

# Syllabus of MATH1580 (Survey of Math), summer 5W1-014

<b>INSTRUCTOR:</b> KOSHAL DAHAL	<b>OFFICE:</b> GAB 441						
<b>OFFICE HOURS:</b> MTWR, 3:30-4:30pm Students unable to see me during these times may request an appointment.	<b>CLASS MEETS:</b> MTWR, 12:00pm – 1:50pm, @ CURY 204 <b>FINAL EXAM:</b> Thursday, July 3, @ 12pm - 2pm						
<b>E-Mail:</b> <a href="mailto:koshaldahal@my.unt.edu">koshaldahal@my.unt.edu</a> Personal site: <a href="http://www.math.unt.edu/~koshal">www.math.unt.edu/~koshal</a> Allow two (2) business days for reply. Include course name, number and section and your full name in the subject header. Email without this information may not get opened.	<b>MATH LAB:</b> GAB 440 Website: <a href="http://www.math.unt.edu/mathlab">www.math.unt.edu/mathlab</a> Go to site for location and hours. (Closed Sundays and holidays)						
<b>If you have technical difficulties with MyMathLab, Call 1-800-677-6337</b>							
<b>COURSE DESCRIPTION: MATH1580 (MATH1332).</b> Survey of Mathematics with Applications. 3 hours. Topics include probability, statistics, algebra, logic and the mathematics of finance. Additional topics are selected from geometry, sets, cryptography, fair division, voting theory and graph theory. Emphasis is on applications. Recreational and historical aspects of selected topics are also included. Technology is used extensively. Math 1580 is not intended to prepare students for calculus, science, engineering or business courses. Students may not receive credit for both Math 1580 and Math 1581. Prerequisite(s): Two years of high school algebra and one year of high school geometry and consent of department, or MATH 1010 with a grade of C or better.							
<b>MyMathLab through Blackboard (<a href="http://learn.unt.edu">http://learn.unt.edu</a>) REQUIRED:</b> Instructor MML ID: <b>dahal44412</b> You will access your math course platform from within Blackboard Learn. The course content (assignments, help tools, textbook, etc.) is delivered in the online platform MyMathLab accessed through Blackboard Learn. Alternate access is: <a href="http://www.pearsonmylab.com">www.pearsonmylab.com</a> . Register in MyMathLab (MML) the first class day of semester. Temporary access is available, register immediately. You must purchase MML by the end of the <b>temporary 14-day</b> access period. If you do not purchase MML by the end of the temporary access, you may lose credit for all work previously completed in MML AND be administratively dropped with the possibility of no refund. No extensions will be given for any missed assignments for any reason. Not having access to MML is not an exception.							
<b>PRINT TEXTBOOK is OPTIONAL:</b> <u>A Survey of Mathematics with Applications, 9<sup>th</sup> Edition</u> , by Angel, Abbott and Runde. The textbook in electronic form is included in MML. MML may be purchased packaged with textbook, as a stand-alone or directly online at the time of registration.							
<b>CAMPUS INTERNET ACCESS:</b> UNT has many general access computer labs for students, see <a href="http://www.gacl.unt.edu/">http://www.gacl.unt.edu/</a> .	<b>ONLINE TUTORING:</b> The UNT Learning Center offers an online tutoring system using the AskOnline platform. Go to <a href="http://www.unt.edu/lc">www.unt.edu/lc</a> , and select the online tutoring button located along the top of the page.						
<b>GRAPHING CALCULATOR:</b> TI 83, TI 83 Plus, TI 84, TI 84 Plus or equivalent for the lecture. Only TI83/84, TI83/84 Plus are supported. TI NSpires, TI 89's, TI 92'2 or any other utility with alphanumeric/CAS capabilities ARE NOT permitted. A calculator may not be shared during an exam.							
<b>ATTENDANCE POLICY:</b> Class attendance is mandatory. Students are responsible for all information given in class, regardless of his/her attendance. Starting <b>Friday, June 13</b> , students may be administratively dropped from the course for nonattendance with a grade of <b>WF</b> . The last day a student may be dropped for nonattendance is <b>Wednesday, June 25</b> . <b>Two (2)</b> or more absences constitute non-attendance!							
<b>ACADEMIC DISHONESTY:</b> Refer to the following university site for the official policy with regards to academic dishonesty. The web site is: <a href="http://vpaa.unt.edu/academic-integrity.htm">http://vpaa.unt.edu/academic-integrity.htm</a>							
<b>EVALUATION MATH 1580:</b> <table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">Homework</td> <td style="text-align: right;">15%</td> </tr> <tr> <td>Average of 3 in-class exams</td> <td style="text-align: right;">60%</td> </tr> <tr> <td>Final Exam</td> <td style="text-align: right;">25%</td> </tr> </table>	Homework	15%	Average of 3 in-class exams	60%	Final Exam	25%	<b>GRADE ASSIGNMENT:</b> A: [90%, ); B: [80%, 90%); C: [70%, 80%); D: [60%, 70%); F: [0%, 60%), 59.5% is an <b>F</b>
Homework	15%						
Average of 3 in-class exams	60%						
Final Exam	25%						

