



# ORGL 3321 – Data Driven Decision Making I

## COURSE SYLLABUS

### INSTRUCTOR INFORMATION

**Instructor:** Sarah Elder

**Office Location:** Online

**Office Hours:** By Appointment

**University Email Address:** [Sarah.Elder@tamuc.edu](mailto:Sarah.Elder@tamuc.edu)

**Preferred Form of Communication:** Email

### COURSE INFORMATION

#### **Materials – Textbooks, Readings, Supplementary Readings:**

This course uses all Open Educational Resources.

#### **Supplemental Materials:**

Links and files will be provided in the document sharing tab within the course.

#### **Software:**

Microsoft Excel and Word

### Course Description

ORGL 3321: Data-Driven Decision Making I is the first course from two subsequent courses on data-driven decision making. The next sequence course is ORGL 3331: Data-Driven Decision Making II. This course examines the role of quantitative data in managerial and entrepreneurial decision-making. The course draws upon quantitative tools and analyses from several disciplines, especially, statistics, economics, accounting, and finance. The course study demonstrates the usefulness of these tools and analyses in providing optimal technical options in decision-making situations.

The emphasis of the course is on the interpretation and translation of data into information for the benefit of internal and external consumers.

**Competency Description:**

This competency focuses on understanding types of data as well as methods and procedures of data-driven decision making. Students will identify, select, and analyze various ways that data are used as measurable outcomes aligned with business imperatives within a chosen project. They will also learn sound principles of protecting and managing data.

**Student Learning Outcomes**

Upon completion of this course, the student will be able to:

- LO1: Explain the importance of data in decision-making (Module 1).
- LO2: Identify the methods used for data-driven decision making (Module 2).
- LO3: Describe Financial, Customer, Marketing, Sales, and Employee and Corporate Social Responsibility Key Performance Indicators (Module 3, 4, and 5).
- LO4: Explain measures of central tendency including mean, median, and mode (Module 3).
- LO5: Create charts with Microsoft Excel using basic statistic functions (Module 4).
- LO6: Describe two current trends in analytics (Module 5).
- LO7: Apply principles for protecting data (Module 6).

**COURSE REQUIREMENTS**

**Pretest**– No review needed and need to complete on the First Day of the current term.

- The Pretest for this course assesses your knowledge of Data Driven Decision Making I focusing on 6 course learning objectives. The purpose of the pretest is to provide a baseline understanding of your knowledge in this competency. **The pretest is required for the course.**

**Posttest and Culminating Project**

- **The Posttest** for this course assesses your knowledge of Data Driven Decision Making I course learning objectives.
- **Culminating Project - Getting Started with DDDM:**  
This assignment will aid the student in demonstrating proficiency of all competencies in this course and will serve as the overall course assessment tool. Students are expected to complete the DDDM Workbook, demonstrating proficiency in all course learning outcomes.

**A score of 80 percent or higher on both the Posttest and Culminating Project is required to demonstrate competency.**

- If you score less than 80 percent on the Posttest and/or Culminating Project you will have an opportunity to review the course materials and re-take the Posttest and/or resubmit the Culminating Project.

- You may take the Posttest assessment and submit the Culminating Project up to three times. Please avoid last minute work if you expect/plan to revise your project.
- If you have not passed the competency in three attempts, you will work with an Academic Coach to determine another method of fulfilling the program requirements in this subject.
- **Not passing the posttest or the project will receive a grade of "F" and be required to complete the failed part in the next term.**

**[IMPORTANT]:**

- Upon complete/submit the **Pretest, Quizzes**, and **Posttest**, students can **only view "Exam score and missed questions"**.
- Prior to taking the **Posttest**, we recommend students **work through each module**.
- **Under each Module**, students **NEED** to **participate in the Discussion**. It is **REQUIRED** for students to complete the course.

## TECHNOLOGY REQUIREMENTS

### Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

## Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

## Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	<p>The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2L supports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.</p> <p>Chrome: Latest version for the iOS browser.</p>
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - 512 MB of RAM, 1 GB or more preferred

- Broadband connection required courses are heavily video intensive
- Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: [JAVA web site http://www.java.com/en/download/manual.jsp](http://www.java.com/en/download/manual.jsp)
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.  
 JavaScript is enabled.  
 Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - [Adobe Reader https://get.adobe.com/reader/](https://get.adobe.com/reader/)
  - [Adobe Flash Player \(version 17 or later\) https://get.adobe.com/flashplayer/](https://get.adobe.com/flashplayer/)
  - [Adobe Shockwave Player https://get.adobe.com/shockwave/](https://get.adobe.com/shockwave/)
  - [Apple Quick Time http://www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/)
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

## **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or [helpdesk@tamuc.edu](mailto:helpdesk@tamuc.edu).

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

## **COMMUNICATION AND SUPPORT**

### **Brightspace Support**

#### **Need Help?**

#### **Student Support**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

#### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "[click here](#)" to submit an issue via email.

