

MBA 543: Data Driven Decision Making

SCHOOL OF BUSINESS AND MANAGEMENT

3 Credits

Effective Date (Summer, 2022)

Grading Type: Decimal

Access to the Internet is required.

All written assignments must be in Microsoft-Word-compatible formats.

See the library's APA Style Guide tutorial for a list of resources that can help you use APA style.

Faculty Information

[INSTRUCTOR MAY INSERT PERSONAL MESSAGE IF DESIRED]

Contact Information

Faculty Name: FACULTY NAME

Contact Information: CONTACT INFORMATION

Course Description

In this course students are introduced to data analytics and its role in business decisions. Key topics include data analysis technologies for business decision making, leveraging principles and techniques of statistical inference for business problem solving, and building a foundation of data-driven regression and time series analytics. Students will learn why data is important and how it has evolved; how to outperform competition using data-driven insights and decisions, and ways to leverage data to gain deeper business insights.

Course Resources

Required and recommended resources to complete coursework and assignments are found on the course [Reading List](#). The reading list can be found under *Course Information* in Blackboard as well as from the library homepage ("Find Your Textbook" button).

Note: Required resources that must be purchased by the student are tagged "Purchase from a vendor of your choosing." Required resources with a direct link, "Available through CityU Library", are available electronically at no cost to students.

Students in Canada may purchase course resources from the [Canada Bookstore](#), and students outside the U.S. and Canada should contact their advisor or textbook coordinator for additional information.

Course Outcomes

After completion of this course learners will be able to:

- Develop statistical reasoning and statistical decision-making skills.
- Analyze the purpose, process, and application for a variety of data-driven analytical methods.
- Apply an analytical model to a specific problem or goal in the business context.
- Analyze data and translate it into clear, actionable conclusions and business goals.
- Present data in an accessible and visually compelling manner.
- Use data in decision making and strategic planning.

Additional Information

CORE CONCEPTS, KNOWLEDGE, AND SKILLS

- Introduction to Business Analytics, Data Science, and Data Management
- Data Science and Statistics
- Hypothesis Testing for Means & Proportions
- Regression and Qualitative Predictors
- Data Mining and Algorithms
- Introduction to Data Visualizations, Advantage of Data-Driven Decision-Making
- Are You Solving the Right Problems?
- Stories and Communication
- Creating a Data Driven Culture
- Strategic Decision-Making Incorporating Data-Driven Dashboards to Convey Decision Making

Grading Scale

The grades earned for the course will be calculated using City University of Seattle's decimal grading system, found in the current University Catalog (<https://www.cityu.edu/catalog/>).

Grading rubrics with details on how each assignment will be graded are located under *Assignments* and/or in *My Grades* in the online course menu. Students should review the rubric for each assignment prior to completing their work in order to understand how it will be assessed.

<i>Overview of Required Assignments</i>	<i>% of Final Grade</i>
Excel Projects (2) and Tableau Projects (2)	15%
Case Studies (2)	20%
Final Paper on Data Driven Decision Making	35%
Instructor Determined Assignments and Activities	30%
TOTAL	100%

Course Assignments and Grading

The instructor will provide grading rubrics that will provide more detail as to how each assignment will be graded.

Excel (2) and Tableau (2) Activities

Using Excel and Tableau students will apply an analytical model to a specific problem or goal in the business context, analyze data and translate it into clear, actionable conclusions and business goals, and present data in an accessible and visually compelling manner. The instructor may also choose to create additional activities to support learning in the classroom or online.

Components	% of Grade
Use of Tool and Features/Skills	50%
Demonstrated Value to Business Analysis	20%
Quality of Write-up Describing Use of Tool and Impact	30%
TOTAL	100%

Case Studies (2)

The instructor will provide case studies to students. The cases are designed to encourage students to apply data analytics and statistical analysis concepts to analyze the case and propose suggested remedies using data for support. The instructor may also choose to create additional activities to support learning in the classroom or online.

Components	% of Grade
Requirements	35%
Analysis	30%
Recommendations	15%
Style Including Structure, Flow, Grammar, and Spelling	10%
APA	10%
TOTAL	100%

Final Paper on Data Driven Decision Making (Phased Projects with 2 Papers as the first two phases)

Students will apply the Data Driven Decision Making Framework to analyze a case and recommend an appropriate decision/course of action. Students should complete each step of the framework with proper details to gradually unfold and reveal a transparent and technical generation and evolution of their final decision/course of action. As part of this requirement, students are encouraged to identify and utilize relevant concepts, tools, and techniques that were discussed throughout the course.

