

# MATH 101 A Spring 2010 Syllabus

<b>Instructor</b>	Dr. Sean Ho twu@seanho.com (604) 513-2121 x3209, Neufeld 5 Office hours: M-R 4-5pm and by appointment	Class location: MWF 11:40-13:00, Neu 37 math101.seanho.com												
<b>Description</b>	Basic concepts in mathematics with applications in business and social sciences. Topics include linear systems, quadratics, sequences, exponential and logarithmic functions. Applications include compound interest, annuities, and linear programming. This course is not intended for students majoring in Science and may not be used for credit towards a major, concentration, or minor in Mathematics. It may, however, be required of some Science majors who are not ready for MATH 105. Most Business majors take this course prior to MATH 120 unless their high school credentials are excellent or the results of a pre-test indicate they may go directly to MATH 120. This course fulfills a non-lab natural science core requirement.													
<b>Objective</b>	This course is designed to give students a good understanding of mathematics essential for the study of Business Finance and Social Sciences. It is recommended for all students planning to study <b>Business</b> , <b>Finance</b> , or <b>Economics</b> .													
<b>Prerequisites</b>	A minimum of C in B.C. Principles of Mathematics 11 or equivalent. Students with a weak math background or who have not studied math recently will need to catch up on their own and perhaps find a private tutor.													
<b>Textbook</b>	Haeussler, Paul, and Wood, <b><i>Introduction to Mathematical Analysis</i></b> , 12th ed., Prentice Hall.  This text should be available at the campus bookstore. It is important to use the correct edition, as the homework questions change from edition to edition.													
<b>Marking</b>	Letter grade assignment follows the TWU percentage to grade equivalents except that $\geq 85\%$ and $< 95\%$ is an A; 95% and above is an A+. <table><tr><td><b>Homework</b></td><td>20%</td><td>Weekly (10 total)</td></tr><tr><td><b>Midterm 1</b></td><td>20%</td><td>Fri 12 Feb</td></tr><tr><td><b>Midterm 2</b></td><td>20%</td><td>Fri 26 Mar</td></tr><tr><td><b>Final Exam</b></td><td>40%</td><td>(TBA)</td></tr></table>		<b>Homework</b>	20%	Weekly (10 total)	<b>Midterm 1</b>	20%	Fri 12 Feb	<b>Midterm 2</b>	20%	Fri 26 Mar	<b>Final Exam</b>	40%	(TBA)
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<b>Topic Outline</b>	<ul style="list-style-type: none"><li>• Algebra Review and Applications (ch0-1)</li><li>• Functions and Graphs (ch2)</li><li>• Lines, Parabolas, and Systems (ch3)</li><li>• Exponential and Logarithmic Functions (ch4)</li><li>• Mathematics of Finance (ch5)</li><li>• Introduction to Matrix Algebra (ch6)</li><li>• Linear Programming (ch7)</li></ul>													
<b>Notes</b>	<ol style="list-style-type: none"><li>Homeworks are due by the <i>start</i> of class on the due date. <b>NO LATE HOMEWORKS</b> except for extenuating circumstances. Homework turned in after the start of class up to 5pm on the due date (including coming to class late) will be penalized 10%; after that they will not be accepted and will receive a zero mark. If you turn in your homework late, it is your responsibility to ensure I get it. Late homeworks forfeit the expectation of prompt feedback -- the TA may take as long as he/she needs to mark late homeworks. If you have an illness, family emergency, etc., you must inform the instructor as soon as possible, before the due date, in order to make special arrangements.</li><li>Study groups are encouraged, but the final draft that you hand in must be <b>your own work</b>. All work must be shown for full marks. Note that only a few questions from each homework</li></ol>													

may actually be marked.

3. A scientific **calculator** is required; graphing or special statistical functions are not required. Please have a separate calculator from your cell phone or PDA, since these are not allowed during exams. Sharing of calculators during exams is not permitted.
4. During in-class **exams**, all of the following are not permitted and should be left in your closed/zipped bag and put on the floor:
  - Textbooks, notes, cell phones (turn off), laptops, PDAs, *electronic dictionaries*Your desk should be clear except for your pencil/pen and calculator. Scratch paper will be provided for you.
5. Mathematics is **cumulative** in nature; if you miss a class or have a gap in understanding of the material, you must fill in that gap first, or else the subsequent material will make not sense. Seek help immediately if you start to feel yourself falling behind!
6. Students who miss more than 25% of class sessions may be barred from taking the final exam [2009-2010 Academic Calendar p.38].
7. In case of inclement **weather**, the TWU campus conditions will be announced on local radio stations and posted on the TWU website at [www.twu.ca/conditions](http://www.twu.ca/conditions).
8. **Academic integrity** is a core value of the entire TWU community. This includes, but is not limited to, avoiding all forms of plagiarism and cheating. Plagiarism is using someone else's work without attribution. In this course, if you do it once you will get a zero, if you do it again you will automatically fail the course. Any such cases also go into the University's files for future reference; TWU has a strict policy concerning plagiarism. A tutorial describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke: (PPT file), (14 min flash), (8 min flash)

*"Make your ear attentive to wisdom, incline your heart to understanding;*

*For if you cry for discernment, lift your voice for understanding;*

*If you seek her as silver, and search for her as for hidden treasures;*

*Then you will discern the fear of the LORD, and discover the knowledge of God.*

*For the LORD gives wisdom; from His mouth come knowledge and understanding."* (Prov 2:2-6)