

Math 1180.590: College Math for Business, Economics and Related Fields

Spring 2019

Instructor: Brad Thompson	Office: GAB 429
Office hours: Monday 12 - 1 Tuesday 11 - 3 Thursday 2-3	Email: Bradley.thompson@unt.edu Policy: May not be used in lieu of attendance. Include course name, number and section and your full name in the subject header. Email without this information may not get opened. Email will be returned in a timely manner, but may occasionally take up to two (2) business days.
Class meets: TTh 3:30 – 4:50 Recitations meet: 591: Samuel Eckert, TTh, 6:30-7:20, GAB 511	Final Exam date and time: Tuesday May 7, 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: Homework 20% Mid term Exams 20% each (3 of them) Final Exam 20%	Grade Assignment: A: [90%,); B: [80%, 90%); C: [70%, 80%); D: [60%, 70%); F: [0%, 60%). A grade of C or better is required for this course to serve as prerequisite for any math course.

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: <https://registrar.unt.edu/registration/spring-registration-guide>

Classes Begin	1/14
Martin Luther King Jr. Day (no classes; university closed)	1/21
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.	1/29
Last day for a student to drop a course.	4/1 (no joke)
Beginning this date, a student who qualifies may request an Incomplete, with a grade of I.	4/8

Last day to withdraw (drop all classes). Grades of W are assigned.	4/19
Pre-Finals Days	5/1-5/2
Reading Day (no classes)	5/3
Final Exams	5/4-5/10

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.

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, January 29th, 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 1/29 to 4/19, students may drop a course by completing the [Request to Drop form](https://registrar.unt.edu/sites/default/files/drop_request_fillable.pdf) at https://registrar.unt.edu/sites/default/files/drop_request_fillable.pdf. The last date to withdraw from all of your classes is 4/19. 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. 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 recitation has a separate P/NP grade. Recitation provides you additional time to get your questions answered and allows time for additional instruction for review material. Work on the assignments before the recitation class and bring questions so you can get through the material easier. 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 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.

Incomplete, the Grade of: Beginning Monday, April 8th, 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 guide.

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 later this semester to provide you with an opportunity to evaluate how this course is taught. You will receive an email on 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
<i>Week 1</i>	01/15/19 Intro, Knewton, Solving linear equations	01/17/19 Simple interest
<i>Week 2</i>	01/22/19 Exponential basics, Logarithmic basics, Compound Interest	01/24/19 Comp. Int. Cont., Future Value of an Annuity
<i>Week 3</i>	01/29/19 Present value of an annuity	01/31/19 Financial Math Wrapup, Graphing, generally
<i>Week 4</i>	02/05/19 All about lines, Finding points of intersection for two lines	02/07/19 Systems of 2 linear equations in two variables
<i>Week 5</i>	02/12/19 Review	02/14/19 Exam 1
<i>Week 6</i>	02/19/19 Linear inequalities, Systems of linear inequalities	02/21/19 Linear programming, graphically, Standard Maximization problem; variable definitions,
<i>Week 7</i>	02/26/19 Simplex Method, Functions	02/28/19 Functions cont., Transformations of functions
<i>Week 8</i>	03/05/19 Quadratic functions, Polynomials	03/07/19 Polynomials cont., Rational Functions

<i>Week 9</i>	03/19/19	03/21/19
	Rational functions cont., Exponential Functions	Review
<i>Week 10</i>	03/26/19	03/28/19
	Exam 2	Logarithmic Functions
<i>Week 11</i>	04/02/19	04/04/19
	Sets, Counting Techniques,	Additional Counting Techniques, Probability
<i>Week 12</i>	04/09/19	04/11/19
	Probability cont., Expected Value	Expected Value cont.
<i>Week 13</i>	04/16/19	04/18/19
	Conditional Probability, More Exponential rules	Factoring review, Function composition and decomposition
<i>Week 14</i>	04/23/19	04/25/19
	Review	Exam 3
<i>Week 15</i>	04/30/19	05/02/19
	Other Algebra topics, Additional topics	Review
<i>Week 16</i>	Final Exams	