

COURSE INFORMATION

Course Number/Course Title: BU 262-A: Business Analytics II

Semester/Year: Spring 2024

Department Name: Dayton School of Business

Meeting Times & Location: TR, 8-9:15 a.m., SH 121

INSTRUCTOR INFORMATION

Name: Albert Kalim

Email: <u>albert.kalim@asbury.edu</u>
Office Hours: By appointment
Phone Number: (859) 806-5809

COURSE DESCRIPTION

General Description: This class will address advanced statistical topics including descriptive statistics, probability, forecasting, multivariate regression, and regression diagnostics used in business. Furthermore, students will engage and utilize advanced research tools (e.g., MS Excel, IBM SPSS) in order to carry out and interpret high-level statistical analysis. This course ends with a full scale research project and presentation.

Texts: "Business Analytics" by James R. Evans, 3rd Edition; ISBN: 9780135231678

Resources: Excel spreadsheet access; and e-mail and Internet access; calculator

Teaching Philosophy: *Igniting change in students' lives to become who God created them to be.*

Teaching Approach:

My aim in teaching is to engender knowledge and application. Essay writing, class discussions, and group exercises, in addition to traditional lecture, reading, and problem-solving work, are specifically utilized to grasp an intimate knowledge of the material. As I have mentioned many times in other stats courses, the best way to *learn* statistics is to *do* statistics. Learning occurs at the intersection of knowledge and application, and class functions will be designed with the intention of making this our destination.

Christian Application:

I make a conscious effort to integrate the Christian faith implicitly or explicitly when I teach. In an effort to properly frame the task of teaching business in a "Christian" context, I submit that a responsible reading of the Bible indicates that our earthly task is to worship God and to love our neighbor. With this vision in mind, we can begin to conceptualize a Christian educational approach towards the philosophy, practice, and vocation of the business discipline.

Student Responsibilities:

Professional, ethical conduct is the basis for the degree of authority & respect achieved by all business professions.

- 1) You are responsible for allocating enough time to this course to achieve the level of understanding necessary for you to succeed.
- 2) You should come to class on time & prepared (Given our time frame and the nature of the material, attendance is *VERY IMPORTANT* and non-attendance can greatly affect your grade).
- 3) You should understand your own priorities and place this course in an appropriate position with your other life priorities, such as other courses, family, friends, social responsibilities, work, etc. Please ensure every necessary effort to come to attend class and to be prepared.
- 4) As it relates to assignments being turned in, if you fail to turn in an assignment prior to a discussion with me, you will not receive credit.
 - a. For example, if you are sick and do not turn in assignment, and then tell me you were sick after the due date, I cannot let you turn the assignment in late (same is true for missing class, etc.).
 - b. In other words, if you are going to miss something (class, assignment, test, etc.)—you must have a discussion with me BEFORE THE FACT in order to have the opportunity to turn it in late, etc.
 - c. Above all, I cannot evaluate excuses...and even attempting to do so is unfair to students.

5) Reading is absolutely imperative. You <u>will not</u> achieve success in understanding the principles of statistics if you do not read and digest each chapter covered in class in addition to working through the assignments provided. Statistics as a discipline is very rigorous and demanding—if you are not prepared for class (reading, assignments, additional study, etc.) you will struggle to pass this course.

Grades:

Activity/Assignment	Points/Weighting
Midterm Exam	25%
Final Exam	50%
Homework/Labs/Project/Participation/Case Presentations	25%
Total	100%

Grading Scale:

94 - 100	A	77 – 79	C+
90 - 93	A-	74-76	С
87 – 89	B+	70 – 73	C-
84 - 86	В	60 - 69	D
80 - 83	B-	00 - 59	F

COURSE OBJECTIVE - ANALYSIS OF "WHAT WILL LIKELY HAPPEN?"

Class Specific Notes:

- 1. Homework / Participation: Homework practice problems for each chapter are assigned throughout the semester. Late homework will not be accepted. I define "Late" as being turned in after the class has started—even down to the minute. Homework is due the class period after it is assigned on the syllabus. Thus, if homework is assigned on Tuesday, it is due on Thursday. If it is assigned on Thursday, it is due on Tuesday of the next week. Students' comments should demonstrate preparation and thoughtful consideration of the topics. I consider 'participation' an extremely important aspect of this course and the overall learning process. Participation includes the following:
 - Class attendance
 - Reading chapters prior to coming to class
 - Active and thoughtful discussion of principles...particularly in the context of essay, paper, article discussion, etc.

- Willingness to work, learn, and have a good attitude.
- A "posture" of learning (no texting, sleeping, talking, etc.)
- Participation: Each student is allowed one unexcused absences. Any absence after this that is not given prior approval by me will count as an unexcused absence. Students will lose 10 points off of their attendance grade for each unexcused absence after the allotted one. After the attendance points have been exhausted, they will lose points off of their total grade (should they continue to be absent). If a student is sick and misses class, they can provide a doctor's or nurse's note to me after the fact.
- 2. Exams: There are two exams on the schedule. EXCUSED absences on the day of the exam will have alternate assignments; unexcused absences will NOT. If you are unavailable on the day of the test, I fully expect to be made aware **prior** to class. Further, if your absence is related to sickness, I will expect a doctor's note or a note from the school nurse. If you do not gain my clearance to miss the exam prior to class, you will not have the opportunity to retake the exam. There are no exceptions to this rule, and it has been rigorously enforced in the past.
- 3. <u>Regression Project</u>: Students will be asked to utilize data, plug it into a statistical package (Excel), run a regression, and then analyze and report upon the results. More details will be provided on this project later in the semester.

