MATH 1351.88 Mathematics for Teachers I, Online

Course Syllabus: Spring 2020

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

Instructor: Dr. Leah Reagan

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday	Online
	10:30 – 11:00	10:30 – 11:00	10:30 – 11:00	10:30 – 11:00		Professor checks email multiple times daily.
	1:00 – 1:30	1:00 - 3:30	1:00 – 4:00	12:30 – 1:30		
	3:00 – 4:30					

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

Course Description:

Three hours credit. Concepts of geometry, probability, and statistics, as well as applications of the properties of real numbers to concepts of measurement with emphasis on problem solving and critical thinking. This course is designed specifically for students who seek middle grade (4 through 8) teacher certification.

Prerequisite(s): MATH 1314 (College Algebra) with a "C" or better

Student Learning Outcomes:

The student will be able to:
1351.1 Recognize, name, compare, and measure two- and three-dimensional shapes.
1351.2 Determine congruent and similar objects through geometric constructions.
1351.3 Use geometric concepts to illustrate symmetries, size transformations, and tessellations.
1351.4 Use probabilities, simulations, and counting techniques to solve problems and analyze games.
1351.5 Select and use appropriate statistical methods to analyze data and reason statistically.

Evaluations/Grading Policy:

Three major 100 point exams aminations will be given, which will count for 45% of your total grade (worth 15% each). If an exam is missed or failed, the highest possible make-up grade is a

70 (with instructor notification prior to the exam missed). The 2nd exam and the Final Exam MUST BE TAKEN IN PERSON IN THE NTCC TESTING CENTER. If you do not live near NTCC, you may take your exam from an approved testing facility that is near you (student is responsible for getting testing site information to me and also for paying any fees the alternate testing facility may charge). The instructor must approve of the testing facility before plans are made.

The average of a series of homework assignments will be worth 20% of the total grade (all homework is on MyMathLab). All homework due dates are posted on MyMathLab. Homework is due on the due date…no exceptions.

Quizzes (over each chapter) will count for 10% of your overall average.

A comprehensive final examination will contribute 15% to the final grade, and the final must be taken in the testing center of the NTCC campus. If you do not live near NTCC, you may take your exam from a approved testing facility near you (student responsible for getting testing site information to me and also for paying any fees the facility may charge).

Tests/Exams:

3 Exams (2nd exam must be taken on campus) 45% (15% each)
Final Exam (must be taken on campus)   20%
Online Assignments (MyMathLab)   25%
Quizzes (MyMathLab)   10%

              TOTAL   100%

    "A"   90%
    "B"   80%
    "C"   70%
    "D"   60%
    "F"   Below 60%

Required Instructional Materials: If you've already taken Math 1350 from me within the last year, then you will not have to purchase anything new for this class. If you haven't taken it from me, you will need to purchase the following:

Long, DeTemple, Millman (2015). Mathematical Reasoning for Elementary Teachers, 7th Edition

Publisher: Pearson, Boston, MA

ISBN Number:
978-0-321-91474-3 LONG/MATHEMATICAL REASONING BINDER TEXT W/MYMATHLAB
Both the loose-leaf textbook and the MyMathLab code will work for BOTH 1350 & 1351. You

only have to purchase them once.

Optional Instructional Materials: None

Minimum Technology Requirements: Students should have a computer at home that is Internet accessible. It is recommended that students have a graphing calculator. The TI-84 is preferred, but other models may be approved by the instructor. You will be using this calculator for both courses.

Required Computer Literacy Skills: Students should have the ability to navigate through a website, use a chat room, post remarks to a discussion board, and email. They must also be able to navigate Blackboard to access posted materials and MyMathLab assignments.

Course Structure and Overview:
This is a 16 week online course where students are required to access graded activities on MyMathLab via the Blackboard Learning Management System. Students are required to complete online homework in addition to chapter quizzes, and over the course of the semester, two projects, three exams and a final exam. It is very important students keep up with course materials and assignments since this is a very fast-paced, college-level course. Students are expected to watch posted instructional videos, read the course textbook, and complete online assignments located in MyMathLab, by the due dates.

