

**Tentative Syllabus for BUS 102 - 607**  
**Business Analytics**  
**Driehaus College of Business**  
**DePaul University**  
**Spring 2023**

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Office Hours: Wednesdays 1:00 PM to 3:00 PM. It will be online through Zoom.

**Lectures:** Tuesdays, Thursdays 1:30–3:00 Lewis Room 1001

**Course Readings:** There is no required textbook for the course, but there are a number of assigned readings. Assigned readings are posted on D2L under Content.

**Course Website on D2L:** This course makes extensive use of D2L (<http://d2l.depaul.edu>), the course management system used at DePaul University. If you have not used D2L before, please read the following training materials:

<https://resources.depaul.edu/student-success/technology/Pages/desire2learn.aspx>

**Course Description:** 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 modern business students. This course introduces the growing role of big data and quantitative strategies to answer business questions. To that end, you will analyze real-world business data and perform business analytics to solve problems in accounting, economics, finance, management, and marketing. The course also introduces some basic statistical techniques and the spreadsheet software Excel, which is used to analyze specific business problems.

## Learning Outcomes:

- Understand the big picture of data analytics as a transformative force in the world of modern business
- Define big data and the increasing role of evidence-based decision-making to support business decision-making.
- Recognize the ethical implications of collecting, managing and using data in business.
- Explain the differences between predictive, prescriptive, and descriptive analytics and the business questions that can be answered with each approach.
- Use Excel to perform basic statistical operations and prepare 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
- Identify opportunities to use analytics to address unstructured business problems

**Course Modality:** This is an in-person course. Attendance is required and is part of the participation grade. The course is designed in ten modules. Each week the materials of that week are posted in a module that has a dedicated page on D2L, and students are required to submit the coursework of that module on D2L by the end of the same week. The following items are essential for this course:

- Frequent access to a computer that connects to the Internet.
- Access to DePaul email account; you need to check it regularly.
- Access to Microsoft Office (Word, Excel, PowerPoint). Currently-enrolled students receive a subscription to Office 365 Education Plus. Students can install Microsoft Word, PowerPoint, Excel, Outlook, OneNote, Publisher, Access, and OneDrive for Business for the duration of their enrollment. Additionally, students receive OneDrive storage for academic work.

**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, Google Sheets, and Apple’s Numbers, the first part of the course includes an introduction to Excel with an introductory exercise. In the second part of the course, students will apply Excel to analyze data related to specific business disciplines.

**Course Grading:**

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, followed by the grading scale and descriptions of each component.

	Class Participation	10
	Online Discussions	10
	Excel Exercise and LinkedIn Certificate	10
<b>Grading:</b>	Group Assignments	30
	Midterm	15
	Final	25
	Total points	100

**Grading scale:** The final Grading is based on: A = 93-100, A- = 90-92, 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

Decimals below 0.5 will not be rounded up. Grades are earned not given. Students should neither expect extra points nor ask for any other adjustment to their grades.

**Description of Grade Components:**

Class Participation:

Participation is a significant part of your grade. Attendance is required and is part of the participation grade. Class sessions are intended to be discussion-based, so active participa-

tion is essential. Form its 10 points, I will assign 7 points for attendance and 3 points for participation in discussions.

Online Discussions Students will be given opportunities to participate in online discussions. The topics will be presented on D2L. We will be using the D2L Discussion function so that students can post as many times as they want and other students will be able to see it. The goal of the D2L Discussions is for students to write about what they are learning related to that topic (like examples of data analytics in marketing). The write-up of your thought process and experience does not need to follow a specific outline. Online discussions should demonstrate learning as well as help students learn from one another. Referencing external sources like websites, podcast episodes, etc. is a great way to share information about available resources for learning.

Think of this as a participation grade based on the degree of your participation in the D2L discussion forum. Participation includes reading and replying to other students' posts so that students can learn from one another. Ideally, the D2L discussion exercises become a routine of reading, replying, and posting, just like a social media forum.

#### Online Excel Module:

Students have different levels of knowledge and exposure to data organizing programs like Microsoft Excel, Google Sheets, and Apple's Numbers. To ensure that all students have an adequate understanding of these common data organizing programs, every student must complete an online module through LinkedIn Learning which is focused on Microsoft Excel (but generalizable to the other programs). The details on how to access the module will be provided in Week 1. In Week 4, students will submit the certificate of completion for the Module. In addition, students will complete an Excel exercise. This exercise is designed to provide some preliminary experience in using Excel to do business analytics. This is an individual (not a group) assignment.

## Group Assignments

Modules 5 through 9 of the course each cover a business discipline: marketing, management and entrepreneurship, accounting, finance, and economics. There is a case associated with each business discipline and students will work in groups of 3 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 a written document associated with the work in Excel. For instance, a submission may be an Excel file that shows the mechanics of the data analysis and a writeup that explains the analysis and interpretation of the results. If you are in a group and one of the students in the group is not contributing, please notify the instructor.

