University of North Texas at Dallas
SYLLABUS

MATH 1351 (Mathematics for Elementary Teachers II) (3Hrs) Spring 2012

Department of	Mathematics and Information Sciences	Division of	Liberal Arts and Life Sciences

Instructor Name:	Dr. Ali Shaqlaih
Office Location:	Founders' Hall, Room 227
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Email Address:	ali.shaqlaih@unt.edu
Office Hours:	MW: 10:00-11:00 am, MW: 1:00-4:00, T: 8:00-9:00am
Classroom Location:	Founders' Hall 336
Class Meeting Times:	MW: 11:30 am-12:50 pm

Course Catalog Description:	The purpose of this course is to extend your knowledge about the fundamental mathematical structures present in school Mathematics curriculum. To this end, we will cover Concepts of Geometry, Probability and Statistics, as well as applications of measurements with an emphasis on problem solving and critical thinking. The structure of the course will be based on the NCTM and Texas standards.

Prerequisites:	MATH 1350 or equivalent

Required Text:	*A Problem Solving Approach to Mathematics for Elementary Teachers* by Billstein, Libeskind, and Lott, 10th ed., 2010, Pearson Education, Inc. (Addison Wesley) - Access to MyMathLab: shaqlaih83382

Recommended Texts	Musser, G., Burger, W., & Peterson, B. Mathematics for Elementary School Teachers: A Contemporary Approach, 7th Ed. Wiley: N.Y. 2005

Access to Learning Resources	UNTD Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNTD Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com

Course Goals

The goal of this course is to:
- Become confident in your ability to do mathematics with understanding
- Explore Mathematics and become a persistent and successful mathematical problem solver
- Learn to reason, justify and communicate mathematically
- Realize that teaching mathematics is more than just showing people how to manipulate formulas and solve problems.

Learning Objectives/Outcomes:

- o **Course Objectives:**
  At the end of this course, the student will be able to:
- Explain how probabilities are determined
- Read and construct statistical graphs
- Find linear measure, area of polygons, surface areas, and volumes of solids
- Define and show applications of translations, rotations, and reflections
- o **General Education Learning Outcomes:**

In this course, the student will:
- Explore mathematics
- Make connections between different areas of knowledge and different ways of knowing
- Be able to locate, evaluate and organize information including the use of information technologies.
- Think critically and creatively, learning to apply different systems of analysis.
- Develop problem solving skills that incorporate multiple viewpoints and differing contexts in their analysis.
- Cultivate intellectual curiosity and self-responsibility, building a foundation for life-long learning.

Course Outline
Priority will be given to understanding the material in depth rather than covering more topics. This schedule is subject to change by the instructor. Any changes to this schedule will be announced in class.

Chapter #	TOPICS	TIMELINE
Chapter 9	Probability	Weeks of Jan. 16, 23, 30
Chapter 10	Statistics	Weeks of Feb.6, 13
Chapter 11	Geometry	Weeks of Feb 20,27
Chapter 12	Congruence	Weeks of March 5, 12, 26
Chapter 13	Measurements	Weeks of April 2, 9, 16
Chapter 14	Motion Geometry	Weeks of April 23, 30

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

Grading Matrix:

Instrument	Value	Total
Homework Assignments	Different Assignments	60
Online Quizzes	Many Quizzes	80
In Class Quizzes	6 quizzes at 25 points each	150
Hour Exams	3 exams at 120 points each	360
Presentations and group work	Presentations, projects, activities	50
Attendance & Participation	Participation	50
Final Exam	One comprehensive exam	250
Total:		1000

The following standard grading scale will be used to determine your final letter grade:
$100\% \geq A \geq 90\% > B \geq 80\% > C \geq 70\% > D \geq 60\% > F \geq 0$.

Technology Use Policy:
Using technology, when appropriate, is encouraged. We will be using TI 84 and Sketchpad.

