University of North Texas at Dallas
Spring 2016
SYLLABUS

MATH 1580.030	SURVEY OF MATHEMATICS		3Hrs
Department of	Mathematics and Information Sc.	**School of**	Liberal Arts & Life Sciences

Instructor Name:	Dr. Noureen Khan
Office Location:	DAL2- 223
Office Phone:	972 338 1567
Email Address:	noureen.khan@unt.edu Please use UNTDallas email account and include Class/Section in subject line.
Office Hours:	Monday & Wednesday 11:30 – 2:30 am or by appointment.
Virtual Hours:	Tuesday 12:00 – 2:00 pm.
Math Lab *DAL1, 3rd floor*	UNT Dallas Math Lab is an open lab where you can do homework and also make an appointment for Individual Tutoring or Group Study Sessions. Online appointments: *http://dallas.unt.edu* under '*Advising and Tutoring*' tab. Math Lab hours: Mon/Wed: 1:00p -7:00p Tue/Thu: 9:00a -7:00p
Course Catalog Description:	Survey of Mathematics with Applications: Topics include probability, statistics, algebra, logic and the mathematics of finance. Additional topics are selected from geometry, sets, fair division, voting theory and graph theory. Emphasis is more on applications. Recreational and historical aspects of selected topics are also included. Technology is used extensively.
Course Description:	MATH 1580 is for students identified in the mathematics placement process as requiring supplemental instruction to strengthen their algebra skills. A grade of "C" or better is required for this course to serve as prerequisite. MATH 1580 is not intended to prepare students for calculus, science, engineering or business courses. Satisfies the Mathematics requirement of the University Core Curriculum.
Required Text:	• A Survey of Mathematics with Applications, 9th Ed. Angel, Abbott, Runde. ISBN-13: 9780321759665 • **MyMathLab (MML) software** **(includes free electronic text book).**
Required Online Assignment Service	MyMathLab(MML) software is the main platform for this course, providing online versions of class assignment and self-paced learning service. Students can sign up for two week FREE TRIAL, use course ID: **khan82202** First time users must login in to UNT Blackboard account to access MyMathLab. For SUPPORT fast assistance; choose chat to "talk" to a technical support person. Students can also call 1-800-677-6337 for assistance from Pearson, ask their instructor or http://247pearsoned.custhelp.com.

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

Course Evaluation Methods: Following instruments are used to determine student grades and proficiency of the learning outcomes for the course.

- Home Work and Study Plans
- Quizzes and Chapter Tests
- Project (Chapter 15)

Grading Matrix:

Instrument	Value (percentages)		Grade Determination:	
			Grade	Percentage %
Homework	20%		A	90 or better
Study Plans	20%		B	80 – 89
Quizzes	20%		C	70 – 79
Chapter Tests	30%		D	60 – 69
Project	10%		F	less than 60
Total:	**100 %**			

Calculator Policy: TI 83, TI 83 Plus, TI 84, TI 84 Plus or equivalent.

Course Objectives:

The goal of this course is to introduce students to sets, logic, number theory, algebra, linear programming, probability and statistics.

Learning /Outcomes:

Upon successful completion of this course, the student will be able to

1	Communicate mathematics and use technology to solve problems
2	Demonstrate understanding of financial mathematics
3	Understand the basic theory of probability and statistics
4	Distinguish between different voting methods, apportionment methods, their theory and uses.
5	Demonstrate real world applications of logic.
6	Demonstrate understanding of base concepts in graph theory

Gen Ed Learning Outcomes:

Upon successful completion of this course, the students will be able to

Explore Mathematics, English, Arts and Humanities, Natural Sciences, Social and Behavioral Sciences
Make connections between different areas of knowledge and different ways of knowing.
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 contexts in their analysis.
Cultivate intellectual curiosity and self-responsibility, building a foundation for life-long learning.

COURSE FORMAT:

Math 1580 is an accelerated fully online (distance learning) course. The course material is presented in seventeen WEEKLY MODULES on Blackboard Learn (BBL). All assignments are linked to publisher's software, MyMathLab (MML) in addition to learning aids under multimedia tabs. First time user must log in to blackboard account and register on MyMathLab. For your convenience learning options are set at flexible weekly schedule, which means you can learn and do assignments at your convenient time even before the due date, there is no penalty for early submissions. In a weekly module, you will learn through electronic textbook, course supplements that include power point slides of lecture notes, videos, animated examples and other helpful web resources. You will do (approx.) two assignments per week, a homework followed by a short quiz. A Chapter-Test is assigned once a chapter is complete. You should start a homework after completing the assigned text, lecture videos, class notes etc. To ensure the mastery of contents, study plan is assigned for quizzes and end of chapter test. Completion of Study Plan is mandatory and you will receive its credit in multiple ways, its 10% of the semester grades. Study Plans should be considered as chapter reviews or practice work, or simply to prepare you better for the tests. There will be a class project (chapter 15) at the end of semester, details are posted on Blackboard.

Math1580.030 is NOT **SELF PACED** course; however, you will complete academic work in a flexible manner. Due to the fast pace of this course, all assignments have firm deadlines, with no possible extension or makeup for missing work, however at the end of semester, one lowest quiz and one lowest test grade will be dropped. So, it is expected that students will not request extensions or makeup, rather diligently work towards upcoming assignments. Moreover, students are responsible to have all updated information provided on blackboard or posted on MyMathLab regardless of internet or technology problem. This includes any changes made to the due dates of homework assignments and test dates that were announced or posted online. You will have *unlimited* number of attempts of answer on all homework, however, a score of 60% or more is required to access a quiz. In other words, you must make 60% on homework and complete study plan to access a quiz. You have *two (2) attempts* to answer a quiz, both homework and quiz open at the same time and there is no penalty for early submission. To ensure the mastery of chapter content, completion of Study plan is mandatory before taking a test. You can start on a study plan as early as it becomes available, and maintain good record of chapter notes and important formulae. On chapter-test, you will get *one (1) attempt* to answer, so prepare enough and answer carefully.

