Angelo State University  
MGMT 3332 • Data Analytics  
Spring 2018  
Syllabus

Class Meetings:  Section 10: TR, 9:30 a.m. - 10:45 a.m., RAS 117  
Section 20: TR, 11:00 a.m. - 12:15 p.m., RAS 117

Instructor: Rex Moody, Ph.D.  
Office: Rassman 206  
Phone: 325-486-6613  
E-mail: rex.moody@angelo.edu

Office Hours:  Mondays and Wednesdays 3:00 p.m. - 4:00 p.m.  
Tuesdays and Thursdays 1:00 p.m. - 4:00 p.m.  
or by appointment

A note on contacting Dr. Moody / e-mail response times:  
Please feel free to stop by during office hours; if you need to see me and can’t make office hours, let me 
know and we can set something else up. Outside of office hours, the best way to contact me is via email. I 
will work hard to return all emails received during business hours within 24 hours of receiving them (in 
most cases I will be quicker than that). 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.

Course Prerequisites: MGMT 2331 (Applied Business Statistics)

Required Materials:  
In March, right after spring break, students will need to purchase the Mimic Pro Simulation from Stukent 
for a section of the course. The cost is $60. Please do not attempt to purchase this software until you are 
given instructions by Dr. Moody during the term.

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 Objectives  
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 be exposed to basic concepts 
related to data analytics, some analysis techniques, and the practice and use of data analytics in several 
areas. 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. Therefore, this course aims to:

- Familiarize the student with the a set of commonly used terms and techniques in the area of “big 
data” and data analytics that are in use today.
- Develop within the student knowledge that can separate the fact from fiction in the environment of 
data analytics.
- Develop within the student an appreciation of how data and data analytics can be used by managers to 
make better decisions.
- Have the student gain perspective and practice by applying data analysis techniques in several 
settings.
- Have the student gain an understanding of, and a familiarity with using Excel and Tableau to perform data analysis and presentation.
Student Learning Outcomes
By the end of this course students should be able to:

✓ 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.
✓ Understand how the data environment in business is changing and will continue to change in relation to management decision making.
✓ Apply common quantitative and visual techniques to aid in management decision making.
✓ Use Microsoft Excel and Tableau to analyze data and provide a manager with information useful in decision making.

Methods of Assessing Learning Outcomes
Learning outcomes will be assessed through two exams, in-class assignments, homework assignments, a simulation, and a data analysis project. Peer evaluations and reflection papers will be used in assessing student learning and participation in several cases.

Course Technology:
We will use Microsoft Excel in this class, along with an application called Tableau and a software package for a simulation we will use as a learning tool. If you would like to bring a laptop to class that has Excel on it when you do in-class work you may do so. Otherwise, the computers in the classroom all are loaded with Excel and Tableau.

Students will need to use a computer for this course. Access to Microsoft Excel and a word processing package, along with a license for the simulation discussed above, will be needed by students. 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.

Readings
Except for the simulation package and some online Tableau videos, all materials for the course will be made available to you by the course instructor through Blackboard.

Class Format
Students will gain their knowledge of analytics in this course through readings, lectures and demonstrations, hands-on activities, a simulation, a group project, and a number of homework assignments.

When used in class, PowerPoint lecture slides will be available before each class session for downloading and/or printing through the class page on Blackboard.

Graded Activities

Exams
Two exams will be given during the term. Students should expect these exams to consist of multiple choice questions. Questions on the exam will test knowledge and application of the student’s knowledge.

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, In-Class Assignments
Short in-class assignments will be used throughout the term in order to get students practicing what is being covered in class.
Homework Assignments
Longer homework assignments will also be given during the term. These will be graded in a more
traditional manner. Students will always have at least one week to complete all homework assignments
(based on the assignment date and the due date).

Note that not all in-class and homework assignments may be listed on the course schedule.

Simulation
A simulation will be used to help students gain an understanding of how data analytics is used in the
business world. Students will be scored based on their decision making (as they explain it) and performance
on the simulation.