#### **System Maintenance**

Please note that on the 4th Sunday of each month there will be System Maintenance which means the system will not be available 12 pm-6 am CST.

#### **Interaction with Instructor Statement**

Email in the best way to contact the instructor. Course shell also provides a way to share content related questions and help needs through multiple discussion forums. If the instructor cannot be reached during office hours and talking over the phone is helpful, leaving a voice mail or emailing the instructor leaving the best date, time, and phone number to reach will be most effective.

## **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

### **Course Specific Procedures/Policies**

The instructor will make every effort to grade an exam and the final project. If an unusual delay should occur, such as illness or a conference travel, instructor availability and expected timeline/response will be shared as course announcement in the course shell. The course has no extra-credit assignment.

## **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

## **University Specific Procedures**

### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](#)

<http://www.albion.com/netiquette/corerules.html>

### **TAMUC Attendance**

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

### **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

## **ADA Statement**

### **Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### **Office of Student Disability Resources and Services**

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: [studentdisabilityservices@tamuc.edu](mailto:studentdisabilityservices@tamuc.edu)

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

### **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>



Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

### COURSE OUTLINE / CALENDAR

<b>Module Topic</b>	<b>Materials to Read and Review</b>	<b>Suggested Assignments</b>
<b>PRETEST</b>	<b>NO REVIEW NEEDED</b>	<b>COMPLETE ON FIRST DAY</b>
INTRODUCTION TO DDDM	<b>Read</b> Intro to Data and DDDM <b>Read</b> Moving from Intuition to Data <b>Complete Activity:</b> Practice using the KPI Library <b>Watch</b> KPI video <b>Watch</b> Business Intelligence Video <b>Review</b> Key Terms	<b>Discussion (Required = R)</b> <b>Quiz</b>
ALGORITHMS, REGRESSION, AND RANDOMIZED TRIALS	<b>Read</b> Using Algorithms for Prediction <b>Watch</b> What is an Algorithm <b>Watch</b> How Algorithms Shape Our World <b>Watch</b> Data Visualization <b>Review</b> Key Terms	<b>Discussion (R)</b> <b>Quiz</b>
DATA IDENTIFICATION AND APPLICATION I	<b>Read</b> Difference between KPIs and Metrics <b>Complete</b> Activity: Studying Financial KPIs <b>Watch</b> the Four Most Important Financial Metrics video <b>Complete</b> Activity: Studying Customer KPIs <b>Watch</b> Customer Metrics video <b>Watch</b> Mean, Median, Mode and Range video <b>Review</b> Key Terms <b>Watch</b> How to Develop KPIs video	<b>Discussion (R)</b> <b>Quiz</b>

DATA IDENTIFICATION AND APPLICATION II	<b>Read Successful Marketing Strategies</b> Read Supply Chain KPIs <b>Complete</b> Activity: Studying Marketing and Sales KPIs <b>Complete</b> Activity: Studying Operations and Supply Chain KPIs <b>Watch</b> Excel Tutorial videos <b>Review</b> Key Terms	Discussion (R) Quiz
DATA IDENTIFICATION AND APPLICATION III	<b>Read</b> Performance Management <b>Read</b> Balanced Scorecards and Sustainability <b>Complete</b> Activity: Studying Employee KPIs <b>Watch</b> People Analytics video <b>Complete</b> Activity: Studying CSR (Environmental) KPIs <b>Watch</b> Predictive Analytics video <b>Review</b> Key Terms	Discussion (R) Quiz
DATA PROTECTION AND INTEGRITY	<b>Read</b> an Introduction to Data Protection and Integrity <b>Read</b> Loyalty to the Company <b>Watch</b> Why is Data Management Important video <b>Review</b> Key Terms	Discussion (R) Quiz
<b>POSTTEST (Required)</b>	<b>REVIEW ALL NECESSARY MODULES</b>	<b>COMPLETE BEFORE FINAL DAY</b>
<b>CULMINATING PROJECT (Required)</b>	<b>DDD WORKBOOK</b>	<b>COMPLETE BEFORE FINAL DAY AND SUBMIT (Activities &gt; Assignment &gt; Project Dropbox). Place into ePortfolio upon successful completion.</b>