**University of North Texas at Dallas**

**Fall 2024**

**Syllabus for MATH 1324-0003 Business Algebra**

Table 1Course Information

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| **Department of** | **Mathematics** | **School of** | **Liberal Arts and Sciences** |
| **Instructor Name:** | **Mary Jean Hoyt, PhD** | | |
| **Office Location:** | **Founders Hall Room 203** | | |
| **Office Phone:** | **972-338-1338** | | |
| **Email Address:** | mary.hoyt@untdallas.edu | | |
| **Office Hours:** | **Tuesday and Thursday 7:30 am – 8:30 am or 1:00 pm – 2:30 pm or by appointment. Email me at mary.hoyt@untdallas.edu for an appointment** | | |
| **Classroom Location:** | Founders Hall 337 | | |
| **Class Meeting Days & Times:** | **Tuesday and Thursday 8-9:50 am** | | |
| **Course Catalog Description:** | Topics from algebra (linear equations, quadratic equations, functions and graphs, exponential and logarithmic functions, and systems of equations), mathematics of finance (simple interest, compound interest, annuities, and amortization) and applications to management, business, and economics. | | |
| **Prerequisites:** | TSI Math Complete; or MATH1305 (formerly MATH 1010) with a grade C or better; or concurrent enrollment in MATH 1305 (formerly MATH 1010) | | |
| **Required Text:** | The required text and materials for this course is found in WebAssign. You link directly to these materials through the Canvas course assignments link. You will need to register for the class. The link brings you to the Cengage program, WebAssign.net. **You will need to purchase WebAssign to complete your homework and test for the course**. **Your book is an e-text included in the program. Cengage provides you with 2 weeks of free access to the course, but you will be asked to pay for the course after 9/6/24**<br><br>The book for this course (included with the WebAssign Learning program) is Harshberger, R. J., Reynolds, J.J., *Mathematical Applications for the Management, Life and Social Sciences*, 12 ed., Cengage Learning, 2018 | | |
| **Access to Learning Resources:** | **UNT Dallas Library:** phone: (972) 780-1616<br>web: http://www.untdallas.edu/library<br>email: library@untdallas.edu<br><br>**UNT Dallas Bookstore:** phone: (972) 780-3652<br>web: http://www.untdallas.edu/bookstore<br>e-mail: untdallas@bkstr.com | | |

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| **Supported Browsers:**<br>Chrome 67 & 68<br>Firefox 60 & 61<br>Flash 29, 30 (for audio/video)<br>Respondus Lockdown Browser<br>Safari 10, 11 | **Access Canvas via** untdallas.instructure.com<br>• **Username**: your EUID #<br>• **Password**: your password<br><br>**Getting Help with Canvas:**<br><br>**Canvas 24/7 Phone Support for Students: 1-833-668-8634**<br><br>**Canvas Help Resources:** |
| **Supported Devices:**<br>iPhone Android<br>Chromebook<br>*(Tablet users can use the Canvas app)*<br><br>**Screen Readers:**<br>VoiceOver (Safari)<br>JAWS (Internet Explorer)<br>NVDA (Firefox)<br>*Note: There is no screen reader support for Canvas in Chrome* | **Web:** Canvas Student Guide<br><br>**For additional assistance, contact Student Assistance (Distance Learning):** DAL 1, Rm 157 phone: (972)338-5580<br>email: distancelearning@untdallas.edu<br><br>***If you are working with Canvas 24/7 Support to resolve a technical issue, make sure to keep me updated on the troubleshooting progress.***<br><br>***If you have a course-related issue (course content, assignment troubles, quiz difficulties) please contact me during office hours or by email.*** |

**Course Goals or Overview: The goals of this course are as follows -**

**Critical Thinking Skills-**to include thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
**Communication Skills-** to include effective development, interpretation & expression of ideas through written, oral and visual communication
**Empirical and Quantitative Skills-**to include the manipulation and analysis of numerical data or observable facts in informed conclusions

**Learning Objectives/Outcomes:** At the end of this course, students will be able to:

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| 1 | Gain awareness of fundamental concepts of functions and other concepts of algebra |
| 2 | Be able to demonstrate their knowledge by solving various mathematics problems with an emphasis on business related applications, which require both analytical and numerical reasoning |
| 3 | Be able to locate, evaluate & organize information related to business and express the conclusion in mathematical topics |
| 4 | Be able to think critically and creatively so as to apply different systems of analysis, algebraic and numerical, and then compare the results from two systems |
| 5 | Acquire problem solving skills that apply to business that incorporate multiple viewpoints and different contexts in their analysis |
| 6 | Be able to read, write and manipulate mathematics phrases according to mathematical grammar |
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**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. Additional readings and activities may be added, these will be noted in the Readings and Activities/Assignments sections.

