
Thursday, January 6	Tableau Calculations	Video Lessons Short Assignment #6 Due, 11:59 p.m.
Friday, January 7	Practice Using Tableau and Tableau Calculations	Begin Homework #3
Monday, January 10	Practice Using Tableau and Tableau Calculations	Homework #3 Due, 11:59 p.m.

Module 5

Learning Goals Covered in this Module:

- Create high-quality data visualizations, dashboards, and stories using Tableau.
- Use Tableau software to analyze data and provide information useful in decision making.
- Outline the fundamentals of the U.S. Census and explain how data for the Census is collected. Demonstrate proficiency in gathering data from the U.S. Census through census.gov, analyzing the data with visualization tools, and using that data to make a business decision. Use third-party tools which are built in part using Census data to help inform decisions.

Date	Topic(s)	Activities
Tuesday, January 11	Working with U.S. Census Data Data Visualization Practice	Video Lessons Begin Homework #4
Wednesday, January 12	Working with Census Data and Data Visualization Practice	
Thursday, January 13	Working with Census Data and Data Visualization Practice	Homework #4 Due, 11:59 p.m.
Friday, January 14		Exam 2, Covering Modules 3-5