Further, in regard to attendance, please note the following paragraph (page 35 of the Asbury Bulletin):

CLASS ATTENDANCE

In order to assure maximum benefit from class instruction, it is important for students to attend class and complete readings and assignments. Students are personally responsible for class attendance. Instructors will explain to students at the beginning of each course their attendance expectations and grading policies with respect to absences from class sessions. Instructors will report excessive absences to the registrar's office.

In the case of: (a) hospitalization or serious illness (as determined by a physician), (b) Asbury University approved group event or travel (i.e., class trip, athletic team trip, etc.) (c) death or serious illness of family member, or (d) other unusual circumstance, the registrar will issue an excused absence (with permission to make up work) to be presented to the instructor. Students may not be penalized for any absence approved by the registrar's office.

Decisions regarding absences resulting from such circumstances as travel difficulties, bad weather, conflicting schedules, oversleeping, minor sickness, doctor or dentist appointments, job interviews, discretionary trips (such as weddings), and family responsibilities will be left to the discretion of the instructor.

• Overall Civility, Engagement, and Participation: Students will be given a final grade over their overall level of civility, engagement, and participation. This grade is based upon my own discretion and assessment.

A Note About Civility/Incivility:

Types of Incivility Exhibited by Students

- A. Annoyances: conversing loudly enough to distract the instructor and/or other students/ making loud sarcastic remarks about the instructor, the content or other students, making emotional outbursts, refusing to participate, coming to class unprepared, disruptively arriving late or leaving early, wearing inappropriate clothing, making/taking cell phone calls during class, surfing the web, and overall indifference.
- B. Classroom terrorism: belligerently trying to sabotage a lecture or classroom activity or trying to force the instructor/class off topic, being vocally intolerant of other student's ideas, etc.
- C. Intimidation: threatening to go to the department chair or dean to complain or seek some type of punishment for the instructor, giving hostile, negative comments on instructor evaluations, threatening some type of retaliation (through parental pressure, legal action, etc.) for low grades.
- D. Violence: physically attacking the instructor or classmates; attacking the psyche of the instructor.

Types of Incivility Exhibited by Instructors

- A. Annoyances: presenting very fast-paced lectures with little interaction with students, making negative remarks about students or groups, seeming distant, cold or uncaring, surprising students with unexpected test items or grades, arriving late or canceling class without warning, permitting students to taunt or belittle fellow classmates, etc.
- B. Intimidation: threatening to damage a student's credibility with other professors, coaches, dept. chairs, etc. using physical size or gender to manipulate/coerce student behavior, etc.

Communication:

Finally, my primary mode of communication is through email. As archaic as this may seem (in the age of twitter, facebook, texting, etc.), this will be your primary mode of communication in the professional world. Thus, I expect you to check your Asbury email regularly. Moreover, if you need to reach me, email will likely be the quickest way to do it (assuming I am not in my office).

Special Needs:

Students having special problems that might affect their performance in class should notify me during the first week of school. Possible arrangements can be made to assist or accommodate the student as necessary.

Professor's Note:

The professor reserves the right to modify the course outline or syllabus. The professor will notify students in advance of any changes. Further, I retain the right to influence a student's grade up or down 5% at the end of the course, based upon my subjective evaluation of their engagement, effort, attitude, and overall approach to the course.

Resources:

Asbury University has a robust referral system, REACH 360, which was created to connect students with the campus resources that will be most beneficial to them. Students may be referred by faculty for any student success issue (academic or personal). Students will be contacted by a care coordinator (Resident Director, Coach, University Pastor, etc.) or resource personnel (Center for Academic Excellence, Financial Aid, etc.) for follow-up. Students may also submit a self-referral through the student portal or at reach360.asbury.edu.

Plagiarism (Please see pages 22-23 in the Asbury Bulletin):

Asbury students need to be honest in their endeavors and be good examples to their peers. Students are expected to live a life of integrity that includes intentional and specific attention to academic honesty. For purposes of clarification, students will find in the Student/Program Handbook a list of acceptable and not acceptable actions during the creation and implementation of a project, lab, paper, or presentation. Students need to check with individual professors for specifics or variations from the list and for specifics related to take-home and in-class essay exams and other projects.

Academic integrity policies and consequences:

- 1) Definition of plagiarism: The use of another's ideas, words, thoughts, or organization without appropriate credit and documentation.
- 2) Consequences for plagiarism: If you are found to have plagiarized at Asbury University, you will be subject to one or more of the following consequences: lowered grade, F or 0% on paper or project, meeting with Academic Dean; F in course; meeting with Academic Integrity Committee, suspension or expulsion from AU
- 3) The point: Whether intentionally or unintentionally, if you do not clarify from where or from whom you take information that you use for a project, paper, presentation, or exam, you are being dishonest--taking credit for what someone else worked hard to discover and record.

If a student has been found guilty of plagiarism or any other form of academic dishonesty (See Asbury Bulletin), then the instructor has the right to fail the student for that particular assignment, or in more egregious cases, fail the student for the course.

Course Evaluation:

All students completing a course for credit are required to complete an online Course Evaluation at the end of the course. Participation by all students is important for our continued accreditation as an institution. The University will provide instructions via your campus email on how to complete the evaluation about two weeks before the course ends.

Course Schedule:

Weeks	Topics	Statistics Reading	
1-2	Regression Analysis	Chapter 8	
3-4	Forecasting Techniques	Chapter 9	
5-6	Data Mining	Chapter 10	
7	MIDTERM EXAM		
8-10	Spreadsheet Modeling & Analysis	Chapter 11	
	Simulation & Risk Analysis	Chapter 12	
11-15	Linear & Nonlinear Optimizations	Chapters 13 - 14	
	Optimization Analytics	Chapter 15	
	Decision Analytics	Chapter 16	
	FINAL EXAM		