Your grade is determined solely by your performance on the evaluation criteria. Grades are not wages; they are not intended to reflect how hard you've worked or the goodness of your intentions. Grades reflect your proficiency of the course content as you have demonstrated them on the evaluation criteria. Expect no extra credit or bonus assignments.

**FINAL GRADE:** Semester grades online at: [my.unt.edu](http://my.unt.edu). Grades posted online are for your record-keeping purposes only. Your course grade is determined by the criteria explicitly stated on syllabus.

**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.*

**NOTES:**

1) This syllabus is subject to change as the instructor deems necessary. Any/all changes will be announced during regular class time. It is the responsibility of the student to attend each scheduled class to be informed of these changes.

2) You are responsible for meeting all university deadlines, such as: registration, fee payment, drop deadlines, etc. Refer to the printed Schedule of Classes and/or University Catalog for policies and dates.

**Academic Dishonesty:**

Cheating on final exam, 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. See <http://vpaa.unt.edu/academic-integrity.htm> for details on academic integrity at UNT.

**Attendance:**

Class attendance is mandatory. Missing any portion of class is considered absence from the entire class. My email may NOT be used in lieu of attendance. Students are responsible for all information given in class, regardless of his/her attendance. This includes knowing exam dates, homework assignments and any changes made to due dates that are announced in class. If you miss a class, it is your responsibility to learn of all the important stuff you missed. Exchange phone numbers/email addresses with several members of your class so that you have multiple sources of information in case of a personal emergency. **Two (2)** or more absences in lecture constitute non-attendance; in which a student may be administratively dropped for non-attendance with a grade of **WF**.

**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. **You will be asked to leave the classroom if you access an electronic messaging device during class AND it will be counted as an absence.**

**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.

## Important Dates for 5W1 Session

- June 2** First Class Day.
- June 6** Make-up day for July 4. One day of instruction (Friday of the first week of 5W1) is added to compensate for contact hours lost to the July 4 holiday. Beginning this date a student who wishes to drop a course must first receive written consent of the instructor.
- June 12** Last Day for student to receive automatic grade of W for nonattendance.  
Last day for change in pass/no pass status.  
Last day to drop a course or withdraw from the semester with a grade of W for courses that the student is not passing. After this date, a grade of WF may be recorded.
- June 13** Beginning this date instructors may drop students with a grade of WF for nonattendance.
- June 25** Last day to drop with either W or WF.  
Last day for a student to drop a course with consent of the instructor.  
Last day to Withdraw (drop all classes).  
Last day for an instructor to drop a student with a grade of WF for nonattendance.
- June 26** Beginning this date, a student who qualifies may request an Incomplete, with a grade of I.
- July 3** Final Exam day.

