

Math 1180: College Math for Business, Economics and Related Fields

Fall 2018

Instructor: Bradley Thompson	Office: GAB 429								
Office hours: T 9 am – noon, TH 2 pm – 3 pm and 7 pm – 8 pm, F 10 am to 11 am	Email: bradley.thompson@unt.edu This is the best way to contact me outside of class and office hours. I will respond within 2 business days.								
Class meets: MATH 1180.160 TR 3:30 pm-4:50 pm Cury 203 Recitations meet: (with Ethan Cramer) 162 F 9:00-10:50 Cury 110 163 F 3:00-3:50 Cury 110 164 F 4:00-4:50 Cury 110	Final Exam date and time: Tuesday December 11, 1:30-3:30 Room location: Regular classroom http://registrar.unt.edu/exams/final-exam-schedule								
Course description: Topics from algebra (linear equations, quadratic equations, functions and graphs, inequalities), mathematics of finance (simple and compound interest, annuities), linear programming, matrices, systems of linear equations, applications to management, economics and business. Prerequisite(s): Two years of high school algebra and one year of geometry, and consent of department. Students who feel they acquired solid algebra skills in high school are strongly encouraged to take the mathematics placement exam to see if they may begin in MATH 1190 instead. A grade C or better in MATH 1180 is required when MATH 1180 is a prerequisite for other mathematics courses.									
Online Materials: This course has no physical textbook. Homework assignments will require accessing Knewton through your UNT Canvas account. Log in to Canvas at unt.instructure.com , read through “How Knewton works,” then select an Assignment to begin. Additional resources are listed in Canvas.									
Calculator Policy: TI 83, TI 83 Plus, TI 84, TI 84 Plus or equivalent, their use will be supported in class. Examples of calculators not allowed: TI-Nspires , TI 92'2 or any other utility with alphanumeric/CAS capabilities ARE NOT permitted , nor are any devices which are capable of connecting to other devices or the internet. A calculator may not be shared during an exam.									
Evaluation: <table border="0"> <tr> <td>Homework</td> <td>20%</td> </tr> <tr> <td>Recitation</td> <td>10%</td> </tr> <tr> <td>Mid term Exams</td> <td>15% each</td> </tr> <tr> <td>Final Exam</td> <td>25%</td> </tr> </table>	Homework	20%	Recitation	10%	Mid term Exams	15% each	Final Exam	25%	Grade Assignment: A: [90%,); B: [80%, 90%); C: [70%, 80%); D: [60%, 70%); F: [0%, 60%).
Homework	20%								
Recitation	10%								
Mid term Exams	15% each								
Final Exam	25%								

Grade Determination: Student grade is determined solely by his/her performance on the evaluation criteria. Grades reflect your proficiency of the course content as you have demonstrated them on the evaluation criteria.

Final Grade: Students may access their course grades online via the EIS system: my.unt.edu/grades

Learning Objectives: Upon successful completion of this course, students will:

1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
5. Apply matrix skills and probability analyses to model applications to solve real-world problems.

Disability Accommodations: The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA 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, ODA 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 with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at 940.565.4323.

Important dates:

Classes Begin	8/27
Labor Day (no classes; university closed)	9/3
Beginning this date a student may drop a course with a grade of W by completing the Request to Drop a Course form and submitting it to the Registrar's Office. See link for complete instructions Dropping a Class.	9/11
Last day for a student to drop a course.	11/05
Beginning this date, a student who qualifies may request an Incomplete, with a grade of I.	11/12

Last day to withdraw (drop all classes). Grades of W are assigned.	11/21
Pre-Finals Days	12/5-12/6
Reading Day (no classes)	12/7
Final Exams	12/8-12/14

Policies

Academic Dishonesty: Cheating on final exams, on in-class tests, or on quizzes is a serious breach of academic standards and will be punished severely and generally result in a student failing the course. All work done on in-class exams and quizzes must represent only the student's own work, unless otherwise stated in the directions. See <http://facultysuccess.unt.edu/academic-integrity> for details on academic integrity at UNT.

