

COURSE INFORMATION

Course Title: BU 261 Business Analytics I, Fall 2023

Time: TR 8-9:15 a.m.

Department: Dayton School of Business

INSTRUCTOR INFORMATION

Name: Albert Kalim

Email: albert.kalim@asbury.edu

Office Hours: By appointment – call or text me

Mobile Phone Number: 859-806-5809

COURSE DESCRIPTION

General Description: BU/BUA 261 (3) Business Analytics I—Students will engage in finite mathematical applications, basic statistics, and probability within a business context. Furthermore, students will explore contemporary applications of data storage, extracting, and analysis within the business sector. Specifically, a managerial understanding of big data, data mining, and data collection will be considered. Pre-requisite: MAT 120 or equivalent.

COURSE OBJECTIVE – ANALYSIS OF "WHAT HAPPENED?"

In this course we will be learning the basics of excel visualizations. We will also be doing forms of descriptive statistics in the areas of probabilities; ANOVA and other descriptive analysis. We will conduct most activities in excel and it will equip you for BU262 as well as descriptive analysis needs in the future.

COURSE REQUIREMENTS

Course Prerequisite: MAT 120 or ACT/SAT Math score of 22/510.

Textbook: "Business Analytics: Methods, Models, and Decisions" by James R. Evans, 3rd Edition; **ISBN: 978-0135231678**

Resources: Excel spreadsheets, e-mail, and calculator. Please ensure that your Excel has data analysis on it as well as the ability to conduct things, such as sparklines. In this class, when we are in lecture modes, there will be no laptop usage. However, when it is time to practice the examples, we will all be on our laptops with a student in front of the class providing a demonstration.

Attendance: The best way to learn the material is to be in class unless there is an unavoidable conflict (e.g., family emergency, sickness, athletic travel, etc.). Each student is allotted two unexcused absences. Each absence beyond this limit will lower the grade by 3%. Excessive tardiness may also result in a grade reduction at the discretion of the instructor.

COURSE ASSIGNMENTS

Exams: There will be a midterm covering the first four chapters of materials and a final exam covering the last three chapters of materials.

Labs: Over the course of the semester, we will be covering homework questions in the class. I expect to be able to call anyone to the screen/board to answer the questions assigned for the chapter that we are focusing on. You are expected to submit the assignments for evaluation before we do work on them in class. The assignment due dates are the suggested dates. Each assignment is due once the chapter is completed and this may be earlier or later than the date suggested on the calendar.

Class Project: At the end of the semester, you will complete a group project. There will be a peer evaluation for each member of the group.

Participation: When we cover the labs in class, you are expected to give information to the scribe or person typing. This is what makes up your participation. It is not only attending but contributing to the class discussion. Consistent attendance in class is only 70% of your participation points. Getting to 100 percent is based on contributing in class when questions are asked. There will be extra credit points given to those who volunteer as scribes on the board or on Excel.

Structure: For this class, you will be placed in a team/group during the class time to enhance learning.

Late Policy: Any assignment that is submitted after the deadline without prior conversation with the instructor warranties an automatic docking of 1 point out of 5 potential points. For each week that it is delayed the grade is docked by another point.

Excel Certification via GoSkills: A requirement of the course is that you complete the Basic Excel Training Course offered through www.GoSkills.com. Upon completion of the lessons you will be asked to take a final test and will receive credit for this assignment if you pass. The training takes 10-20 hours and must be completed by the end of Week 10. Your score on the test will count as one of your quizzes.

To enroll and start the training go to www.GoSkills.com/coupon. I will give you the code when it is available.

Activity/Assignment	Points/Weighting
Midterm Exam	20%
Final Exam	20%
Labs	35%
Group Project	10%
Participation	10%
Excel Certification	5%
Total	100%

SCHEDULE OVERVIEW – TUESDAYS (LECTURES) / THURSDAYS (MS EXCEL LABS)

