PROFESSOR: Thomas Walker, MS
EMAIL: twalke14@depaul.edu
OFFICE HOURS: 11:15 – 11:45am

CLASSROOM: Lewis Center 1209
MEETING DATES: Tue. & Thur.
CLASS TIME: 11:50am – 1:20pm

COURSE INTRODUCTION

Businesses are increasingly turning to data analytics to evaluate and improve business decisions. The ability to collect, analyze, and use data to inform important decisions is a critical skill for modem business students. This course will introduce students to the growing role of big data and the quantitative strategies to answer businesses questions. Students will analyze business cases in which data have helped businesses make better decisions, exposing them to real world applications of analytics to solve problems in accounting, economics, finance, management, and marketing. The course will also introduce students to some basic statistical techniques and the spreadsheet software, Excel, which students will use to analyze specific business problems.

LEARNING OBJECTIVES

- Understand the big picture of data analytics as a transformative force in modern business world.
- Define "big data" and its increasing use to support business decisions.
- Explore the ethical implications of collecting, storing, and using data on individuals.
- Apply the four questions of business analytics (what happened? Why did it happen? What might happen next? What should we do?) to different business scenarios and explore the descriptive, diagnostic, predictive, and prescriptive approaches to analytics.
- Use Excel to perform basic statistical operations and produce visual representations of business data.
- Apply the principles of business analytics to examples in marketing, finance, management and entrepreneurship, accounting, and economics.
- Communicate the insights and applications identified within quantitative data.

COURSE MATERIAL & FORMAT

There is no required textbook for this course. However, there are readings, videos, notes, and assignments posted on D2L. Each Module (week) has a dedicated folder on D2L. Module assignments are always **due at 11:59pm on the stated date**.

EXCEL FOR DATA ANALYTICS

Students will be required to use Microsoft Excel, including its statistical functions. Excel is an important tool for doing data analytics in the business world. Because students will enter the course with varying levels of prior exposure to data organizing programs like Microsoft Excel, the first part of the course includes an introduction to Excel whereby students will complete a LinkedIn Learning certificate course in Excel. They will also complete two Excel exercises. In the second part of the course, students will use Excel to analyze data related to specific business disciplines.

*Note: You must use Excel in this course. No credit will be given for assignments submitted in Google Sheets or Apple Numbers.

ASSESSMENT OF STUDENTS

To assess the extent to which students have acquired the skills necessary for a strong foundation in business analytics, the course grading components are listed below.

Attendance and Participation	10%
Online Discussion Posts	5%
LinkedIn Certificate	5%
Excel Exercises	10%
Midterm Exam	20%
Group Case Work	25%
Final Exam	25%
Total Grade	**100%**

GRADING SCALE

The course follows the traditional grading scale, which appears below:
A: 94-100%; A-: 90-93%; B+: 87-89%; B: 83-86%; B-: 80-82%; C+: 77-79%; C: 73-76%; C-: 70-72%; D+: 67-69%; D: 60-66%; F: <60%.

DESCRIPTION OF GRADE COMPONENTS

Session Attendance and Participation (10 Percent of Grade)

The class sessions are intended to be interactive, so attendance and participation are essential. For this reason, attendance is required and part of your grade in the course. Class participation – essentially, asking and answering questions and engaging in discussions – is also part of your grade. Your participation will make the course more fun, more engaging, and more educational. Notice that this does allow students to miss a class or two before being penalized. Here is the approximate grading rubric for Session Attendance and Participation:

Attendance	**Participation**	**Score**
95%-100%	Very Active	10.0
95%-100%	Active	9.5
95%-100%	Moderate	9.0
95%-100%	Minimal	8.5
Attendance 90%-95%		-0.5 from above
Attendance 70%-90%		-1.0 from above
Attendance 50%-70%		-2 from above
Attendance <50%		-4 from above

Discussion Posts and In-class Discussions (5 Percent of Grade)

