Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: https://catalog.uvu.edu/

Semester: Spring
Year: 2025
Course Prefix: MGMT
Course and Section #: 2400-X06
Course Title: Business Analysis for Business
Credits: 3

Course Description

Introduces the field of data analytics in business; the software, languages, hardware used in data analytics. Uses common analytical tasks such as clustering, classifying, and predicting outcomes, along with common algorithms used in data analytics such as regression, decision trees, and neural networks. Discusses the legal, ethical, and privacy issues inherent in big data projects. Includes hands-on experience with data extraction, data analysis, and interpretation. The students will be able to ask relevant data-driven questions, apply current business intelligence and data visualization tools to relevant questions, analyze large data sets to identify key variables, earn acceptable score on industry data visualization software package accrediting exam/s.

Course Attributes

This course has the following attributes:

☐ General Education Requirements
☐ Global/Intercultural Graduation Requirements
☐ Writing Enriched Graduation Requirements
☒ Discipline Core Requirements in Program
☐ Elective Core Requirements in Program
☐ Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Daniel Hu Adjunct Professor

Student Learning Outcomes

Many firms have demonstrated that Data Analytics can be an effective competitive weapon in conjunction with well-conceived marketing and financial plans, these firms have made major penetrations into markets worldwide.

We will also focus on five key areas for assessment -

• Writing ability (final term project),
• Oral Presentation Skill (individual presentation - may be recorded or live),
• General Business Knowledge (readings, quizzes, and exams),
• Quantitative Ability (homework assignments and exams), and
• Critical Thinking Ability (term project).

The specific objectives include, that students will be able to:

• Ask relevant data-driven questions.
• Apply current business intelligence and data visualization tools to answer relevant questions.
• Analyze large data sets to identify key variables.
• Present meaningful visualization of key data variables.
• Earn acceptable score on leading industry data visualization software package accrediting exam(s).

Course Materials and Texts

A printed textbook is not required for this course. This class will use electronic text and electronic course content that will be accessed through the Canvas website for the course; there is a $24 course fee for testing center to proctor MS Excel exams and $13 computer fee accessed by WSB.

Course Requirements

Course Assignments, Assessments, and Grading Policy

Grading:

Excel/Spreadsheet assignments	40%
Assignments/Discussions	10%
SQL Assignments	15%
Tableau Assignments	15%
Final Project and Exam	20%

94% and above	A
90-93.99%	A-
87-89.99%	B+
83-86.99%	B
80-82.99%	B-
77-79.99%	C+
73-76.99%	C
70-72.99%	C-
67-69.99%	D+
63-66.99%	D
60-62.99%	D-
Less than 60%	F

Required or Recommended Reading Assignments

No required reading

General Description of the Subject Matter of Each Lecture or Discussion

1. Introduction and Syllabus Overview (Jan 7): Familiarizing students with course expectations, structure, and objectives.
2. Excel Desktop Proficiency (Jan 10): Learning the basics of Microsoft Excel through LinkedIn Learning.

3. Data Analysis Basics (Week of Jan 14): Introducing foundational Excel skills and their applications in data analysis.
4. Installing Tableau (Jan 17): Setting up Tableau software for future visualization tasks.
5. Class Roster Data Analysis (Week of Jan 21): Understanding data input, cleaning, and formatting through class roster exercises.
6. Analyzing Apple Product Sales (Week of Jan 24): Exploring data summarization and geographic segmentation in sales data.
7. Fortune 500 Analysis (Week of Jan 28): Engaging in research and data evaluation related to Fortune 500 companies.
8. Ethics and Analytics Discussions (Feb 4): Examining ethical considerations in data tracking and analysis.
9. CAGR and Progressive Data (Feb 7): Learning to calculate compound annual growth rate (CAGR) with real-world insurance data.
10. Correlation and Regression (Week of Feb 11): Exploring statistical relationships between variables using Excel.
11. Optimization with Goal Seek (Feb 14): Using Excel's Goal Seek tool for scenario analysis and optimization.
12. Pivot Table Mastery (Week of Feb 18): Developing proficiency in creating and using pivot tables for data summarization.
13. Excel Dashboards (Weeks of Feb 25 & Mar 4): Building and interpreting interactive dashboards for data visualization.
14. Group Project Introduction (Mar 4): Initiating teamwork for collaborative data visualization projects.
15. Tableau Visualization (Weeks of Mar 21 - Apr 15): Creating and enhancing data visualizations, including CO2 emissions, flight maps, sales data, and dashboards.
16. Career Reflections (Apr 8): Discussing aspirations and preparing for professional opportunities in data analytics.
17. Group Tableau Projects (Apr 22): Collaboratively creating comprehensive Tableau dashboards and presenting findings.
18. Final Reflections and Exam (Apr 29): Reflecting on learning outcomes and completing the final assessment.

Required Course Syllabus Statements

Generative AI

General Guidelines for Use of Artificial Intelligence*

Generative AI tools such as ChatGPT, Perplexity and Google Gemini represent the cutting edge of what AI can do today. While these tools offer incredible potential to enhance your work, there are risks and limitations you need to be aware of. I encourage you to use them responsibly to improve your learning experience and develop skills that will be essential in the labor market.

First, the limitations. The use of AI tools is not allowed for written assignments that ask for your opinion or your own ideas. Please do not use them. I have used these tools extensively and have reviewed many student submissions in this class, so it is almost always apparent to me when a student submits AI generated content. AI-generated content can sometimes be imprecise, deceptive, or wholly fabricated (commonly referred to as "hallucinations") and may inadvertently include copyrighted material. You are ultimately responsible for any content you submit that

incorporates AI-generated material, so always verify the accuracy and appropriateness of what it generates. Remember, AI tools are powerful assistants, not infallible sources.

Second, I encourage you to use AI tools when you are stuck on technical concepts. Ask good questions with context and you will likely get good guidance. But transparency is essential. If you use AI-generated content in your submitted work, you must disclose it clearly. A simple statement such as, "I used ChatGPT to brainstorm ideas and refine the grammar of this submission, but the overall work reflects my own effort and perspective," is sufficient. Strive to maintain originality by ensuring that your unique voice and critical thinking remain the dominant aspects of your submissions.

Lastly, use these tools as a means to enhance—not replace—your learning and creativity. Your ability to integrate your own insights and knowledge will not only distinguish your work but also prepare you for real-world scenarios where AI will augment, not substitute, human expertise. It is generally clear to me when submissions rely heavily on AI, so aim to strike a thoughtful balance between AI assistance and your own contributions.

**ChatGPT was used to enhance and clean up the writing of this part of the syllabus.*

Using Remote Testing Software

☒ This course does not use remote testing software.

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Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU Accessibility Services at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in UVU Policy 541: *Student Code of Conduct*.

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.
To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a specially dedicated space for meditation, prayer, reflection, or other forms of religious expression.