

2020 Fall MATH 1350.002/Mathematics for Elementary Teachers I

Instructor Contact

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Zoom Office Hours: MW 1:30-2:00pm and Tue 1:00-2:00pm

Communication: Use the Canvas Inbox or email. If you email me, I only respond to UNT student email addresses. Your communication with me and your classmates is expected to be in line with [UNT's General Online Communication Guidelines](#).

- Furthermore, you should communicate with me in a professional manner. (<https://www.grammarly.com/blog/professional-email-in-english/>)

Communication Expectations: I will respond within two (2) business days, during business hours.

Course Description

Math 1350 covers concepts of sets, functions, numeration systems, different number bases, number theory, and properties of the natural numbers, integers, rational, and real number systems with an emphasis on problem solving and critical thinking.

Required Materials/Access to MyLabs-Math

(Required) Canvas Course site: [Canvas](#)

Login with your unique ID and password. All materials for the course will be posted under course content as we travel through the course. If you do not see the course when you log on to Canvas after the first day of class, send me a message with your EUID so I can add you.

(Required) MyLabsMath (MLM) through Canvas

You will access your math course platform from within Canvas. Some of the course content (assignments, textbook, help tools, etc.) is delivered in the online platform MLM accessed through Canvas. Register in MLM the first class day of the semester. It is located under the 'MyLab and Mastering' tab on Canvas. You may also purchase the MLM Access code at the UNT Barnes and Noble bookstore. You will use the same platform for 1351, so **you should purchase the 1 year access**.

MyLabs grants a no-cost trial 14-day access. You must purchase your access before the temporary access expires. If you do not make the purchase before trial period ends, you may lose credit for all work previously completed. See information in the Introduction Module for purchase information.

- Note that "Not having access to MLM" is not a valid reason for missing assignments.

(Recommended) Supplies

- 3-Ring Binder / folder to store and organize course materials
- Notebook or loose-leaf grid/graph paper
- Pens, Pencils, Markers / crayons, scissors, construction paper.

(Optional) Print Textbook

Mathematical Reasoning for Elementary Teachers, 7th edition by Long, DeTemple, and Millman ISBN-13: 978-0-321-90099-9. The textbook in electronic form is included in MLM. MLM may be purchased packaged with the textbook or as a stand-alone at the UNT Barnes and Noble bookstore.

Course Prerequisites or Other Restrictions

A student must have successfully completed either Math 1100 or Math 1180 with a grade of C or better. This course is restricted to students in math placement groups 2 & 3. This course is only for those students requiring it for teacher certification. Students failing to meet the prerequisite requirements, may be administratively dropped with a possibility of no refund.

What is this course about?

This course provides a TEACHER'S PERSPECTIVE of the mathematics of the elementary school curriculum – in particular, mathematical problem solving, numbers & operations, and elementary number theory.

- This class is about learning to understand mathematics—and to understand others' understandings of mathematics—particularly developing an understanding of the children that you will eventually teach.
- This means that you need to understand mathematics in a connected, meaningful way rather than as a set of rules to be followed without understanding the reasons for the procedure.
- Part of our goal this semester is your mathematical growth. We anticipate this means a careful look at the nature of mathematics, at what it means to do mathematics, and at your own attitudes toward and beliefs about mathematics.

How do you approach this course?

It is important that you realize that you cannot solve with understanding mathematical problems by observing and mimicking others doing mathematics. You must participate mentally in the learning process.

- This participation includes studying the material; listening to and working with others; struggling with non-routine problems; symbolically representing mathematical thinking and reasoning; reflecting on what you are doing; as well as the more typical tasks of doing homework, completing quizzes and examinations.
- The emphasis in this course will be on problem solving and reasoning with understanding rather than memorizing and using equations or algorithms.

Why do we take this approach?

Too often our previous experiences with mathematics have caused us to focus on memorization and finding correct answers. Consequently our understanding of what mathematics is and what it means to do mathematics is shaped by these experiences and is rather limited and narrow. And yet, mathematical reasoning and problem solving consists of so much more.

- The learning and subsequent understanding of mathematics through problem solving with a focus on numerical reasoning provides a model for lifelong learning. The multi-dimensional view of mathematics gives you a broad scope of the discipline of mathematics and to allow you to see the pervasiveness of mathematics in your life.
- The experiences in this course will assist you in your role as an educated informed citizen in your community, and in your role as a teacher involved with children and mathematics.