COURSE OUTLINE:
All problems assigned to each section are located in the Homework tab in MyMathLab. Dates for each section are located in your MyMathLab Calendar.
I.   Probability
    A. The Basics of Probability
    B. Applications of Counting Principles to Probability
    C. Permuations and Combinations
    D. Odds, Expected Values, Geometric Probability, and Simulations

II.   Statistics
    A. Organizing and Representing Data
    B. Measuring the Center and Variation of Data
    C. Statistical Inference

III.   Congruence, Constructions, and Similarity
    A. Congruent Triangles
    B. Constructing Geometric Figures
    C. Similar Triangles
    D. Networks

IV.   Transformations, Symmetries, and Tilings
    A. Rigid Motions and Similarity Transformations
    B. Patterns and Symmetries

C. Tilings and Escher-like Designs

V. Measurement
   A. The Measurement Process
   B. Area and Perimeter
   C. The Pythagorean Theorem
   D. Volume
   E. Surface Area

VI. Geometric Figures
   A. Figures in the Plane
   B. Curves and Polygons in the Plane
   C. Figures in Space

Communications:
Emails will be responded to within 24 hours. Students are expected to abide by Netiquette rules when communicating online. See this link for details: **https://coursedesign.colostate.edu/obj/corerulesnet.html**.

The college's official means of communication is via your campus email address. Your instructor will use your campus email, Blackboard, and REMIND texting to communicate with you. You need to check these often throughout the week in case your instructor sends out new information. Also, make sure you keep your campus email cleaned out and below the limit so you can receive important messages.

Institutional/Course Policy:
Since this is an online class, students must be self-motivated to keep up with the due dates, turn in assignments ON TIME, and take Exams as scheduled. Students need to check their email accounts daily AND log in daily to MyMathLab to make sure they receive all communications from the professor.

No late work will be accepted without prior approval by the instructor. It is the student's responsibility to check their Blackboard and NTCC email accounts, as well as Remind texting, for important information/announcements regarding the course. Students should be working on course material via Blackboard and MyMathLab every day. Do not wait until the last minute to complete and submit assignments in case of technology issues.

NTCC Academic Honesty/Ethics Statement:
NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

Family Educational Rights and Privacy Act (FERPA):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments to this timeline at any point in the term): SEE NEXT PAGE

	ASSIGNMENTS:	DUE DATES:	
1	Section 9.1 Homework	01/24/20	
2	Section 9.2 Homework	01/26/20	
3	Section 9.3 Homework	01/30/20	
4	Chapter 9 Review Quiz	01/31/20	
5	Section 10.1 Homework	02/04/20	
6	Section 10.2 Homework	02/07/20	
7	Section 10.3 Homework	02/10/20	
8	Section 10.4 Homework	02/13/20	
9	Section 10.5 Homework	02/16/20	
10	Chapter 10 Review Quiz	02/18/20	
11	REVIEW for Exam #1 (Chapters 9 & 10)	02/23/20	
12	**EXAM #1 (Chapters 9 & 10) – May be taken at home**	**Opens 8:00 am 02/23/20; Due by midnight on 02/24/20**	
13	Section 11.1 Homework	02/29/20	
14	Section 11.2 Homework	03/05/20	
15	Section 11.3 Homework	03/16/20	
16	Chapter 11 Review Quiz	03/18/20	
17	Section 12.1 Homework	03/23/20	

[18](#)	Section 12.2 Homework	03/27/20	
[19](#)	Section 12.3 Homework	04/01/20	
[20](#)	Chapter 12 Review Quiz	04/04/20	
[21](#)	REVIEW for Exam #2 (Chapters 11 & 12)	04/07/20	
[22](#)	**EXAM #2 (Chapters 11 & 12) – MUST BE TAKEN AT TESTING FACILITY**	**Opens 04/07/20 at 8:00 am; Due by 6:00 pm 04/08/20**	
[23](#)	Section 13.1 Homework	04/11/20	
[24](#)	Section 13.2 Homework	04/15/20	
[25](#)	Section 13.3 Homework	04/18/20	
[26](#)	Chapter 13 Review Quiz	04/20/20	
[27](#)	Section 14.1 Homework	04/25/20	
[28](#)	Section 14.2 Homework	04/28/20	
[29](#)	Section 14.4 Homework	05/02/20	
[30](#)	Chapter 14 Review Quiz	05/05/20	
[31](#)	REVIEW for Exam #3 (Chapters 13 & 14)	05/07/20	
[32](#)	**EXAM #3 (Chapters 13 & 14) – May be taken at home**	**Opens 8:00 am 05/07/20; Due by midnight on 05/08/20**	
[33](#)	Review for Final Exam	05/11/20	
[34](#)	**FINAL EXAM!!! Must be taken at a testing facility**	**Opens 8:00 am 05/11/20; Due 6:00 on 5/14/20**	