Phase 1 Paper: Executive summary to request project approval and resources on case. This part will be used as the introduction to the final paper.

Phase 2 Paper: Proposal to modify project/resources/timeline, based on new inputs/challenges provided by the instructor. The instructor will determine if this part will be used as part of the final paper.

Phase 3 (Final) Paper/Presentation:

Final Paper: Students will provide an analysis of the case in 8-12 pages (excluding cover page and reference page) and include Excel and Tableau visualizations; APA writing conventions should be followed with a minimum of ten (10) sources referenced and cited.

Presentation: Students will also submit a PowerPoint presentation deck that would be used to present the project and outcomes in a typical meeting. For In-Person or Hybrid classes students will also be asked to give a short presentation to the class. For Online Only classes students will submit the PowerPoint presentation and may be asked to submit a video of their presentation (at instructor's discretion). The PowerPoint must include Excel and Tableau visualizations and be 12-20 slides (excluding cover page and reference page); APA writing conventions should be followed with a minimum of ten (10) sources referenced and cited.

Components	% of Grade
Data Driven Decision Making Framework Requirements	20%
Analysis and Evaluation of Issues/Problems	20%
Application of Framework	20%
Generating Recommendations	20%
Technical Requirements	10%
Citations	10%
TOTAL	100%

Instructor Determined Assignments and Activities: Discussions (5)

Whether in class, online, or in a mixed mode setting, students will be graded on their participation in classroom discussions; ability to present, explain, or defend alternative viewpoints; and the degree to which they have mastered the concepts and principles inherent in the study of data analytics for decision making. Written work will be assessed not only on relevance to the subject presented, but also on adherence to good written form, APA style, and professional presentation. The instructor may also choose to create additional activities to support learning.

<i>Components for Discussions</i>	<i>% of Grade</i>
Quality of Responses	50%
Quantity of Responses	30%
Writing Mechanics	20%
Total	100%

Criteria	Below Standard	Approaching Standard	At Standard	Exceeds Standard
Scale	0.00%-68.74%	68.75%- 86.24%	86.25%- 93.74%	93.75%- 100%
Quality of Responses/ Arguments Weight 50%	Superficial and undeveloped analysis. No insight or thoughtfulness. Off topic. Never addresses instructor's comments to original posts.	Scattered and poorly developed analysis. Few, if any, new ideas or connections. Rephrases or summarizes other postings. Sometimes doesn't address instructor's comments to original posts.	Generally competent. Analysis is somewhat insightful and thoughtful. Some new ideas or connections, but lack depth and/or detail. Most of the time addresses instructor's comments to original posts.	Rich in content. Thoughtful and insightful problem analysis. Detailed new ideas with connections to real life situations. Always addresses the instructor's comments to original posts.

Instructor Determined Assignments and Activities: Debates (5)

Whether in class, online, or in a mixed mode setting, students will be graded on their participation in classroom debates; ability to present, explain, or defend alternative viewpoints; and the degree to which they have mastered the concepts and principles inherent in the study of data analytics for decision making. Written work will be assessed not only on relevance to the subject presented, but also on adherence to good written form, APA style, and professional presentation. The instructor may also choose to create additional activities to support learning.

The debate structure will be determined by the instructor. Teams will take sides on a topic with each side discussing the merits and views. The topic will be outlined in the course schedule or assigned by the instructor. The assignment output video format will be specified in the assignment.

- Hybrid Class with scheduled class time: The debate will be held during the scheduled class time. It can be done live or shared as a recorded debate.
- Online class: The debate will be recorded and submitted as a regular assignment.

<i>Components for Debates</i>	<i>% of Grade</i>
Quality of Introductory Argument / Response	30%
Understanding and Use of Technical Concepts	50%
Persuasiveness	20%
TOTAL	100%

Course Policies

Late Assignments

A critical aspect of management is to meet predefined deadlines. Therefore, all assignments are expected to be submitted when due. No late assignments are accepted. Life-situations do occur. When an issue arises coordinate with the instructor prior to the assignment's due date and the due date may be adjusted. It is in the best interest of the student to ensure that all assignments are submitted on time.

