

MATH 1552 - Applied Business Calculus

Fall 2026 Syllabus, Section 05, CRN 40991,

Credit hours: 4

Instructor

Richard Rappach

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Public Instructor Information

Instructor Title: Instructor

Instructor Professional Qualifications: MS, Mathematics, Youngstown State University

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Course Description

1552. Applied Business Calculus. Apply functions and linear systems to business including use of technology; mathematics of finance and an introduction to limits, derivatives and integrals with business, management, economics, life science and social science applications. Credit will not be given to students who have completed MATH 1570, 1571, 1571H, 1581, 1581H, or 1585H. Prereq.: MATH 1510 or MATH 1510C or MATH 1513 or MATH 3767 with grade of "C" or better or at least Level 45 on the YSU Mathematics Placement Test. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	MyMathLab Subscription for Finite Mathematics and Calculus with Applications (YSU Custom Edition)	Lial, Greenwell, Ritchey	

• Inclusive Access

This course is part of the Inclusive Access program; you should NOT purchase any course materials as they are part of your course registration. In the event you drop this course from your schedule on or prior to the last day of DROP/ADD period, your account will be fully refunded automatically.

• Opt-out

By default, students are opted into the content. If the student decides at that time, they do not want their required course materials to be delivered in this program at the low cost offered, they have the option to OPT-OUT. We highly encourage students not to opt-out. If you choose to opt-out, you will be responsible for obtaining the appropriate course materials/textbook/connect at the full price.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Chapter 11/12	Limits and Continuity, Rates of Change Definition of the Derivative Techniques of Finding the Derivative (power, products, quotients, chain rules), Derivative of Exponential & Logarithmic Functions	Weekly Homework
8/31	Chapter 11/12	Limits and Continuity, Rates of Change Definition of the Derivative Techniques of Finding the Derivative (power, products, quotients, chain rules), Derivative of Exponential & Logarithmic Functions	Weekly Homework



9/7	Chapter 11/12	Limits and Continuity, Rates of Change Definition of the Derivative Techniques of Finding the Derivative (power, products, quotients, chain rules), Derivative of Exponential& Logarithmic#Functions	Weekly Homework
9/14	Chapter 11/12	Limits and Continuity, Rates of Change Definition of the Derivative Techniques of Finding the Derivative (power, products, quotients, chain rules), Derivative of Exponential& Logarithmic#Functions	Weekly Homework
9/21	Chapter 11/12	Limits and Continuity, Rates of Change Definition of the Derivative Techniques of Finding the Derivative (power, products, quotients, chain rules), Derivative of Exponential& Logarithmic#Functions	Weekly Homework
9/28	Chapter 13/14	Increasing and Decreasing Functions, Relative Extrema, Higher Derivatives and Concavity Absolute Extrema, Applications of Extrema	Weekly Homework
10/5	Chapter 13/14	Increasing and Decreasing Functions, Relative Extrema, Higher Derivatives and Concavity Absolute Extrema, Applications of Extrema	Weekly Homework
10/12	Chapter 13/14	Increasing and Decreasing Functions, Relative Extrema, Higher Derivatives and Concavity Absolute Extrema, Applications of Extrema	Weekly Homework
10/19	Chapter 13/14	Increasing and Decreasing Functions, Relative Extrema, Higher Derivatives and Concavity Absolute Extrema, Applications of Extrema	Weekly Homework
10/26	Chapter 13/14	Increasing and Decreasing Functions, Relative Extrema, Higher Derivatives and Concavity Absolute Extrema, Applications of Extrema	Weekly Homework
11/2	Chapter 15	Antiderivatives, Substitution Method, Fundamental Theorem of Calculus, Area Between Two Curves, Consumer and Producer Surplus	Weekly Homework
11/9	Chapter 15	Antiderivatives, Substitution Method, Fundamental Theorem of Calculus, Area Between Two Curves, Consumer and Producer Surplus	Weekly Homework
11/16	Chapter 15	Antiderivatives, Substitution Method, Fundamental Theorem of Calculus, Area Between Two Curves, Consumer and Producer Surplus	Weekly Homework
11/23	Chapter 15	Antiderivatives, Substitution Method, Fundamental Theorem of Calculus, Area Between Two Curves, Consumer and Producer Surplus	Weekly Homework
11/30	Chapter 15	Antiderivatives, Substitution Method, Fundamental Theorem of Calculus, Area Between Two Curves, Consumer and Producer Surplus	Weekly Homework

12/7

Final Exam Week

Final Exam: Tuesday, December 8 from
1:00-3:00

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.