Chapter	Topics	Statistics Reading	Assignments
1	Introduction to Business Analytics	Chapter 1	Homework: 1.4; 1.7; 1.14;
			A1.2; A1.8; A1.10-due August 28
2	Analytics on spreadsheets	Chapter 2	Figure 2.3; Example 2.4- Purchase order document; Figure 2.4-NPV document Example 2.5-Sales transactions document Examples 2.6-Sales units document
			Homework:2.4; 2.5; 2.7; 2.10; 2.19; 2.26-due- September 4
3	Visualizing and exploring data	Chapter 3	Figure 3.2; Figure 3.8-9- Sales units document Example 3.5-Energy production and consumption Figures 3.17-3.21-Sales units document Example 3.13-Bicylce inventory Example 3.14-19; 23-24-Purchase orders Example 3.27-30-Regional sales by products Homework:3.1; 3.7; 3.10; 3.14; 3.15; 3.19 September 11
4	Descriptive statistical measures	Chapter 4	Example 4.1-4.4; 4.6-4.9; 4.12-4.15; 4:18-Purchase orders; 4.19-Credit Risk data; 4.20-22-Colleges and Universities Homework:4.5; 4.11; 4.17; 4.23; 4.49; 4.51; 4.70 Due October 2
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multiplication law Example 5.12; 5.13; 15; 18-19;23; 26, 27, 30, 31 Homework: 5.7; 5.17; 5.23; 5.31; 5.35; 5.41; 5.42-Due October 16 Sampling and estimation Chapter 6 Examples 6.6; 6.8; - 6.10; 6.13. Figure 6.11 Homework: 6.8; 6.14; 6.16; 6.26; 6.39; 6.44; 6.45-Due November 6 The example 7.4-7.5; 7.7; 7.8-Example 7.4 document Example 7.4 document Example 7.6-Vacation survey Example 7.10; 7.12 - Purchase orders Example 7.13-7.14- Insurance survey Homework: 7.3; 7.7; 7.9; 7.18; 7.27; 7.28; 7.38; 7.43; 7.47 Due- November 20 Example 7.6-Vovember 20	5	Probability distribution and data modelling	Chapter 5	Example 5.3-5.6; 5.17-5.19; Figure 5.8-Dice document Question 5.13 (back of chapter) to review joint probability Question 5.14(back of chapter)-conditional probability Example 5.11-
6.13. Figure 6.11 Homework:6.8; 6.14; 6.16; 6.26; 6.39; 6.44; 6.45-Due November 6 7 Statistical inference Chapter 7 Example 7.4-7.5;7.7;7.8-Example 7.4 document Example 7.6-Vacation survey Example 7.10; 7.12 - Purchase orders Example 7.13-7.14-Insurance survey Homework:7.3; 7.7; 7.9; 7.18; 7.27; 7.28; 7.38; 7.43; 7.47 Due- November 20				multiplication law Example 5.12; 5.13; 15; 18-19;23; 26, 27, 30, 31 Homework:5.7; 5.17; 5.23; 5.31; 5.35; 5.41; 5.42-Due
Example 7.4 document Example 7.6-Vacation survey Example 7.10; 7.12 - Purchase orders Example 7.13-7.14- Insurance survey Homework: 7.3; 7.7; 7.9; 7.18; 7.27; 7.28; 7.38; 7.43; 7.47 Due- November 20	6	Sampling and estimation	Chapter 6	6.13. Figure 6.11 Homework: 6.8; 6.14; 6.16; 6.26; 6.39; 6.44; 6.45-Due
20	7	Statistical inference	Chapter 7	Example 7.4 document Example 7.6-Vacation survey Example 7.10; 7.12 - Purchase orders Example 7.13-7.14- Insurance survey Homework:7.3; 7.7; 7.9; 7.18; 7.27; 7.28; 7.38;
	16		Exam	,

^{**} Text material must be read PRIOR to class for vital discussion.

^{***}Schedule may be altered at instructor's discretions.

Academic Integrity

Academic integrity, the embodiment of the moral and spiritual principles to which we adhere, is the essential basis of the Asbury University academic community. Integrity, as partially defined by the Student or Program Handbook on Community Life Expectations, is "both knowing the right thing to do and doing it regardless of the circumstances." This definition may be applied to all of the scholastic interactions of the academic community. Every member of the community shares responsibility for maintaining mutual trust, respect, and integrity. Violations of such trust and specific acts of academic dishonesty will be subject to disciplinary action.

Plagiarism: Section 500.4.3.7 Academic Integrity in the Faculty Manual notes that course syllabi should include a reference to the definitions of cheating and plagiarism and what penalties will occur if a student engages in either of these practices. Based on this statement, the following information should be included in all DSB course syllabi.

Academic Integrity per Asbury University Academic Catalog 2021-2022

Academic integrity, the embodiment of the moral and spiritual principles to which we adhere, is the essential basis of the Asbury University academic community. Integrity, as partially defined by the Student or Program Handbook on Community Life Expectations, is "both knowing the right thing to do and doing it regardless of the circumstances." This definition may be applied to all of the scholastic interactions of the academic community. Every member of the community shares responsibility for maintaining mutual trust, respect, and integrity. Violations of such trust and specific acts of academic dishonesty will be subject to disciplinary action.

Definitions of Academic Dishonesty

Academic dishonesty can be defined as any type of cheating relative to a formal academic requirement. Academic dishonesty is typically thought of first as plagiarism. Plagiarism, whether intentionally or unintentionally, occurs when credit is taken for what someone else worked hard to discover and record if there is no clarification from where or from whom information is taken. Plagiarism is the use of another's ideas, words, thoughts, or organization without appropriate credit and documentation when used for a project, paper, presentation, or exam.