## Midterm and Final

There will be a midterm exam after Module 4 (end of Part I) of the course. The midterm might include multiple choice as well as short answer questions related to the materials in the first half of the course. Details about the date of the midterm are in D2L and the course schedule at the end of the syllabus.

There will be a final to assess students' learning at the end of the quarter. The final might include multiple choice and short answer questions related to the material throughout the course. The format of the exam will be similar to the midterm. The goal of the final exam is to encourage students to take individual responsibility for learning the content of the course, including the application of analytics across business disciplines. Details about the timing of the final are in D2L and the course schedule at the end of the syllabus.

**Academic Integrity:** All work done for this course must adhere to the University Academic Integrity Policy, which you can review in the Student Handbook or by visiting Academic Integrity at DePaul University (<http://academicintegrity.depaul.edu>). Violations of the academic integrity policy will result in a zero for that assignment/problem set/exam.

**Excused Absence:** In order to petition for an excused absence, students who miss class due to illness or significant personal circumstances should complete the Absence Notification form through the Dean of Students office.

<https://offices.depaul.edu/student-affairs/support-services/academic/Pages/absence-notification.aspx>

Students must submit supporting documentation alongside the form. The professor reserves

the sole right whether to offer an excused absence and/or academic accommodations for an excused absence.

### **Course Schedule:**

- **Week 1:** The Growing Role of Business Analytics
- **Week 2:** Big Data and Ethics
- **Week 3:** The Basic Tools of Business Analytics
- **Week 4:** Answering Business Questions with Data Analytics
- **Part II: The Application of Analytics across Business Disciplines**
- **Week 5:** Data Analytics in Marketing
- **Week 6:** Data Analytics in Management & Entrepreneurship
- **Week 7:** Data Analytics in Accounting
- **Week 8:** Data Analytics in Finance
- **Week 9:** Data Analytics in Economics
- **Week 10:** Preview of Advanced Analytics and Careers in Analytics
- **Final Exam: Thursday, June 8th at 11:30 AM.**

**Resources for students with disabilities:** Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) by emailing [csd@depaul.edu](mailto:csd@depaul.edu) and/or visiting the virtual office during pandemic. The virtual office will be staffed Monday-Friday from 9:00 a.m. to 5 p.m. (CST).

Virtual Office: [www.tinyurl.com/CSDVirtualOffices](http://www.tinyurl.com/CSDVirtualOffices)

**Online Course Evaluations:** Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in [campusconnect.depaul.edu](https://campusconnect.depaul.edu).

### **Sexual and Relationship Violence:**

Academic relationships are based on communication, trust and respect, and as a DePaul community, we share a commitment to take care of one another. Sometimes, material raised in class may bring up issues for students related to sexual and relationship violence or other trauma. In other instances, students may reach out to faculty as a potential source of help and support. It is important for students to know that faculty are required to report information reported to them about experiences with sexual or relationship violence to DePaul's Title IX Coordinator. Students should also know that disclosing experiences with sexual or relationship violence in course assignments or discussion does not, in itself, constitute a formal report to the University and will not begin the process of DePaul providing a response.

Those seeking to report an incident of sexual or relationship violence to DePaul should:

- use the attached link to do so here ([https://cm.maxient.com/reportingform.php?DePaulUniv&layout\\_id=4](https://cm.maxient.com/reportingform.php?DePaulUniv&layout_id=4))
- contact the Title IX Coordinator (312-362-8066 or [titleixcoordinator@depaul.edu](mailto:titleixcoordinator@depaul.edu)) or
- contact Public Safety (Lincoln Park: 773-325-7777; Loop: 312-362-8400)

Students seeking to speak confidentially about issues related to sexual and relationship violence should contact a Survivor Support Advocate in the Office of Health Promotion & Wellness for information and resources (773-325-7129 or [hpw@depaul.edu](mailto:hpw@depaul.edu)). More information is

available at <http://studentaffairs.depaul.edu/hpw/shvp.html>. Students are encouraged to take advantage of these services and to seek help around sexual and relationship violence for themselves as well as their peers who may be in need of support.

**Enrollment/Withdrawal and Other Academic Policies:** All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on registration policies can be found at DePaul Central.

- **Withdrawal:** Students who withdraw from the course do so by using the Campus Connection system ([campusconnect.depaul.edu](http://campusconnect.depaul.edu)). Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition, does not constitute an official withdrawal from class and will result in academic as well as financial penalty.
- **Administrative withdrawal:** Administrative withdrawal appeals are submitted to and processed by the Dean of Students Office, and allow students to be retroactively withdrawn from classes for medical, mental health or personal crises even after the term has ended. More information is available on the Division of Student Affairs website.

**Syllabus Changes and Errors:** The instructor may make changes and updates to the course syllabus and schedule as needed. Students will be notified of any changes. If you find any broken links, outdated information, or other content that just seems ?off? somehow, please let me know so I can fix it. I really do appreciate students helping me find and fix mistakes or confusing wording in my materials.