Homework Policy:
Homework will be into two parts, recommended part, that is for practice and the student doesn't need to turn in and another part that is to be handed in at the beginning of the class on the due date. You should view the assigned homework problems as the minimum number of problems required to attain some level of mastery of the material. I deem it acceptable for students to work in groups as they make their preliminary efforts to explore and work through homework problems. However, after any such preliminary and cooperative efforts, I expect each student to write up his/her final homework papers individually and without outside assistance. The act of copying another student's homework, or writing a problem solution as dictated by a tutor or from a solution manual, constitutes academic misconduct. You should do all homework problems but only selected problems will be graded. Be as neat as possible on the homework and try to keep the problems in order with space between them. Late homework will **NOT** be accepted.

Online Assignment Policy:
There will be different online quizzes or/and homework assignments that every student needs to complete on line using MyMathLab. Each student should buy an access code for MyMathLab to get access to these assignments. Students must purchase and register in MyMathLab (MML) by the 3rd class. Students may access MML at any general access lab on campus. More information about the due dates of the assignments will be announced in class.

In Class Quizzes policy:
There will be 10 in-class quizzes throughout the course. At the end of the semester, each student's best 6 quizzes will be added to get a 150 possible-point total. Generally, the quizzes will be given in the first 15 minutes of the class. **There will be no make-ups for missed quizzes for any reason**. The material that will be covered in the quizzes will be announced a head of time.

Exams and Make-up exam policy:
Exams should be taken as scheduled in the class time. No makeup examinations will be allowed except for documented emergencies (See Student Handbook). All requests for make-up exams MUST be submitted to the instructor in writing, with the supported documents. It is imperative that you contact your instructor as soon as possible (do **NOT** wait until you return to class!).

General Policies:
- The first and most fundamental expectation I have for everyone in the class is to respect one
- another. Among other things, this means that only one person speaks at a time, **no one works on anything not related to the class (no cell use, no texting, no reading, no sleeping,…) and** everyone will put forth an honest effort.
- It is the student's responsibility to stay abreast of all class announcements and changes made to this syllabus in class, whether present or not.
- Leaving and entering the class back is **not allowed**. You can leave the class if you are not returning or for real emergency case. Leaving the class should be by the permission of the instructor.
- You are expected to review all graded quizzes, homework and exam papers as soon as they are returned. All questions about the grading of quizzes, homework or exam papers must be reported within **seven** calendar days of the date on which the paper was returned.
- To do well in this course, attend class every meeting on time, be prepared to work for the full class time, bring all necessary materials to class, participate as much as possible, do the homework and extra problems steadily every day rather than once a week. Don't be afraid to make mistakes or ask questions, the more you get involved, the better you'll do!
- **My door will always be open and you should feel free to e-mail me if you have questions**. Don't stress out about math! You have the abilities to do very well as long as you work hard.

Students with Disabilities (ADA Compliance):
The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students' with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. For more information, you may visit the Office of Disability Accommodation/Student Development Office, Suite 115 or call Laura Smith at 972-780-3632.

Student Evaluation of Teaching Effectiveness Policy:
The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. 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 the SETE to be an important part of your participation in this class.

Bad Weather Policy:
On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings

on the campus website www.unt.edu/dallas. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Class attendance 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 class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Coming to class late or leaving *it* early is considered an absence. Students are responsible to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

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 the Student Code of Academic Integrity at http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.
In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:
On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

Diversity/Tolerance Policy:
Students are encouraged to contribute their perspectives and insights to class discussions. 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 Center for Student Rights and Responsibilities as the instructor deems appropriate.

Important dates:

Quiz 1	Jan. 25
Quiz 2	Feb. 1
Quiz 3	Feb. 8
Quiz 4	Feb. 15
First hour exam	**Feb. 22**
Last day to withdraw with an automatic W	**Feb 24**
Quiz 5	Feb 29
Quiz 6	March 7
Quiz 7	March 14
Second hour exam	**March 28**
Last day to drop with W or WF	**March 29**
Quiz 8	April 4
Quiz 9	April 11
Quiz 10	April 18
Third hour exam	**April 25**
Quiz 11	April 28
Final exam	**May 7 at 11:00am**