There will be a major class project about voting and apportionment methods described in Chapter 15. More details, and sample project are available on blackboard. It's advised that you select a topic well ahead of time to avoid duplicates or overlaps of the same title.

Weekly Procedure:

1. Read assigned section from the textbook (hardcover or e-book).
2. Watch lecture videos, and other multimedia resources available on MyMathLab.
3. Complete homework and short quiz, there is no penalty for early completions.
4. Maintain good record of your work by doing all assignments in a spiral note book.
5. Work diligently on Study Plans and take Chapter Test with full preparation.

Assignments due dates Policy:

For simplicity reasons, all assignments are made available and due at **midnight** (**12:00am)** on **Monday, Wednesday or Friday,** unless otherwise specified.

REQUIRED INITIAL ASSIGNMENT:

In accordance with US Department of Education guidance regarding class participation, this class requires the following assignments by January 25th , 2016:

1) Registering for MyMathLab software, and completing first two assignments.
   (Mymathlab does offer 2 weeks of free trials, so you can register right away.)
2) Sending me an email that you understand and agree with the course policies.
3) Posting a self-introduction on Blackboard discussion board.

Above assignments must be completed by the first week of class start, Monday, January 25, 2016, failure to do that may result administratively drop from the course. If you have any question, please contact me any time.

COMMUNICATIONS:

Due to online availability, you can access the class material at anytime from anywhere, MML mobile app is also available. In other words, you have flexibility of doing work at your convenient time, so plan ahead and work diligently. All assignments are made available for several days with firm deadlines and no possible extensions. So, check-in MyMathLab home page few times a week, keep record of upcoming assignments and their due dates, don't delay or wait for the last minute. If you have any question or want to discuss an issue, send me an email at: noureen.khan@unt.edu. My email response time is less than two business day. Please DONOT USE BLACKBOARD EMAIL for communications, blackboard emails will take longer time to response (up to a week). You can visit my office or meet virtually during posted hours or by sharing your Skype ID. Use UNT email address and include your class/ section/ student ID in subject for all email communications. You can also call my office in case you seek verbal response, I am available at 972 338- 1567 during listed office hours.

Statement regarding use of email and extension requests:
- Emails about assignments extension request may not be replied due to heavy electronic communication load and course syllabus policy.
- Emails sent from other than UNT email address and/ or without student- ID and Class and Section number may go to junk (SPAM) folders, and my not be replied.
- Emails about grades or grades related questions will not be replied due to sensitivity and privacy policy, call or visit office to discuss grade related issues.
- Emails sent to blackboard account will take longer response time, up to a week.
- Emails regarding personal matters or irrelevance to the course will go unanswered.

Assignments Overview:
- Homework/quizzes are open for several (five – seven) days, with unlimited number of attempts.
- Quizzes and chapter tests (2-attempts) are timed tests with no possible extensions.
- Study Plans are part of final grades and required for quizzes, chapter tests.

NOTE:
This is tentative schedule and subject to change at the discretion of the instructor at any time.

Week	Online Module	TOPICS
Week 1 Jan 19 – Jan 25	<u>Chapter 3</u>: Section 3.1 - 3.2	Statements, Connectives, Truth Table
Week 2 Jan 26 – Feb 01	Section 3.1- 3.2	Conditional and Bi-conditional
Week 3 Feb 02 – Feb 08	Section 3.3 – 3.4	Symbolic Arguments
Week 4 Feb 09 – Feb 15	Section 3.5 – 3.6	**Chapter 3 - Test**
Week 5 Feb 16 – Feb 22	<u>Chapter 11:</u> Section 11.1 - 11.2	Personal loans and Simple Interest
Week 6 Feb 23 – Feb 29	Section 11.3 - 11.4	Compound Interest, Installment buying
Week 7 Mar 01 – Mar 07	Section 11.5	Mortgage loans **Chapter 11 – Test**
Week 8 Mar 08 – Mar 14	<u>Chapter 12:</u> Section 12.1 – 12.2	Theoretical Probability
Week 9 Mar 15 – Mar 21	SPRING BREAK	SPRING BREAK
Week 10 Mar 22 – Mar 28	Section 12.3 – 12.4	Odds, Expected value
Week 11 Mar 29 – Apr 04	Section 12.5 – 12.6	AND, OR problems, conditional Prob. **Chapter 12 – Test**
Week 12 Apr 05 – Apr 11	<u>Chapter 14:</u> Section 14.1 – 14.2	Graph Theory
Week 13 Apr 12 – Apr 18	Section 14.3 – 14.4	**Chapter 14 – Test**
Week 14 Apr 19 – Apr 25	<u>Chapter 13:</u> Section 13.3 – 13.4	Frequency Distribution
Week 15 Apr 26 – May 02	Section 13.5 – 13.6	Measures of Dispersion
Week 16 May 03 – May 06		**Chapter 13 – Test**
Week 17	<u>Chapter 15:</u> Class Project Report	Monday, May 09

University Policies and Procedures:

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 200 or call at 972-338-1779.

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.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of conduct and Academic Dishonesty 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 Conduct at http://www.unt.edu/csrr/student_conduct/index.html *for complete provisions of this code.*

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. 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. Excessive absences (more than 3 classes, with or without excuse) may result in being dropped from the class or receiving an F for the course.

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.

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.*

Important Dates:

- Monday, January 18   Martin Luther King Day
- March 14 – March 20   Spring Break Monday
- Friday, April 8   Last day to withdraw from a course with a grade of W