Attendance Policy: Class attendance is mandatory. Students are responsible for all information given in class, regardless of his/her attendance.

Classroom Etiquette: Appropriate behavior is expected of all students taking this course. Arrive to class promptly and do not leave until the scheduled ending time of the class. If you must arrive late or leave early, please do so as discreetly as possible and take a seat near the door. Turn off all non-medical electronic devices such as pagers, cell phones, laptops, etc. Take off the headphones. Do not read newspaper or work on unrelated assignments during class. I prefer that you not eat during class. **You will be asked to leave the classroom if you access an electronic messaging device during class AND it will be counted as an absence.**

Course Requirements: As a general rule, average college students are expected to spend three (3) hours per week for each one (1) hour of class working on the course to be able to successfully learn the content. If you are an "average" college-level learner, you should spend about nine (9) hours per week if you expect to successfully complete this course. Adjust for more (or less) hours to accommodate your learning level.

Drop/Withdrawal Policy: If the student is unable to complete this course, it is his/her responsibility to formally withdraw from the course. NOTE: Substantial changes were announced for Fall 2018. Prior to Tuesday, September 11th, students may drop a course from their student portal on my.unt.edu (and depending on the date, may be eligible for at least a partial refund). From 9/11 to 11/5, students may drop a course by completing the [Request to Drop form](https://registrar.unt.edu/sites/default/files/drop_request.pdf) at https://registrar.unt.edu/sites/default/files/drop_request.pdf. The last date to withdraw from all of your classes is 11/21. If the student does not properly withdraw from the course but stops attending, s/he will receive a performance grade, usually an F.

If you are considering dropping, it is strongly recommended that you discuss the matter with me as soon as possible.

Changes to the University's policy may affect this. Please contact the Registrar for further questions.

Homework: Homework will all be due on Canvas at unt.instructure.com . The homework is provided through Knewton. This software is a mastery-based, adaptive software, which is intended to thoroughly judge your ability to complete the assignments. You will be able to proceed through Knewton much more quickly if you review your notes and seek out additional review/help before starting the assignments. Read through “How Knewton works” in Canvas before your first assignment for best results.

Homework is due at 11:59 pm on the date listed. Most assignments are due on Fridays and there are typically many assignments due each week. To successfully complete the assignments, you must carefully manage your time. I would recommend that you plan to complete assignments well ahead of time at a routine time, such as right before class. This will allow you to bring questions to class and then work through the assignments more quickly.

- **Getting the most out of the homework**

- You should have a dedicated notebook for your math homework. Carefully write out your work, especially noting the questions you struggled with. This should form a substantial part of your review material prior to the exams.
- Homework is one piece of your learning process in this course, but successful completion of the homework assignments should not be considered sufficient preparation for exams. Discuss with your instructor what else you should be doing to get prepared.

Recitation (aka Lab): The required recitation portion of this course counts for 10% of your grade. Recitation provides you additional time to get your questions answered and allows time for additional instruction for review material. Your grade in recitation will consist of active attendance. More details are included in your recitation syllabus.

Exams: Three in-class exams are planned for this semester. Keep a record of all your scores. Be sure to review your exam upon receiving it. Check your written exam grade with the grade posted online to ensure that they are the same. Each exam is 15% of the course. Tentative dates are listed on the attached calendar and content will be discussed in class. The final exam is comprehensive.

Exam Etiquette:

- Place all papers, textbook, notes, etc. in a backpack or a book bag and close it securely.
- Turn off all non-calculator electronic devices (unless medically necessary), this includes cell phones, pagers, etc.
- Handling of ANY such electronic devices during an exam will be construed as cheating (receiving unauthorized aid) and may result in a zero for that exam.
- Do not wear HATS or CAPS during exams.
- Do not share any materials during an exam. This includes, but is not limited to pencils, erasers, calculators, etc.

- Only approved calculators during an exam. You may have both a scientific and a graphing calculator. It is your responsibility to know how to work the calculator(s) you bring to a test.
- Have only the exam, pencil, eraser and calculator out during an exam. Work our space is provided on the actual exam and you can get additional paper from the instructor. You will not be permitted to have any of your own scratch paper during an exam.