### Drop Policy:

If the student is unable to complete this course, it is his/her responsibility to formally withdraw from the course. The student may do so through the Registrar's Office after obtaining the necessary signatures. Consents for withdrawal and all necessary signatures may be obtained in the Math Department Office, GAB 435. The last day to drop a class with an automatic "W" is **Thursday, June 12**. The last day to drop a class with "W" or "WF" is **Wednesday, June 25**. "WF" is averaged into your GPA as an "F". If the student does not properly withdraw from the course but stops attending, s/he will receive a performance grade, usually an F.

**Exams:**

Three in-class exams are planned for this semester. Check your posted online exam score with the grade you earned. If they are not the same, notify me immediately to correct the error. You have one week from the time the graded exam is posted to contest errors. Keep a record of all your scores. Each exam is **20%** of the course grade.

Contents and dates are **tentatively** scheduled as follows:

EXAM 1 – **Week of Monday, June 09:** (Chapters 15, 6 and 11, as presented)

EXAM 2 – **Week of Monday, June 16:** (Chapters 12 and 13, as presented)

EXAM 3 – **Week of Monday, June 23:** (Chapters 3 and 14, as presented)

**Exam Etiquette:**

- Any student who arrives late for an exam will not be permitted to take the exam. The student will receive a zero for that exam.
- 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. and place out of sight. Handling any electronic device besides an approved calculator during an exam will be construed as cheating.
- 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 booklet, pencil, eraser and calculator out during an exam. Plenty of work-space is provided on the exam booklet. You will not be permitted to have any scratch paper during an exam.

**Final Exam:**

Your final exam will be administered in our regular classroom. The date and time are posted online at: <http://registrar.unt.edu/exams/summer> for UNT 2014 summer final exams schedule. **You should look up the time and record it for your academic planning. The final exam is comprehensive and is 25% of the course grade.**

**Grade Assignment:**

The student course grade is assigned according to the evaluation criteria and grading assignment stated on this syllabus. The grade is completely objective and is determined solely by student performance on each of the evaluation criteria (in-class exam grades, homework, and the final exam). Don't expect extra credit work or bonus grade assignments.

**Homework:**

Most of your homework assignments will be administered through MyMathLab (MML); you may also have occasional "paper" and "in-class" assignments which evaluate as a homework grade. MML is the required online course delivery platform. All regular online homework assignments for the entire term are already set; due dates and times explicitly stated in MyMathLab. **You will typically have an online assignment due by 10:00am.** I suggest you complete your assignments the day before each due date when possible. You have five (5) attempts per problem-type for each online problem in MyMathLab. Use the attempts carefully so that you can earn a 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.** If you are prone to circumstances that affect your ability to complete assignments as due, I suggest that you work ahead. **The MML homework assignments, including online, in-class and take-home together comprise 15% of the course grade.**

**Incomplete, the Grade of I:**

Beginning **Thursday June 26**, 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.

**Learning Objectives:**

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

- Demonstrate proficiency of algebraic skills
- Communicate mathematics and use technology to solve problems
- Demonstrate understanding of financial mathematics
- Demonstrate understanding of probability and basic statistics
- Demonstrate understanding of voting methods, apportionment methods, their theory and uses
- Demonstrate understanding of basic logic
- Demonstrate understanding of graph theory basics

**Make-up Exam Policy:**

**NO MAKE-UP EXAMS WILL BE GIVEN.** An exam may be taken **prior** to the scheduled date. You must make your request, via email, at least a week prior to the date you need to take your test. 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 an academic alert will be filed.

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 cheating on an exam, the final exam score will NOT replace that zero. Again, **NO MAKE-UP EXAMS WILL BE GIVEN FOR ANY REASON EVER!**

**Progress Reports:**

Students needing progress reports completed/signed for athletics, scholarships and/or any other organization must attend office hours to get them completed.

**Recommended Keys to Success/Expectations:**

Success in math classes requires a great deal of time and honest effort outside of class along with punctual attendance. You are expected to come to each class on time and stay the entire class. You are responsible for everything that happens in class. You should come to each lecture and come prepared. Spend an hour (or two) after each lecture with a classmate reviewing the lesson and working on homework problems. Use the UNT Math Lab and meet with a study group every day.