*Table 2Course Schedule*

| Schedule | Topic | Activities | Due Date |
|---|---|---|---|
| Week 1 – Aug. 26 | 0.3 Exponents,<br>0.4 Rational exponents | HW Sections 0.3 and Section 0.4 | September 2 |
| Week 2 – Sept. 2 | 0.5 Operations with expressions<br>0.6 Factoring | HW Sections 0.5 and 0.6 | September 9 |
| Week 3 – Sept. 9 | 0.7 Fractions | HW Section 0.7 and Section 1.1 | September 16 |
| Week 4 – Sept. 16 | Review for Test 1<br>TEST 1 | Chapter 0 Assignment<br>TEST 1 | September 23 |
| Week 5 – Sept. 23 | 1.1 Solving Linear Equation<br>1.2 Functions | HW Sections 1.1 and 1.2 | September 30 |
| Week 6 – Sept. 30 | 1.3 Linear Function<br>1.4 Graphs and Graphing | HW Section 1.3 and 1.4 | October 7 |
| Week 7 – Oct. 7 | 1.5 Solutions of Linear Equations<br>1.6 Applications of functions | HW Section 1.5 and 1.6 | October 14 |
| Week 8 – Oct. 14 | Review<br>Test 2 | Chapter 1 Assignment | October 21 |
| Week 9 – Oct. 21 | 2.1 Quadratic Equations<br>2.2 Quadratic Functions<br>2.3 Business Applications | HW Section 2.1, 2,2 and 2.3 | October 28 |
| Week 10 – Oct. 28 | 2.4 Special Functions<br>2.5 Modelling | HW 2.4 and 2.5 | November 4 |

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| Week 11 – Nov. 4 | Review<br>Test 3 | Chapter 2 Assignment | November 11 |
| Week 12 – Nov. 11 | 5.1 Exponents<br>5.2 Logarithms<br>5.3 Solving Logarithmic Equations | HW Section 5.1, 5.2 and 5.3 | November 18 |
| Week 13 – Nov. 18 | 6.1 Simple Interest,<br>6.2 Compound Interest<br>6.3 Future Value | HW 6.1, 6.2 and 6.3 | November 25 |
| Week 14 – Nov. 25 | 6.4 Present Value<br>6.5 Loans and Amortizations | HW Section 6.4 and 6.5<br>6.5; | December 2 |
| Week 15 – Dec. 2 | Review for Finals | | |
| Finals | No class on Tuesday Dec. 10 | | December 12<br>8 – 10 am |

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

**In-Class Activities/Participation**

It is important to be involved in your learning process and participate fully in the class. You will complete class activities each week with your peers. These learning activities allow you to actively engage in the class and with your classmates. Some of these assignments will be collected and graded. Not every assignment will be collected. Students missing a class, late to class, or leaving early may not make up these assignments. If you miss, are late, or leave early, you will receive a 0 for the assignment. Remember when completing these activities to treat each other as you expect to be treated.

**Tests**

Three tests will be taken through this semester and are posted on the above schedule. You will need to complete the test on the date administered in class. Students who miss a test will receive a 0 for the missing test. Tests are cumulative and may require skills previously learned in the course. The final exam will replace a missing test grade for a student missing a test during the semester.

Test policy: Tests should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

**Final Exam**

The final exam is cumulative covering all the material we have completed in the course. A student not completing the final exam will receive a 0 for the exam.

**Assignments**

Homework assignments are completed using WebAssign, a learning system by Cengage. Students will be expected complete their homework by the due date. If a student misses the deadline to complete assignments, they may be completed with a 20% late penalty. Please email me to request access to your late assignments through WebAssign.

**Chapter Assignments**

At the end of each chapter, you will be assigned a worksheet of problems to complete. The worksheet should have each problem worked out neatly. This assignment will have a specific due date. Late assignments will not be accepted. A 0 will be given for a missed assignment.

**GRADING MATRIX**

Class Activities 10%
Homework 15%
Tests 40%
Final Exam 20%
Chapter Assignments 15%

**Total 100%**

**GRADE DETERMINATION:**

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| **A** | **89.5 – 100%** |
| **B** | **79.5 – 89.4%** |
| **C** | **69.5 – 79.4%** |
| **D** | **59.5 – 69.4%** |
| **F** | **<59.4** |

## 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 accommodations 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 accommodations 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 Disability Services Office. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu or at Building PL, room 1104.

**Disruptive Behavior in an Instructional Setting:**

Students are expected to engage with the instructor and other students in this class in a respectful and civil manner at all times to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student's responsibility to meet with the Dean of Students before class meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absent for that class period and any other classes the student misses as a result of not meeting with the Dean of Students. The student is responsible for material missed during all absences and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.

The Code of Student's Rights, Responsibilities, and Conduct (Policy 7.001) describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or to another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

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 technologies, 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 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:**
Student's evaluations of teaching effectiveness is 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 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).

**Exam Policy:** (Online exams and the ability to retake is solely at the instructor's discretion). NOTE: Online exams may be proctored on campus per instructor's discretion.

**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. Refer to UNT Dallas' Student Code of Academic Integrity 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.

**Classroom Policies**

The University attendance policy is in effect for this course. Class attendance in the Canvas classroom and participation is expected because the class is designed as a shared learning experience, and because

essential information not in the textbook will be discussed in the discussion board. Online presence and participation in all class discussions is essential to the integration of course material and your ability to demonstrate proficiency.

. To maintain financial aid award eligibility, activity must occur before the census date of the session or term of the course. Refer to UNT Dallas' Registrar for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to let the instructor know immediately, upon your return, the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course.

***Diversity/Tolerance Policy:***
*Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate.*

**Technology Assistance:** In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you experience difficulty accessing or using components of the course, try using Google Chrome browser. If you still experience technical difficulties, first, notify your instructor.

If the problem is still not resolved, call Student Assistance (Distance Learning) at the phone number listed on the first page of the syllabus. Also, no matter what browser you use, always enable pop-ups. For more information see:

- UNT Dallas Canvas Technical Requirements
- Canvas Instructure Supported & Unsupported Operating Systems