Participation

Class participation will be evaluated during class. Participation includes being prepared for class discussions and contributing meaningful content when appropriate. It also includes individual effort contributed to the team project.

Professional Writing

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

University Policies

Students are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the [University Catalog](#) that is linked from the CityU Web site.

Antidiscrimination

City University of Seattle and its staff and faculty are committed to supporting our students. We value equity, diversity, and inclusion as a way of life as well as the educational opportunities it provides. CityU will not tolerate any form of discrimination based on race, color, ethnicity, sexual orientation, gender identification, socioeconomic status, or religious values. If you have experienced any discrimination based on any of the above, we encourage you to report this to the University. Please report this to your instructor. If you do not feel safe reporting this to your instructor, please report to the Provost or to the Vice President of Student Affairs.

Non-Discrimination & Prohibition of Sexual Misconduct

City University of Seattle adheres to all federal, state, and local civil rights laws prohibiting discrimination in employment and education. The University is committed to ensuring that the

education environment is bounded by standards of mutual respect and safety and is free from discriminatory practices.

In the U.S., the University is required by Title IX of the Education Amendments of 1972 to ensure that all of its education programs and activities do not discriminate on the basis of sex/gender. Sex include sex, sex stereotypes, gender identity, gender expression, sexual orientation, and pregnancy or parenting status. Sexual harassment, sexual assault, dating and domestic violence, and stalking are forms of sex discrimination, which are prohibited under Title IX and by City University of Seattle policy. City University of Seattle also prohibits retaliation against any person opposing discrimination or participating in any discrimination investigation or complaint process internal or external to the institution. Questions regarding Title IX, including its application and/or concerns about noncompliance, should be directed to the Title IX Coordinator. For a complete copy of the policy or for more information, visit <https://my.cityu.edu/titleix> or contact the Title IX Coordinator.

In Canada, in compliance with the British Columbia Human Rights Code, the Alberta Human Rights Act, WorksafeBC, and the Workers' Compensation Board of Alberta, the University believes that its environment should at all times be supportive and respectful of the dignity and self-esteem of individuals. Discrimination, harassment and bullying conduct, whether through person to person behaviour or via electronic communications such as email or social media is not acceptable and will not be tolerated. As an educational institution, it is our responsibility to cultivate an environment of excellence, equity, mutual respect and to recognize the value and potential of every individual. The University will take all necessary steps to meet or exceed the requirements of the law to prevent discrimination, harassment and bullying. The Respectful Workplace Policy for the prevention of discrimination, harassment and bullying policy and procedure can be found at <https://www.cityu.edu/discover-cityu/about-cityu/> under the Policies section or at <https://www.cityuniversity.ca/about/>.

Religious Accommodations

City University of Seattle has a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The University's policy, including more information about how to request an accommodation, is available in the University Catalog and on the my.cityu.edu student portal. Accommodations must be requested by the 20% mark of this course (e.g. day 14 of a ten-week course, day 7 of a 5-week course) using the Religious Accommodations Request Form found on the student dashboard in the my.cityu.edu student portal.

Academic Integrity

Academic integrity in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. You are responsible for understanding CityU's policy on academic integrity and adhering to its standards in meeting all course requirements. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Scholastic Honesty* under *Student Rights & Responsibilities*.

Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if s/he is present at any time during the class session. For online classes, a student has attended if s/he has posted or submitted an assignment. A complete copy of this policy can be found in the [University Catalog](#) in the section titled *Attendance Policy for Mixed Mode, Online and Correspondence Courses*.

Support Services

Disability Services Accommodations Statement

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Support Services to discuss accommodation requests and eligibility requirements. Please contact Disability Support Services at disability@cityu.edu or 206.239.4752 or visit the [Disability Support Services](#) page in the my.cityu.edu portal. Confidentiality will be observed in all inquiries. Once approved, information about academic accommodations will be shared with course instructors.

Library Services

CityU librarians are available to help students find the resources and information they need to succeed in this course. Contact a CityU librarian through the [Ask a Librarian](#) service, or access [library resources and services online](#), 24 hours a day, seven days a week.

Smarthinking

As a CityU student, you have access to 10 free hours of online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at help@cityu.edu to request your user name and password.