Math is not a spectator sport. You will not learn mathematics just from watching me or friends display ideas and solve problems. You must try the problems, finish problems, ask questions, correct your mistakes; put concepts in your own words, and practice, practice, practice!! An increase in effort usually results in increases in success.

**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](http://www.unt.edu/csrr).

\*Texting or using any electronic messaging devices during class is NOT acceptable behavior and is grounds for disciplinary action.

### **Student Evaluation of Teaching Effectiveness (SETE):**

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. Please be sure to complete this important survey for all of your UNT courses. I consider the SETE to be an important part of your participation in this class.

### **Statement regarding use of email and attendance:**

- Email may not be used in lieu of attendance. YOU MUST ATTEND class to obtain instruction regarding lectures, lessons, quizzes, homework assignments, answers to particular problems, etc.
- Due to limitations of email communication, you must physically meet with me for help with course materials.
- YOU are responsible for attending the required class meetings and labs as stated in the course schedule guide.

### **Web Access:**

You should be able to access your MyMathLab account through UNT's course management system: <https://learn.unt.edu/>. Students may access use MyMathLab either through <https://learn.unt.edu/> or through [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com). Necessary information for using this site will be provided in the first day of class. It's the MyMathLab handout.

### **Math 1580 list of sections to be taught from course textbook** (additional content will be presented in lecture):

#### Chapter 3: LOGIC

- 3.1: Statements and Logical Connectives
- 3.2: Truth Tables for Negation, Conjunction, and Disjunction
- 3.3: Truth Tables for the Conditional and Biconditional
- 3.4: Equivalent Statements
- 3.5: Symbolic Arguments
- 3.6: Euler Diagrams and Syllogistic Arguments

#### Chapter 6: ALGEBRA, GRAPHS AND FUNCTIONS

- 6.1: Order of Operations
- 6.2; Linear Equations in One Variable
- 6.3: Formulas
- 6.4: Applications of Linear Equations in One Variable
- 6.5: Variation:
- 6.6: Linear Inequalities
- 6.7: Graphing Linear Equations
- 6.8: Linear Inequalities in Two Variables
- 6.9: Solving Quadratic Equations by Factoring & Quadratic Formula
- 6.10: Functions and Their Graphs

#### Chapter 13: Statistics

- 13.1: Sampling Techniques
- 13.2: The Misuses of Statistics
- 13.3: Frequency Distributions and Statistical Graphs
- 13.1: Measures of Central Tendency
- 13.2: Measures of Dispersion
- 13.6: The Normal Curve
- 13.7: Linear Regression

#### Chapter 14: GRAPH THEORY

- 14.1: Graphs, Paths, and Circuits
- 14.2: Euler Paths and Euler Circuits
- 14.3: Hamilton Paths and Hamilton Circuits
- 14.4: Trees

Chapter 11: CONSUMER MATHEMATICS

- 11.1: Percent
- 11.2: Personal Loans and Simple Interest
- 11.3: Compound Interest
- 11.5: Buying a House with a Mortgage.
- 11.6: ordinary Annuities, Sinking Funds, and Retirement Investments

Chapter 12: PROBABILITY

- 12.1: The Nature of Probability
- 12.2: Theoretical Probability
- 12.3 Odds
- 12.4: Expected Value
- 12.5: Tree Diagrams
- 12.6: Or & And Problems
- 12.7: Conditional Probability
- 12.8: The Counting Principle and Permutations
- 12.9: Combinations
- 12.10: Solving Probability Problems Using Combination

Chapter 15: VOTING AND APPORTIONMENT

- 15.1: Voting Methods
- 15.2: Flaws of Voting
- 15.3: Apportionment Methods
- 15.4: Flaws of the Apportionment Methods

- **Keep a positive attitude about your ability to succeed and work diligently towards that goal!**

- **MATHEMATICS IS NOT A SPECTATOR SPORT -- YOU MUST PRACTICE TO LEARN!!**

- **Wishing You a Great Semester Ahead!!!**