



Master Course Syllabus

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

Semester: Spring

Course Prefix: MGMT

Course Title: Business Statistics I

Year: 2025

Course and Section #: 2340-001

Credits: 3

Course Description

Analyzes profit, revenue, cost and average cost functions through rates of change, both average and instantaneous. Applies graphical, numerical, and algebraic techniques to optimization in business-related problems. Covers compound interest including present value and future value of ordinary annuities. Excel use is required in this course, including on all exams. Industry expects graduates in business to have spreadsheet skills to solve problems. Focuses on solving a variety of problems in economics and finance using derivatives and integrals.

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: My name is Jacque Westover. Most students call me Jacque (pronounced “Jackie”), but you can call me Dr. Westover if you prefer.

Student Learning Outcomes

Analyzes profit, revenue, cost and average cost functions through rates of change, both average and instantaneous.

Applies graphical, numerical, and algebraic techniques to optimization in business-related problems.

Covers compound interest including present value and future value of ordinary annuities.

Excel use is required in this course, including on all exams.

Industry expects graduates in business to have spreadsheet skills to solve problems.

Focuses on solving a variety of problems in economics and finance using derivatives and integrals.

Course Materials and Texts

- Mathematical Application for the Management, Life, and Social Sciences, 12th edition. By Ronald Harshbarger and James Reynolds.
 - Cengage/WebAssign Online Learning Platform
 - Microsoft Excel
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Course Requirements

Course Assignments, Assessments, and Grading Policy

Grading Scale:

A	93-100%	C	73-76%
A-	90-92%	C-	70-72%
B+	87-89%	D+	67-69%
B	83-86%	D	63-66%
B-	80-82%	D-	60-62%
C+	77-79%	E	0-59%

Assignments and Assessments:

Homework	5%
Discussions (1% each)	5%
Quizzes	10%
Projects (10% each)	40%
Exams (10% each)	40%

Homework

Homework is necessary for completion of the course. We will be using the WebAssign online learning and homework platform (linked in Canvas). Homework assignments are designed to help you practice what you learned throughout the week and will typically be due on Fridays at 11:59pm. You will be automatically assessed for the cost of this online platform. Homework assignments are worth 5% of your total grade.

Quizzes

There will be a quiz each week that new course content is covered, found in Canvas (linked to WebAssign). Quizzes are timed for 90 minutes, and you will have 2 attempts for each quiz. Quizzes will typically be due on Sundays at 11:59pm. I will drop the lowest two quiz scores from your overall grade. Quizzes are worth 10% of your total grade.

Discussions Days

There will be five (5) Discussions Days throughout the semester. The first Discussion will be a Discussion Board on Canvas and will just be introductions (see Canvas for more details). Each Unit will include a Discussion Day which will consist of two parts: (1) You will be required to read an article/watch a video and the write a Reflection answering certain questions on the topic (due prior to the in-class Discussion Day); (2) You will also be required to attend the in-class Discussion Day where we will discuss in groups and as a class the given topic. Discussions are worth 5% of your total grade.

Projects

There will be four (4) projects completed this semester. Project are submitted on Canvas. Project assignment details will be given as we approach their due date. Each project is worth 10% of the total grade, accounting for 40% of your total grade.

Exams

There are four (4) exams worth 10% each, for a total of 40% of your course grade. **Exams are open-book, open-note, and Excel (and/or calculator), but NOT open-web or another person.** Students are required to take every exam using Proctorio (please see “**Proctorio Info**” section of the syllabus).

Required or Recommended Reading Assignments

All required readings use chapters from the course text that align with the lectures below.

General Description of the Subject Matter of Each Lecture or Discussion

Week	Section	Learning Objective Description
1	Intro	Syllabus, Canvas, WebAssign, Excel
	1.1	Linear Functions and Models
	1.2	Functions in the Business Setting
	Review	Algebra and Problem Solving Review
	1.3	Introduction to Excel Spreadsheets
	1.4	Graphing functions with Excel
	1.5	Using Excel to find best-fit curves
2	1.6	Finding numerical solutions with Goal Seek
	2.1	Market equilibrium
	2.2	Modeling revenue, costs, and profit
	2.3A	Logarithmic and exponential functions in Excel
3	2.3B	Nonlinear functions
4	Unit 1 Assessment Week	
5	3.1	Numeric derivatives and limits
	3.2	Marginal functions and difference quotients
	3.3	Elementary derivatives
	3.3B	Practice with derivatives
6	4.1	Applications of marginals and derivatives
	4.2	Optimization
7	Unit 2 Assessment Week	
8	5.1	Advanced derivatives and implicit differentiation
	5.2	Related rates
	5.3	Elasticity
	5.3B	Tax revenue
9	6.1	Evaluating and graphing functions of several variables
	6.2	Partial derivatives and tangent planes
	6.2B	Practice with partial derivatives

10	Spring Break
11	6.3 Applications of functions of two or more variables
	6.4 Applications of maxima and minima
12	Unit 3 Assessment Week
13	7.1 Total cost and profit
	7.2 National consumption and savings
	7.2B Practice with national consumption and savings
14	8.1 Simple and compound interest
	8.2 Continuous Compounding, APY, and Annuities
	8.2B Practice with annuities
15	8.3 Loans
	8.4 Amortization
16	Unit 4 Assessment Week

Required Course Syllabus Statements

Generative AI

This course requires you to complete assignments that assess your understanding and application of the material. You are expected to do your own work, but the use of specifically approved artificial intelligence (AI) tools is allowed on all assignments. Acceptable AI tools will be discussed throughout the course.

If you have questions about acceptable use of AI tools, please consult the instructor before submitting your work.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

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](https://www.uvu.edu/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.