Course Objectives

This course examines key concepts taught in elementary/middle school mathematics along with some algorithms and manipulatives that can be used to gain a deeper understanding of these concepts. By the end of the course you should be able to do the following:

- better understand the mathematical concepts needed to be able to teach mathematics to young children with confidence, competence, creativity, and capacity;
- understand different problem solving techniques used in teaching EC-8 grade students;
- understand and apply the use of sets and set operations when teaching mathematical concepts to EC-8 grade students;
- understand and analyze different number systems;
- understand the operations (addition, subtraction, multiplication, division) and be able to apply different algorithms when teaching them to EC-8 grade students;
- understand number theory and examine different methods of teaching this concept to EC-8 grade students;
- understand fractions and their operations and be able to apply different algorithms to teach this concept to EC – 8 students.

Course Structure

This is a remote delivery course with virtual synchronous class meetings MW 2:00-3:20pm. It is not an online course, *per se*, as class attendance is expected at the scheduled times. Lecture is delivered via Zoom, which you conveniently access from Canvas. The use of webcam and microphone is highly encouraged to create an engaging learning environment.

Grading

Exams – 75%

Written Homework – 10%

MyLabsMath Homework - 5%

CISNT Tutoring & Projects – 10%

- Grades are determined solely on a student's performance on the assessments.
- Final grades are weighted. Calculating a percentage using total points scored will not accurately reflect the final grade.
- There is NO EXTRA CREDIT component; work consistently from day one (1), making sure that you are on top of course work.

Your grades will be posted in the Canvas gradebook.

Late work will not be accepted in this course regardless of the reason.

Homework

Homework will come from 1) written assignments and 2) assignments posted in MLM. Assignments will be posted in Canvas as we go; you are responsible for the assignments and deadlines. If you are absent, you will need to go to Canvas to get any handouts for the day that you missed. Homework to be turned in to me will be due at the beginning of class; I will not accept late homework. Assignments posted in MLM will become available as we cover the material in class. Check MLM each day to be sure that you are keeping up with assignments and due dates.

1) Written Homework

- You will be assigned problems from the textbook that you will work out and turn in to be graded. The textbook is available through MLM. You may also be given additional worksheets that will be passed out in class for certain topics.
- All worksheets will be posted in Canvas and will open as we cover the material.
- You are responsible for the assignments and deadlines. If you are absent, you will need to go to Canvas to get any handouts for the day that you missed.
- Homework to be turned in to me will be due at the beginning of class; I will not accept late homework for any reason. You are responsible for turning in assignments on time. If you know that you will be absent, you may turn in the assignment early.
- **Homework must be uploaded as a single PDF file.**

2) MyLabsMath Assignments

- Please maintain a separate notebook for doing homework problems. Make sure to write down what section the problem is from and work out the problem showing all of your steps.
- Even though MyLabsMath may not require you to show all the steps in your work, I want to encourage you to still do ALL of the steps. At times, MLM only requires a final answer, which will be frustrating for some of you because you cannot receive partial credit for correct work.
- Assignments posted in MLM will become available as we cover the material in class.
- Check MLM each day to be sure that you are keeping up with assignments and due dates.
- You have three (3) attempts per problem-type for each online problem in MLM. Using the “Help Me Solve It” feature uses one attempt. Use the attempts carefully so that you can earn a grade of 100% on each assignment.
- **NO LATE HOMEWORK** will be accepted for any reason whatsoever. A grade of zero will be assigned to any homework assignment not completed online and submitted by the due date and time. Specifically, due dates will **NOT** be extended for any reason. **NO EXCEPTIONS**. Technical difficulty, including loss of internet access, is not an excuse for not completing an assignment.
- **DO NOT** wait until the last minute to complete an online assignment, this way you can avoid last minute technical glitches including loss of internet access.

Exams

There will be 3 in-class exams during the semester. If **unavoidable** circumstances keep you from attending class on the day of a quiz or exam, please contact me promptly (a message in the office or an email sent before class is fine) to explain the absence and, if approved, schedule a make-up. We will discuss how exams will work prior to Exam one.