Final Exam: The final exam is on Tuesday December 11, 1:30-3:30. The final exam is comprehensive and is 25% of the course grade. Location will be provided as we approach the final exam.

Incomplete, the Grade of: Beginning Monday, November 12th, a student that qualifies may request a grade of “I”, incomplete. An “I” is a non-punitive grade given only if ALL three of the following criteria are satisfied. They are:

- 1) The student is passing the course;
- 2) The student has a justifiable (and verifiable) reason why the work cannot be completed as scheduled; and
- 3) The student arranges with the instructor to complete the work within one academic year.

Make-up Exam Policy: An exam may be taken prior to the scheduled date. I request a week’s notice for this accommodation via email. In the event of a schedule conflict with a university function, dental/physician’s appointment, wedding, formal, or whatever, the student must take the test early. If a student does not take a scheduled exam, a zero will be recorded for that exam and a notice may be sent through the registrar’s office.

There are three in-class exams. If your final exam score is higher than one of your in-class exam scores, then that in-class exam grade will be replaced with final exam grade. If you miss an in-class exam, a zero will be recorded for that exam grade and your final exam score will replace that one zero. If you receive a zero for academic dishonesty on an exam, the final exam score will NOT replace that zero.

Math Lab (New Location: Sage 130): Go to Website: www.math.unt.edu/mathlab for information.

Progress Reports: Students needing progress reports completed/signed for athletics, scholarships and/or any other organization must attend office hours to get them completed.

Statement regarding use of email and attendance: Email may not be used in lieu of attendance. It is primarily for emergencies. YOU MUST ATTEND class to obtain course-related information.

- YOU are responsible for attending the required class meetings as stated in the course schedule.

Student Behavior: Student behavior that interferes with an instructor’s ability to conduct a class or

other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr

Student Perceptions of Teaching (SPOT): Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The SPOT survey will be made available November 19 – December 6 to provide you with an opportunity to evaluate how this course is taught. For the fall 2018 semester you will receive an email on November 19 (12:01 a.m.) from "UNT SPOT Course Evaluations via IASystem Notification"(no-reply@iasystem.org) with the survey link. Please look for the email in your UNT email inbox. Simply click on the link and complete your survey. Once you complete the survey you will receive a confirmation email that the survey has been submitted. For additional information, please visit the SPOT website at www.spot.unt.edu or email spot@unt.edu.

Tentative Calendar:

	Tuesday	Thursday
Week 1	08/28/18	08/30/18
	Intro, Knewton, Solving linear equations	Simple interest, Stocks, Exponential basics
Week 2	09/04/18	09/06/18
	Logarithmic basics, Compound Interest	Future Value of an Annuity
Week 3	09/11/18	09/13/18
	Present value of an annuity	Financial Math Wrapup, Graphing, generally
Week 4	09/18/18	09/20/18
	All about lines, Finding points of intersection for two lines	Systems of 2 linear equations in two variables, Linear inequalities
Week 5	09/25/18	09/27/18
	Review	Exam 1
Week 6	10/02/18	10/04/18
	Systems of linear inequalities	Linear programming, graphically
Week 7	10/09/18	10/11/18
	Simplex Method	Functions
Week 8	10/16/18	10/18/18
	Polynomials	Exponential functions

Week 9	10/23/18	10/25/18
	Logarithmic Functions	Review
Week 10	10/30/18	11/01/18
	Exam 2	Sets, Counting Techniques
Week 11	11/06/18	11/08/18
	Additional Counting Techniques, Probability	Probability, cont.
Week 12	11/13/18	11/15/18
	Expected Value	Additional Algebra topics
Week 13	11/20/18	11/22/18
	Bayes' Theorem, Additional Algebra topics	Thanksgiving
Week 14	11/27/18	11/29/18
	Review	Exam 3
Week 15	12/04/18	12/06/18
	Additional topics	Review
Week 16	Final Exams	