Group Project
We will be working on a data analysis project as one large component of this class this semester. Students
will work in sub-groups of four or five students to practice completing the project. The main focus of your
work on the project will be data analysis and presentation of the results.

Working in groups can be much more difficult than working individually. Be prepared to face the
challenges of group work and avoid finger pointing at the end of the term. Should problems arise within
your group, you should contact me immediately. Ask, and you will receive support. Peer evaluations will
play a role in each group member’s final project grade, as will observations by the instructor.

Attendance
Regular class attendance is expected in this course. However, as an adult it is up to you to attend class.
Regular non-attendance will affect a student’s participation grade.

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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
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<tr>
<td>F</td>
<td>Below</td>
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</tbody>
</table>

Your semester grade will consist of the following components.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>Exams</td>
<td>200</td>
</tr>
<tr>
<td>In-Class Assignments</td>
<td>100</td>
</tr>
<tr>
<td>Homework Assignments</td>
<td>300</td>
</tr>
<tr>
<td>Simulation</td>
<td>200</td>
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<tr>
<td>Group Project Report</td>
<td>200</td>
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<tr>
<td>Total</td>
<td>1,000</td>
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Other Course Policies

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 at the start of class on the days listed in the syllabus or on the assignment handout, they must be turned into Professor Moody and not to the department secretary. Assignments must be turned in by the deadlines given. Late assignments (even a few minutes) will be docked 20%. Assignments will not be accepted 24 hours or more past the stated due date and time. Plan ahead and be prepared to turn your assignments in when they are due.

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

You are expected to use your phones, tablets, personal laptops, and ASU computers for class purposes only while in class. As a matter of courtesy, check to see that your cell phone is turned off before class begins, texting during class is not allowed. Should I find that you are using your electronic device for non-class purposes or texting during class, I will ask you to leave class for the rest of the day.

Your actions in class such as talking to your neighbor, texting, reading your textbook from another class, or studying for an exam do not go unnoticed by other students in class or the class instructor. The expectation is that you are in class to learn about business research. If you would rather talk to your friends, listen to your iPod, or surf the Internet / play solitaire, you can do so out in the hall. Please, if you have other pressing matters to attend to such as talking, surfing the net, sleeping, or preparing for another class, etc., do not come to class.

We are all expected to abide by the ASU 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
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 Academic Honor Code, which is contained in both print and web versions of the ASU Student Handbook. In essence, the willingness to cheat undermines our purpose at the university. In general, all students are expected to conduct themselves in this course in a manner consistent with the University Honor Code policy which is at: http://www.angelo.edu/forms/pdf/Honor_Code.pdf
Academic integrity is expected of all. This includes, but is not limited to, any form of cheating, plagiarism (presenting someone else’s work as your own), unauthorized sharing of work, or unauthorized possession of course materials. The professor assumes that all students can be trusted. Please do no violate this trust. Violation of academic integrity will result in a failing grade for the course.

If two or more students turn in the exact same work on any numeric-based assignments in this class, the assignment will be graded and the grade split between all students turning in the same work.

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 Student Life Office 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 the Student Life Office, Room 112 University Center, at (325) 942-2191 or (325) 942-2126 (TDD/FAX) or by e-mail at Student.Life@angelo.edu to begin the process.

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.

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/registrars_office/course_drop_provisions.php. November 2 is the last day to drop a course during the fall 2016 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.

