

**University of North Texas Dallas**  
**Fall 2025**  
**Syllabus**

|   |  |  |           |   |
|---|--|--|-----------|---|
| MATH 1325 – H002: Business Calculus (3hr)   |  |  |           |   |
|   |  |  |           |   |
| Department of   |  | Mathematics  | School of | Liberal Arts and Sciences   |
|   |  |  |           |   |
| Instructor Name:  |  | Mary Hoyt, PhD   |           |   |
| Office Location:  |  | FH 203   |           |   |
| Office Phone:   |  | 972 – 338 – 1338   |           |   |
| Email Address:  |  | Mary.hoyt@untdallas.edu  |           |   |
|   |  |  |           |   |
| Office Hours:   |  | TR 7:30 -8:20 am, 1:00 – 2:20 pm<br>Virtual Via Teams on Wednesday (by appointment)  |           |   |
|   |  |  |           |   |
| Classroom Location:   |  | DAL 1 222  |           |   |
| Meeting Days & Times:   |  | TR 2:30 – 3:50 pm  |           |   |
|   |  |  |           |   |
| Course Catalog Description:   |  | Differential and integral calculus with emphasis on applications to business.  |           |   |
|   |  |  |           |   |
| Prerequisites:  |  | MATH 1324 or equivalent with a grade of C or better  |           |   |
| Required Text:  |  | WebAssign Access Code – Accessed through Canvas. <b>You must purchase access to the WebAssign Learning System.</b> Cengage does provide temporary access for the first 10 days of the course, but after this time you will need to purchase access.  |           |   |
| Access to Learning Resources:   |  | UNT Dallas Library: UNT Dallas<br>phone: (972) 780-1616<br><a href="#">Library Webpage</a> <a href="#">UNTD library@untdallas.edu</a> mail:  |           | Bookstore:<br>phone: (972) 780-3652 <a href="#">UNTD Bookstore Webpage</a> email: <a href="#">untdallas@bkstr.com</a> |
| Supported Browsers:<br>Chrome<br>Firefox<br>Flash 28, 29 (for audio/video) Internet Explorer 11<br>Safari 10, 11<br><br>Supported Devices:<br>iPhone Android<br>Chromebook<br>(Tablet users can use the Canvas app) |  | Access Canvas via <a href="#">untdallas.instructure.com</a> <ul style="list-style-type: none"><li>• <b>Username:</b> your EUID #</li><li>• <b>Password:</b> your password</li></ul> <b>Getting Help with Canvas:</b><br><br><b>Canvas 24/7 Phone Support for Students: 1-833-668-8634</b><br><br>For additional assistance, contact Distance Learning: DAL1, Ste 150<br>email: <a href="#">distancelearning@untdallas.edu</a><br><br><i>If you are working with Canvas 24/7 Support to resolve a technical issue, make sure to keep me updated on the troubleshooting progress.</i><br><br><b>If you have a course-related issue (course content, assignment troubles, quiz difficulties) please contact me during office hours or by email.</b> |           |   |

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| <b>Learning Objectives/Outcomes:</b> At the end of this course, students will be able to: |   |
| <b>1</b>  | Be able to demonstrate their knowledge by solving various calculus problems with an emphasis on business-related applications, which require both analytical and numerical reasoning. |
| <b>2</b>  | Be able to locate, evaluate and organize information and express the conclusion in mathematical topics in business calculus level.  |
| <b>3</b>  | Acquire problem solving skills that incorporate multiple viewpoints and different contexts in their analysis.   |
| <b>4</b>  | Be able to read, write and manipulate mathematical phrases according to mathematical grammar.   |
| <b>5</b>  | Be able to read and write mathematical sentences according to mathematical grammar.   |

## Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in class or via class email or Canvas announcement.