During the first two weeks of the course, you are required to do a discussion post. We will be using D2L Discussion so that students can post (7 points). The goal of the initial post is for students to help you begin the course thinking about data analysis around you. There are writing prompts, but your write-up should reflect your thought process and interests. Discussions will take place in class (3 points). You must be in class to earn full credit on the discussion assignment. The in-class discussions will help students verbalize their thoughts and learn from one another. Each post should be about 100-150 words (i.e. a paragraph); longer is okay. Please be respectful of each other during discussions. Please also avoid using ChatGPT and other generative AI models. This is a violation of DePaul's academic integrity policy and will not help you learn.

LinkedIn Certificate (5 Percent of Grade)

Part 1 of the course includes an introduction to Excel. By the end of Module 2, students must submit a certificate of completion for the LinkedIn Learning course assigned in Module 1. This is a 0/1 grade for whether a student completed the LinkedIn Learning course and submitted the certificate. It accounts for 5 percent of your grade and is essential content for the course as it will help you complete subsequent assignments. You can access the course here.

Individual Excel Exercises (10 Percent of Grade)

There are two Excel exercises due at the end of Module 3 and Module 4. These exercises give students practice using Excel and solidify what is learned from the LinkedIn Learning Certificate.

Midterm Exam (20 Percent of Grade)
There will be a midterm exam in Session 2 of Module 5 (end of Part I of the course). The midterm will include multiple choice, short answer questions, and an Excel exercise related to the material in the first half of the course. A Midterm review is available on D2L to help you prepare.

Group Case Work (25 Percent of Grade)
During weeks 6 to 10 of the course, we will learn more about analytics used in each business discipline: marketing, management, accounting, finance, and economics. There will be a business case associated with each discipline and students will work in groups of two or three on the cases. Instructions for the group case work will be provided on D2L. All of the submissions will include an Excel file with some form of work in Excel. Some of the submissions also will include some form of written document associated with the work in Excel. Your score on each case submission represents 5% of your final grade. If you are in a group and one of the students in the group is not contributing, please notify the instructor.

Final Exam
There will be a final exam to assess students' learning at the end of the quarter. Like the midterm, the final will include multiple choice, short answer, and an Excel exercise related to the material throughout the course. The format of the exam will be similar to the midterm with an increased emphasis on Excel work and interpreting the analytics results. Students will take the final exam in class on the first day of finals week (Week 11).

ADDITIONAL EXPECTATIONS

Academic Integrity
Cheating and plagiarism will not be tolerated. Students are expected to adhere fully to the University's full Academic Integrity Policy. Please refer to your Student Handbook or visit Academic Integrity at DePaul University (http://academicintegrity.depaul.edu) for further details.

GenAI (ChatGPT) Policy
Business embraces new technology, so employers will expect hires to know how to use such tools.
Unfortunately, we do not have enough time in class to demonstrate ways to use AI responsibly in a business analytics setting in any meaningful way. So, in this course, GenAI is prohibited on all assignments (including exams, discussion posts, Excel work, short answer responses, etc.). Any deviation from this policy can result in an academic integrity violation.

Timeliness
Late Homework Policy: It is important to stay on top of your work and hand in your assignments on time. That said, things happen. Therefore, I will accept late homework assignments, but late homework assignments will be marked down 10 percent for each day they are late. Thus, if an assignment is due by 11:59pm on the 10th, any assignment submitted on the 11th will be automatically marked down 10 percent. If it's submitted on the 12th, it will be marked down 20 percent and so forth. This policy allows you some flexibility if needed, but with caution.

Exam Policy: The midterm and final exam will be held on the dates (and at the times) listed in the Course Schedule on D2L. However, if you foresee a scheduling problem, please reach out to me as soon as you know, and I may or may not accommodate the request. This will be decided on a case-by-case basis. Last-minute requests are unlikely to be accommodated.