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.
<table>
<thead>
<tr>
<th>Day / Date</th>
<th>Topic(s) / Activity</th>
<th>Due</th>
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<tbody>
<tr>
<td>Tuesday, Jan. 16</td>
<td>Course Introduction</td>
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<tr>
<td>Thursday, Jan. 18</td>
<td>Introduction to Data Analytics</td>
<td>Assigned Readings</td>
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<tr>
<td>Tuesday, Jan. 23</td>
<td>Review of Basic Statistical Concepts</td>
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<tr>
<td>Thursday, Jan. 25</td>
<td>Statistics in Excel / Excel Dashboards</td>
<td>In-Class Assignment</td>
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<tr>
<td>Tuesday, Jan. 30</td>
<td>Work Day on Homework #1</td>
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<tr>
<td>Thursday, Feb. 1</td>
<td>Introduction to Big Data</td>
<td>Homework #1 Due (Stats in Excel)</td>
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<tr>
<td>Tuesday, Feb. 6</td>
<td>Exam 1</td>
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<tr>
<td>Thursday, Feb. 8</td>
<td>Linear Regression / Chi-Square Tests</td>
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<tr>
<td>Tuesday, Feb. 13</td>
<td>Introduction to Tableau</td>
<td>In-Class Assignment</td>
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<tr>
<td>Thursday, Feb. 15</td>
<td>Tableau Work Day</td>
<td>Assigned Learning Activities</td>
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<tr>
<td>Tuesday, Feb. 20</td>
<td>Tableau Work Day</td>
<td>Homework #2 Due (Tableau)</td>
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<tr>
<td>Thursday, Feb. 22</td>
<td>U.S. Census &amp; Census Data Collection</td>
<td>Assigned Readings</td>
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<tr>
<td>Tuesday, Feb. 27</td>
<td>Working With Census Data</td>
<td>In-Class Assignment</td>
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<tr>
<td>Thursday, March 1</td>
<td>Census Data Work Day</td>
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<tr>
<td>Tuesday, March 6</td>
<td>Census Data Work Day</td>
<td>Homework #3 Due (Census)</td>
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<tr>
<td>Thursday, March 8</td>
<td>Exam 2</td>
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<tr>
<td>Tuesday, March 13</td>
<td>Spring Break</td>
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<tr>
<td>Thursday, March 15</td>
<td>Spring Break</td>
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<tr>
<td>Tuesday, March 20</td>
<td>Digital Marketing Simulation, Introduction</td>
<td>Purchase Stukent Simulation after Tuesday, March 20</td>
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<tr>
<td>Thursday, March 22</td>
<td>Digital Marketing Simulation, Work Day</td>
<td>Preliminary Work and Assignments Due Along the Way</td>
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<tr>
<td>Tuesday, March 27</td>
<td>Digital Marketing Simulation, Work Day</td>
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<td>Thursday, March 29</td>
<td>Digital Marketing Simulation, Work Day</td>
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<td>Tuesday, April 3</td>
<td>Digital Marketing Simulation, Work Day</td>
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<tr>
<td>Thursday, April 5</td>
<td>Digital Marketing Simulation, Work Day</td>
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<tr>
<td>Tuesday, April 10</td>
<td>Explanation of Final Data Analysis Project</td>
<td>Final DM Simulation Analysis Due</td>
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<td>Thursday, April 12</td>
<td>Data Released and Explained for Final Data Analysis Project</td>
<td>Preliminary Work and Assignments Due Along the Way</td>
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<tr>
<td>Tuesday, April 17</td>
<td>Final Data Analysis Project Work Day</td>
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<tr>
<td>Thursday, April 19</td>
<td>No Class, Final Data Analysis Project Work Day</td>
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<tr>
<td>Tuesday, April 24</td>
<td>Final Data Analysis Project Work Day</td>
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<tr>
<td>Thursday, April 26</td>
<td>Final Data Analysis Project Work Day</td>
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<tr>
<td>Tuesday, May 1</td>
<td>Final Data Analysis Project Work Day</td>
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<tr>
<td>Thursday, May 3</td>
<td>Final Project Reports Due</td>
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**Finals Week Class Schedule (no final exam, but time will be used for class activities)**

Section 10 (9:30 a.m. class): Thursday, May 10, 8:00 - 10:00 a.m.
Section 20 (11:00 a.m. class): Tuesday, May 8, 10:30 a.m. - 12:30 p.m.