

Trinity Western University  
Undergraduate Course Syllabus  
MATH 101  
Mathematics for Business  
Summer 2017

Pre-requisite: At least a C in BC Principles of Mathematics 11, Foundations of Math 11, Pre-Calculus 11 or equivalent, or permission from the instructor.

Semester Hours: 3

Instructor: Stephen Benecke

Contact Information: [stephen.benecke@gmail.com](mailto:stephen.benecke@gmail.com)

Office Hours: TBA

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**Academic Calendar Course Description:**

Basic concepts in mathematics with applications in business, finance, and economics. Topics include elementary counting and probability, variables, equations and functions, interest rates, annuities and loan calculations. The course is aimed at business students and serves to enhance a student's understanding of mathematics and its usefulness in a business environment.

**Course Objectives:**

The course is aimed at business students and serves to enhance a student's understanding of mathematics and its usefulness in a business environment. A student who successfully completes the course should have a deeper appreciation for mathematics and have the confidence to employ the techniques in the future. He/she should develop critical thinking skills and the ability to analyze problems systematically. In addition, he/she should be able to present the solutions in a clear and logical manner.

The skills that a student should take from this course are

- to perform calculations effectively and with confidence;
- to critically analyze problems;
- to effectively present mathematical calculations and interpret the results.

**Required/optional Texts and Materials:**

The course material used will consist mainly of class notes and handouts that will be provided by the instructor via the website.

**Instructor:**

Stephen Benecke  
Office: TWUX  
Office Hours: TBA  
Email: [stephen.benecke@gmail.com](mailto:stephen.benecke@gmail.com)

Students are encouraged to approach the instructor if they wish to discuss any aspect of the course, either during office hours, by appointment or by email.

**Course Web page:**

Students are encouraged to visit the course web page <http://stephen.ministryofconstructions.com/math/> on a regular basis. Besides the fact that the assignments will be posted here, it is also a useful tool to convey important information regarding the course.

**Proposed Course Outline:**

The course content may include the following topics:

- Elementary Probability Theory
- Equations, Functions and Graphs
- Financial Mathematics and Interest Rates

**Course Evaluation:**

At the end of each section/day a tutorial session will be held during class time, according to the online schedule. This gives the student the opportunity to solidify their understanding of the concepts and discuss it with the class and the instructor. The tutorial session may conclude with a small quiz. These quizzes contribute 30% of the final grade. There will be additional assignments presented periodically throughout the course. These assignments test the student's understanding of the various mathematical concepts and his/her ability to answer various questions based on the course material. The schedule of assignments and due dates will be available on the course web page and will contribute 10% to the final grade.

There will be one midterm, taken halfway through the course. This test contributes 30% to the final grade. In addition, the final examination contributes 30% to the final grade, and will mainly cover the second half of the course.

Assessment Opportunity	Percentage
Quizzes	30%
Homework Assignments	10%
Midterm	30%
Final Exam	30%

The nature of what students will be expected to do on the tests and the final examination is largely defined by the in-class examples and additional examples.

The University Standard Grading System used in the Department of Mathematical Sciences is:

Letter Grade	Percentage	Grade Point
A+	95-100%	4.3
A	85-94%	4.0
A-	80-84%	3.7
B+	77-79%	3.3
B	73-76%	3.0
B-	70-72%	2.7
C+	67-69%	2.3
C	63-66%	2.0
C-	60-62%	1.7
D+	57-59%	1.3
D	53-56%	1.0
D-	50-52%	0.7
F	Below 50%	0

## **Policies:**

Once marked, homework assignments and midterm tests will be returned in class, or may be claimed during office hours. There will be no make-up tests. If a student misses a test due to reasons in accordance with University regulation, the instructor should be notified as soon as possible. A written request to be excused, as well as the relevant supporting documentation, should be submitted prior to the test. In such cases the other assessment opportunities will be used to assign a score for the missed test.

Students are strongly advised to **not** make final plans for travel or employment during exam period, since special arrangements will not be made for examinations that may conflict with such plans.

Questions or concerns regarding graded test or assignment papers should be brought to the attention of the instructor within 7 calendar days of the date when it was returned. Grades may be posted by student number on the website. If a student wishes to be excluded from this posting, the instructor should be notified in writing.

## **Academic Integrity and Avoiding Plagiarism at TWU**

As Christian scholars pursuing higher education, academic integrity is a core value of the entire TWU community. Students are invited into this scholarly culture and required to abide by the principles of sound academic scholarship at TWU. This includes, but is not limited to, avoiding all forms of plagiarism and cheating in scholarly work. TWU has a strict policy on plagiarism (see academic calendar). Learning what constitutes plagiarism and avoiding it is the student's responsibility. An excellent resource describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke and is freely available for download (PPT file) or used as flash (self running) tutorials of varying lengths from:

<http://acts.twu.ca/library/plagiarism.ppt>

<http://acts.twu.ca/library/Plagiarism.swf> (14 minute flash tutorial)

[http://acts.twu.ca/library/Plagiarism\\_Short.swf](http://acts.twu.ca/library/Plagiarism_Short.swf) (8 minute flash tutorial)

## **Campus Closure and Class Cancellation Policy**

In the event of extreme weather conditions or other emergency situations, please consider the website the primary source of information, along with the TWU bulletin line 604.513.2147. The University will communicate information regarding the cancellation of classes to the following radio stations: CKNW (980 AM), CKWX (1130 AM), STAR FM (107.1 FM), PRAISE (106.5 FM) and KARI (550 AM). Should there be conflicting reports regarding campus closures, the TWU website and bulletin line are to be considered correct.

The first announcement regarding status of campus is made at 6:30 am and covers the period up to 1:00 p.m. The second announcement will be made at 11 am and will cover afternoon classes. Students and faculty should assume that all night classes will continue to operate. If the emergency continues into the evening, students and faculty may check for a class cancellation notice on the University's weather bulletin line or the website after 3:00 p.m. that day.

If this specific class must be cancelled for any other reason, the instructor will communicate this in advance. In the case of an unexpected cancellation, a sign will be posted on the classroom door.

**This document is prepared before the beginning of the course. It is possible that some of the information in it will have to be modified before the course ends. Any such changes will be announced in class and on the course web page. It is the student's responsibility to be aware of any such changes.**