Center for Students with Disabilities
Students with disabilities who require additional time on exams must work through the Center for Students with Disabilities (CSD) to arrange these accommodations. I will happily comply with all accommodation, but they must first be approved by CSD. You should take care of this during the first week of the course if you have not already made arrangements with CSD. Please also give me a heads up if you expect to be working with CSD on specific accommodations.
Contact: CSD; Loop Campus: Lewis Center 1420, Ph:312.362.8002.

Dean of Students

The Dean of Students Office (DOS) helps students navigate the university, particularly during difficult situations, such as personal, financial, medical, and/or family crises. DOS also has resources and programs to support health and wellness, violence prevention, substance abuse and drug prevention, and LGBTQ student services. They are the correct folks to contact for Absence Notifications, Late Withdrawals, Community Resource Referrals, or you just need someone to talk to (http://studentaffairs.depaul.edu/dos). Please reach out if you need help. We are committed to your success as a DePaul student.

RESPECT

This course is designed for learning, which is best achieved by asking questions, thinking things through, and even making mistakes. Please treat your professor and your classmates with respect. If you have concerns about the behavior of others in the class, please let me know right away.

WEEKLY COURSE SCHEDULE

I. The Basics			
MODULE	TOPICS	ASSIGNMENTS OPEN	ASSIGNMENTS DUE
Module 1 S1: 1/7 S2: 1/9	The Growing Role of Business Analytics	LinkedIn Learning + Discussion Post: T, Jan. 7th @ 1:20pm	Discussion Post: Th, Jan. 9th @ 11:50am
Module 2 S1: 1/14 S2: 1/16	Big Data and Ethics	Discussion Post: T, Jan. 14th @ 1:20pm	Discussion Post: Th, Jan. 16th @ 11:50am LinkedIn Learning: Su, Jan. 19th @ 11:59pm
Module 3 S1: 1/21 (No class) S2: 1/23	The Basic Tools of Business Analytics	M3: Indiv. Excel Exercise: T, Jan. 21st @ 1:20pm	M3: Indiv. Excel Exercise: Su, Jan. 26th @ 11:59pm
Module 4 S1: 1/28 S2: 1/30	Answering Business Questions with Data Analytics	M4: Indiv. Excel Exercise: T, Jan. 28th @ 1:20pm	M4: Indiv. Excel Exercise: Su, Feb. 2nd @ 11:59pm
Module 5 S1: 2/4 S2: 2/6	Additional Topics in Microsoft Excel + Review **Midterm Exam**	Midterm Exam: Th, Feb. 6th @ 11:50am	Midterm Exam: Th, Feb. 6th @ 1:20pm
II. The Application of Analytics across Business Disciplines			
Module 6 S1: 2/11 S2: 2/13	Data Analytics in Marketing	Marketing Case: T, Feb. 11th @ 1:20pm	Marketing Case: Su, Feb. 16th @ 11:59pm
Module 7 S1: 2/18 S2: 2/20	Data Analytics in Management & Entrepreneurship	Management/Entr Case: T, Feb. 18th @ 1:20pm	Management/Entr Case: Su, Feb. 23rd @ 11:59pm
Module 8 S1: 2/25 S2: 2/27	Data Analytics in Accounting	Accounting Case: T, Feb. 25th @ 1:20pm	Accounting Case: Su, Mar. 2nd @ 11:59pm
Module 9 S1: 3/4 S2: 3/6	Data Analysis in Finance	Finance Case: T, Mar. 4th @ 1:20pm	Finance Case: Su, Mar. 9th @ 11:59pm
Module 10 S1: 3/11 S2: 3/13	Data Analysis in Economics	Economics Case: T, Mar. 11th @ 1:20pm	Economics Case: Su, Mar. 16th @ 11:59pm
Finals 3/18	**Final Exam**	Final Exam: T, Mar. 18th @ 11:30am	Final Exam: T, Mar. 18th @ 1:45pm