| Date  | Topics  | WebAssign Due Date |
|-------|---|--------------------|
| 8/25  | Algebra Review  |                    |
| 9/1   | 1.6 & 2.3 – Applications of Functions to Business and Economics<br>9.3 Rates of Change and Derivatives                                | 9/11               |
| 9/8   | 9.4 Derivative formulas<br>9.5 Product and Quotient Rules   | 9/18               |
| 9/15  | 9.6 The Chain Rule<br>9.7 Using Derivative Formulas   | 9/25               |
| 9/22  | Review<br>Exam 1  | 10/2               |
| 9/29  | 9.8 Higher Order Derivatives<br>9.9 Applications, Marginals & Derivatives   | 10/9               |
| 10/6  | 10.1 Relative Maxima and Minima, Curve Sketching<br>10.2 Concavity and Inflection Points  | 10/16              |
| 10/13 | 10.3 Optimization in Business and Economics<br>10.5 Exponential and Logarithmic Functions   | 10/23              |
| 10/20 | 11.1 and 11.2 Derivatives of Exponential and Logarithms Functions<br>Review   | 10/30              |
| 10/27 | <b>Exam 2</b><br>11.5 Applications in Business & Economics; Elasticity  | 11/6               |
| 11/3  | 12. 1 Indefinite Integrals<br>12.2 Power Rule   | 11/13              |
| 11/10 | 12.3 Integrals Involving Exponential and Logarithmic Functions<br>12.4 – Applications of Indefinite Integrals to Business & Economics | 11/20              |
| 11/17 | 13.1 & 13.2 – The Definite Integral; The Fundamental Theorem of Calculus  | 12/7               |
| 11/24 | Exam 3  |                    |
| 12/1  | Review  |                    |
| 12/8  | Final Exam  |                    |

## Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

### Participation

Attendance and participation in class is required. Failing to attend class, being excessively tardy or leaving early without permission, being inattentive to the day's activities, etc., will result in a loss of credit toward participation. Participation includes being present, engaging in class, participating in classroom activities.

### Weekly Assignments

Each week you will be assigned a worksheet of problems like those completed during the week. You will need to submit them by the deadline to receive credit for the worksheet. Late worksheets will not be accepted. One of these grades will be dropped. You will not have a worksheet assigned during a test week.

### WebAssign

Course assignments will be administered through WebAssign. This content will be accessed through Canvas. **You will need to purchase an accessed code to use WebAssign; this in lieu of purchasing a textbook.** There is also an eBook included in the access you purchase that can be used for supplementary material. Assignments are due one week after the associated material is discussed in class.

### Exams

You will be given 3 exams throughout the semester. These exams will be semi-comprehensive in nature; that is, there may be some material from older exams on the midterm, but the focus will be on the new material. The exams will be administered in class and will be in a short-answer format. You are permitted a 4"x6" notecard and a graphing calculator on the exam. All work must be shown to receive credit. A missed exam will result in a 0 for a grade. There are no make-up exams except for those determined by university policy.

### **Final Exam**

The final exam is comprehensive and will be of the same format as the exams.

**Grading Matrix**

| <u>Assignments</u> | <u>Percentage</u> |
|--------------------|-------------------|
| Weekly Worksheets  | 15%               |
| WebAssign Homework | 25%               |
| Exams              | 30%               |
| Final Exam         | 30%               |

### Grade Determination

A = 90+ %

B = 80 – 89 %

C = 70 – 79 %

D = 60 – 69 %

F = 59- %

## **Classroom Policies**

### **Make-Up Exams**

All exams must be taken at the designated times. No make-up exams will be administered. In the event of a university excused, documented emergency, as outlined in the student handbook, accommodations may be made at the discretion of the instructor. **All requests for accommodations must be made in writing, with supporting documents, within 24 hours of the exam being administered.**

### **Electronic Communication Policy**

Communication between students and the instructor should be done through Microsoft Canvas (both email and announcements), or university email. You should check all these daily for important updates. Due to privacy rights, I cannot engage in electronic communications from non-university email addresses.

### **Miscellaneous Policies**

- Everyone is always respect each other. This includes being attentive to others, civilly exchanging ideas and questions, and avoiding distractions such as electronic devices, sleeping and working for other classes.
- You are responsible for all announcements made in class and changes made to the syllabus. • Questions on grading of assignments should be asked within seven days of the return of the assignment.

## **University Policies and Procedures**

### **Students with Disabilities (ADA Compliance):**

#### **Chapter 7(7.004) Disability Accommodations for Students:**

The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodation at any time; however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the [Disability Services Office website](#). You may also contact them by phone at 972-338-1777; by email at [UNTDisability@untdallas.edu](mailto:UNTDisability@untdallas.edu) or in the Student Center Building, 1<sup>st</sup> floor.

#### **Canvas Instructure Accessibility Statement:**

University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technology, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser and information on any assistive technology being used. [Canvas Instructure Course Management System's Accessibility Statement](#) is also provided.

**NOTE:** Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e. MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

#### **Course Evaluation Policy:**

Students' evaluations of teaching effectiveness are a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you with a chance to comment on how this class is taught. I am

very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

**Assignment Policy:** (According to the instructor's discretion while working in concert with the division/program's guidelines).

**Academic Integrity:**

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures in the [Student Code of Academic Integrity](#) Code 7.002 for complete provisions of this code.

Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

**Web-based Plagiarism Detection:** Please be aware in some online or hybrid courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.