More examples of academic dishonesty include, but are not limited to: unauthorized collaborations, fabrications of data, unauthorized access to sources on an exam, excessive revision by someone other than the student, re-use of previous work without permission, and other situations described by faculty for specific purposes.

Students desiring to appeal a determination of academic dishonesty will follow the 'Academic Appeals Procedure' presented in the University's Academic Catalog.

Determination of Academic Dishonesty and Consequences

Faculty will address suspected occurrences of academic dishonesty as follows:

- 1. The faculty member will meet with the student individually to discuss the incident. At the faculty member's discretion, the department chair will either be notified of the meeting or be asked to be present for it. The student will be informed of the department chair's involvement.
- 2. At the faculty member's discretion the student will receive a lowered grade, an 'F' or 0% on the assignment in question.

- 3. Within 2 weeks of the incident the faculty member will report the details in writing to the Registrar, including the course number/title, section, type of academic integrity violation, timeline, and actions take (academic and otherwise). The Registrar maintains record of reported academic integrity violations and will notify the faculty member as to the number of offenses on record for the student.
- a. If the incident is the student's second offense of academic dishonesty as verified by the Registrar, the student will meet with the Dean of the college or school

where the most recent incident occurred. At the Dean's discretion, the student may be given an 'F' in the course.

b. If the incident is the student's third offense, the student will be suspended from Asbury University.

Use of "Homework Helper"/Internet Resources

Some companies (e.g. – but not exclusively – Course Hero, Chegg) provide internet resources ostensibly designed to reinforce the learning that you do in class and through your reading of the chapters. In some cases, answers to course questions assigned from textbooks are provided verbatim. Using these resources without attribution is plagiarism and will be addressed according to the policies outlined in this syllabus and in the Asbury University Bulletin. However, because the use of these kinds of resources reduces or eliminates the need for you to do your own independent analysis of questions involved in fulfilling the requirements of an assignment, the use of these kinds of resources are prohibited in this course. Using them (even with attribution) will be considered cheating and you will receive a zero for any assignment in which you did so.

It is your responsibility to familiarize yourself with the definition and consequences of academic dishonesty by reviewing the Academic Integrity section in the Asbury Bulletin. If you need any clarification, please contact me

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- 1. The faculty member will meet with the student individually to discuss the incident. At the faculty member's discretion, the department chair will either be notified of the meeting or be asked to be present for it. The student will be informed of the department chair's involvement.
- 2. At the faculty member's discretion, the student will receive a lowered grade, an F or 0% on the assignment in question.
- 3. The faculty member will report the incident in writing to the Registrar who will maintain a record of academic integrity violations.
- a. If the incident is the student's second offense of academic dishonesty as verified by the Registrar, the student will meet with the Dean of the college or school where the most recent incident occurred. At the Dean's discretion, the student will receive an F in the course.
- b. If the incident is the student's third offense, the student will be suspended from Asbury University.

Appeals Process

Students desiring to appeal a determination of academic dishonesty will follow the 'Academic Appeals Procedure' found in the Probation, Suspension, and Appeals section of the Asbury University Bulletin, specifically item 1. A.

Any student found cheating on an exam or plagiarizing in an assignment will receive a zero for the exam or assignment and disciplined in accordance with the Academic Integrity policy in the Asbury Bulletin:

1st offense—F or 0% on exam/assignment; meeting with Dean of the school 2nd offense—F in course; meeting with Academic Integrity Committee 3rd offense—suspension from Asbury University

It is your responsibility to familiarize yourself with the definition and consequences of academic dishonesty by reviewing the Academic Integrity section in the Asbury Bulletin. If you need any clarification, please contact me.

Center for Academic Excellence

Reach support: 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.

The *Center for Academic Excellence (CAE)* offers out-of-class academic support services that are paid for as part of your enrollment at Asbury University. *CAE services are available for students at all levels of academic achievement to help you become a better student*.

Some of the service available through the CAE are: *Open Group Study/Writing Consulting/Homework Help Sessions, One-on-One Peer Course Tutoring, One-on One Peer Writing Consulting,* and *Group and One-on-One Academic Coaching.*

All CAE services can be accessed at http://cae.asbury.edu.

Emergency Alert Policy

When there is an emergency or alert for our campus community, a text message and email is sent out to faculty, staff, and students. To ensure safety for all, the faculty member designates at least two students in the classroom to monitor for alerts. The professor of this course will instruct chosen students how to alert the professor when teaching. Appropriate action will be taken by the professor for the emergency alert.