- I will require documentation of the reason for absence. Make-up exams will only be scheduled after the actual exam dates. Exam dates are available from day one of class, so work is not an acceptable reason for absence. Be sure to request off if you have a potential conflict of schedules.

- If approved, this exam must be completed prior to the next class meeting.
- Exam 3 will be given on the date scheduled for a final exam. For this class that will be on Tuesday, December 7 from 1:30 to 3:30 pm.

Communities in Schools North Texas Tutoring

We are partnering with Communities in Schools North Texas (CISNT) to give Math 1350 / Math 1351 students an opportunity to engage in early field experience. During this experience, you will interact with elementary/middle school students throughout the semester. Math 1350 / Math 1351 students will serve as math tutors for elementary/middle school students either virtually or in person at one of the available campuses this semester.

The requirements of this project are as follows:

- Complete an online application at [New Volunteer Application](#) if you are new to CISNT
- Students who volunteered with CISNT at any point during the 2019-2020 school year can apply here: [Returning Volunteer Application](#)
- Complete the online orientation session at [Electronic Orientation](#) .
- Tutor a minimum of 5 hours throughout the semester

Projects

You will be assigned two (2) projects during the semester. These will involve using what you have learned in this course about teaching math concepts to elementary school students.

Attendance

Attendance is important and expected. In this class, attendance is virtual via Zoom. The instructor will not repeat whole lectures or offer personal lessons in office hours or email. These venues are for specific questions/problems. If a student is absent, it is their responsibility to watch the recorded lecture and to make sure homework is turned in on time.

Covid-19 Impact on Attendance

While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent so I may make a decision about accommodating your request to be excused from class.

If you are experiencing any symptoms of COVID-19 (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>) please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

Changes to Syllabus

I reserve the right to amend, append, or otherwise make changes to this syllabus, should the need arise. Any changes will be posted as an Announcement in Canvas.

Technical Requirements & Skills

Minimum Technology Requirements

- Computer, tablet, or laptop that is compatible with all required apps for the course
- A smartphone *is not* sufficient
- Reliable internet
- Scanner (many free apps available for smartphones, iPhone users can also use the notes app)
- Webcam/microphone for virtual office hour visits and Zoom lecture
- Printer, not necessary but helpful

Technical Skills & Digital Literacy

- Navigate Canvas and MyLabs
- Scan documents and create pdf files (there are several free scanning apps for phones / tablets like Adobe Scan or Office Lens)
- Upload documents to Canvas
- Complete assignments on MyLabs

Getting Help

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: [UIT Student Help Desk](http://www.unt.edu/helpdesk/index.htm) (<http://www.unt.edu/helpdesk/index.htm>)

Email: helpdesk@unt.edu

Phone: 940-565-2324

In Person: Sage Hall, Room 130

Walk-In Availability: 8am-9pm

Telephone Availability:

- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

Canvas Technical Requirements: [Canvas Technical Requirements](#)

(<https://clear.unt.edu/supported-technologies/canvas/requirements>)

Additional Canvas Support: [Canvas Technical Help](#)

(<https://community.canvaslms.com/docs/DOC-10554-4212710328>)

Pearson MyLabs Student Technical Support

MyLabs offers student technical support

Website: [Pearson Student Technical Support](#)

Academic Support Services

- [UNT Math Lab](#) (<https://learningcenter.unt.edu/math-lab>)
- [UNT Learning Center](#) (<https://learningcenter.unt.edu>)
- [Academic Resource Center](#) (<https://clear.unt.edu/canvas/student-resources>)
- [Academic Success Center](#) (<https://success.unt.edu/asc>)
- [UNT Libraries](#) (<https://library.unt.edu/>)
- [Writing Lab](#) (<http://writingcenter.unt.edu/>)

Student Support Services

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- [Student Health and Wellness Center](#) (<https://studentaffairs.unt.edu/student-health-and-wellness-center>)
- [Counseling and Testing Services](#) (<https://studentaffairs.unt.edu/counseling-and-testing-services>)
- [UNT Care Team](#) (<https://studentaffairs.unt.edu/care>)
- [UNT Psychiatric Services](#) (<https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry>)
- [Individual Counseling](#) (<https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling>)

Other student support services offered by UNT include:

