



## **BUSA 537: Advanced Analytics COURSE SYLLABUS: Fall 2024 (81E)**

**Instructor:** Dr. Bo Han, Professor of Business Analytics

**Office:** TBA (Dallas Campus)

**Office Hours:** 10 AM – 1 PM (Zoom) on Tuesdays & 8:50 PM -10:50 PM (In-Person) on Wednesdays

**Email Address:** [bo.han@tamuc.edu](mailto:bo.han@tamuc.edu)

**Preferred Form of Communication:** Email.

**Response Time:** will reply everyone's emails within 24 hours except for Saturdays, Sundays, and the university approved holidays. Emails received during Saturdays, Sundays, and the university approved holidays will be replied on the following business day.

### **Welcome!**

Hello everyone,

Welcome to BUSA 537 Advanced Analytics class! To protect your academic privacy, please always send me emails from your tamuc.edu email. Please use emails to ask me questions. This is the fastest way to reach me. If you meet any questions during this semester, please feel free to email me. I'm here to help!

Please **bring a PC or a Mac to every class lecture**, so that I can help you to install the R software and you can practice the exercises in the software. *iPad, any Android pad, or Chromebooks will **not** work for the class software.*

## **COURSE INFORMATION**

### **Required Textbook**

**R for Everyone: Advanced Analytics and Graphics**

by Jared P. Lander

ISBN: 978-0-321-88803-7

## **COURSE DESCRIPTION**

This course is designed to introduce the following advanced business analytics knowledge to students:

- 1. Business analytics by using advanced statistics models**

## 2. Statistics model implementation in the R software

### College of Business Student Learning Outcomes:

1. Students will demonstrate proficiency in spoken communications by delivering clear and well-structured business presentations.
2. Students will demonstrate proficiency in written communications by creating clear and well-structured business documents.
3. Students will identify and evaluate ethical business issues.
4. Students will identify and evaluate global business challenges.
5. Students will be analytical problem solvers in business environments.

COB Student Learning Outcomes (SLOs)	Course Outcomes - After successfully completing this course, students will be able to:	Measurement Methods (Outcome Assessments)
2, 5	<ul style="list-style-type: none"> <li>• Students should be able to use the statistical models introduced in this class to resolve analytical questions assigned during this semester.</li> <li>• Students should be familiar to the R software interface and the data modeling processes in the software.</li> <li>• Students should be able to interpret the implications of data analysis results to business operations.</li> </ul>	<ul style="list-style-type: none"> <li>• Exam</li> <li>• Project</li> </ul>

## GRADING

### Project (A Maximum of 30 Points)

A data analysis project will be given during the semester. This is a **group** project. You can get a maximum of 30 points from this project assignment. Please note:

- Project points are very important to your final grade! **The due date for the project is 6 PM on November 24, 2024. No late submission will be accepted!** Early submission is highly recommended.
- If you like, you can complete the project by yourself. If you like to form a group, make sure your group has 4 or fewer members. **Submissions from groups with more than 4 members will not be graded.**
- **Each group** only needs to submit **one copy** of the project. **Make sure to clearly list each member's first and last name on the cover page of the submission.**

- If you need to find group members, please see the “Call for Members” document on myleo online.

### Exams (A Maximum of 70 Points)

Three exams will be given during the semester. Each exam will be open for one week in the online learning system. You can choose any time during the one-week period to take the online exam. Once you start the exam, you have three hours to complete the exam. You can't pause or retake the exam once it is started. The exam dates are:

- **Exam 1** (10 points) will be open from **10 AM Sep 23 to 6PM Sep 29**.
- **Exam 2** (30 points) will be open from **10 AM Oct 28 to 6PM Nov 3**.
- **Exam 3** (30 points) will be open from **10 AM Dec 4 to 6PM Dec 11**.

### Final Grade

At the end of this semester, if your total point is between 90 and 100, you will get an A; if it's between 80 and 89, you will get a B, and so on. **Please note that the actual points will be used to calculate your final grade.** No percentage or curving will be used in this class.

Points	Grade
90-100	A
80-89	B
70-79	C
60-69	D
below 60	F

### Bonus points

You can participate in the instructor assigned activities to get a maximum of 3 points for bonus in this semester.

## TECHNOLOGY REQUIREMENTS

The following information is provided to assist you in successfully using technology to complete the assignments and class activities:

For the class exercises and assignments, you need the R software. If you don't have the software, please refer to page 1 to 33 of the textbook to download and install the software on your computer. **Please do NOT install the R Studio software**, because all tutorials are developed according to the R software, not R Studio. The R software is a cross-platform system. Thus, it can be installed on Windows PC, Apple Mac desktop and laptop, and the Linux system.

You cannot install the R software on any smart phone, iPad, or tablet PC.

It is the best practice to use Firefox to access to the online class. This is applicable to both PC and Mac users. Please download either one if you don't have any of these Web browsers.

## **COMMUNICATION AND SUPPORT**

**If you have questions in software operations, please be sure to include the screenshots of the issues in the emails.**

All assignment due dates, project deadlines, and exam time are central time in the United States.

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

### **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/registrar/documents/studentGuidebook.pdf>

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 132

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

Fax (903) 468-8148

Email: [Rebecca.Tuerk@tamuc.edu](mailto:Rebecca.Tuerk@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.

### **Counseling Center**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit [www.tamuc.edu/counsel](http://www.tamuc.edu/counsel)

### **AI use policy**

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

13.99.99.R0.10 Graduate Student Academic Dishonesty

# **COURSE OUTLINE / TENTATIVE CALENDAR**

Please refer to “Schedule of Lectures” on myleo for more details.