- [Registrar](#) (<https://registrar.unt.edu/registration>)
- [Financial Aid](#) (<https://financialaid.unt.edu/>)
- [Student Legal Services](#) (<https://studentaffairs.unt.edu/student-legal-services>)
- [Career Center](#) (<https://studentaffairs.unt.edu/career-center>)
- [Multicultural Center](#) (<https://edo.unt.edu/multicultural-center>)
- [Counseling and Testing Services](#) (<https://studentaffairs.unt.edu/counseling-and-testing-services>)
- [Pride Alliance](#) (<https://edo.unt.edu/pridealliance>)
- [UNT Food Pantry](#) (<https://deanofstudents.unt.edu/resources/food-pantry>)

UNT Policies

Academic Integrity Policy

Cheating on tests, quizzes or final exams 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 exams and quizzes must represent only the student's own work, unless otherwise stated in the directions. According to [UNT Policy 06.003, Student Academic Integrity](#), academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. See [Academic Integrity](#) for details on academic integrity at UNT.

Acceptable 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 Dean of Students 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. Visit UNT's [Code of Student Conduct](#) (<https://deanofstudents.unt.edu/conduct>) to learn more.

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students 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 Access](#) website. (<https://disability.unt.edu/>).

Emergency Notification and Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency. In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Incomplete, the Grade of:

Beginning Monday, November 9, 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.

If the student does not meet the terms of the "I" contract, that grade will automatically be changed to an F one academic year after the "I" is assigned.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](http://www.ecfr.gov/) (<http://www.ecfr.gov/>). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](https://policy.unt.edu/policy/07-002) (<https://policy.unt.edu/policy/07-002>).

Summary of Key Dates – Fall 2020

August 24, Monday
Classes begin.

August 28, Friday
Last day to add/swap a class. Cannot swap to a higher-level class, only down.

September 6, Sunday
Beginning this date a student may drop a course with a grade of W by completing the [Request to Drop Class](#) form and submitting it to the Registrar's Office.

September 7, Monday
Labor Day – No Classes, University Closed.

November 2, Monday
Last day to drop a course.

November 9, Monday
Beginning this date a student may request a grade of "I", incomplete, a non-punitive grade given only if a student (1) is passing, (2) has justifiable reason why the work cannot be completed on schedule; and (3) arranges with the instructor to complete the work in no more than one academic year.

November 20, Friday
Last day to withdraw (drop all classes) from the semester.

November 26, Thursday – November 29, Sunday
Thanksgiving Break – University Closed.

December 4, Friday
Reading Day – No Classes.

December 5, Saturday – December 11, Friday
Final examinations. Terms ends.

Math 1350 Fall 2020 Tentative Schedule

If and when needed, changes may be made to this schedule.

Week	Date	Topic	Date	Topic
1	Aug 24	Syllabus; Intro to Course	Aug 26	Problem Solving
2	Aug 31	Problem Solving	Sept 2	Problem Solving
3	Sept 7	Labor Day: No Class	Sept 9	Problem Solving
4	Sept 14	Sets and Set Operations	Sept 16	Sets, Counting and the Whole Numbers
5	Sept 21	Review for Exam 1	Sept 23	Exam 1
6	Sept 28	Numeration Systems	Sept 30	Numeration Systems
7	Oct 5	Numeration Systems	Oct 7	Numeration Systems
8	Oct 12	Conceptual Models for Addition & Subtraction of Whole Numbers	Oct 14	Conceptual Models for Addition & Subtraction of Whole Numbers
9	Oct 19	Algorithms for Addition & Subtraction of Whole Numbers	Oct 21	Review for Exam 2
10	Oct 26	Exam 2	Oct 28	Conceptual Models for Multiplication of Whole Numbers
11	Nov 2	Conceptual Models for Division of Whole Numbers	Nov 4	Algorithms for Multiplication & Division of Whole Numbers
12	Nov 9	Number Theory; Divisibility Rules	Nov 11	Number Theory; Divisibility Rules
13	Nov 16	Greatest Common Factor & Least Common Multiple	Nov 18	Fractions – Conceptual models
14	Nov 23	Fractions – Conceptual models	Nov 25	Operations with Fractions & Mixed Numbers
15	Nov 30	Operations with Fractions & Mixed Numbers	Dec 2	Review for Exam 3
<b style="color: red;">Exam 3 –Final Exam schedule available at https://registrar.unt.edu/exams/final-exam-schedule/fall				