CALVARY UNIVERSITY

Syllabus

COURSE:	MA 103 Data and Decision Making for Educators / MA105 Quantitative Reasoning
CREDIT:	*3 Semester Hours*
SEMESTER:	*Fall 2025 - Sessions 1/2 [16 week course]*
INSTRUCTOR:	*Jon Henderson*
CONTACT INFO:	*Phone: 816/213-0801 (mobile)*
	E-mail: jon.henderson@calvary.edu
MEETING TIME:	Tuesdays, 6:00pm to 9:00pm
DELIVERY:	Blended (recorded lecture and online classroom for discussion and problem solving)

I.   COURSE DESCRIPTION:

MA103 Data and Decision Making for Educators (3 credit hours) A study of mathematics that introduces: data collection, mathematical modeling, and decision making processes, including basic concepts of probability and statistics. This course provides a review of basic functions and algebra as well as creating and reading charts and graphs. Only Education majors may take this course.

MA105 Quantitative Reasoning (3 credit hours) A study of mathematics that introduces: data collection, mathematical modeling, and decision making processes, including basic concepts of probability and statistics. This course provides a review of basic functions and algebra as well as creating and reading charts and graphs.

II.   COURSE OBJECTIVES:

General competencies to be achieved. The student will:
- Gain an understanding of mathematical concepts, processes, and procedures.
  Program Objectives 1 & 5
  Assessment: Homework Assignments and Exams

- Realize mathematics is a gift from God that should be mastered and appreciated.
  Program Objective 2
  Assessment: Class Participation, Homework Assignments

- Develop effective approaches to teaching and learning mathematics.
  Program Objective 1
  Assessment: Homework Assignments

Specific competencies to be achieved. The student will:
- Study the branches of mathematics that will be useful in teaching elementary mathematics.

Program Objective 1
Assessment: Homework Assignments

- Develop skills in mathematical computations.
Program Objectives 1 & 5
Assessment: Homework Assignments and Exams

- Acquire and/or expand mathematical problem-solving skills.
Program Objective 5
Assessment: Homework Assignments, Exams, and Biblical Integration

III.   REQUIREMENTS: All students will be expected to:

- Complete the assigned exercises for each topic covered in the textbook during the course; showing all work on your completed assignments, where appropriate.   Software tools associated with the textbook will be required and utilized throughout the Cycle.

- Complete exams as assigned during the course

- Complete the Biblical Integration Assignments

IV.   METHODS

A. **LECTURES:** Lectures will consist primarily of material from the textbook; however, at the instructor's discretion, additional materials may be incorporated.   Students should take notes as homework questions will be directly related to the lectures.   Lectures will consist of both "live" sessions and pre-recorded sessions; live sessions will also be recorded for student viewing.

B. **TEXTBOOK READING:**   The textbook provides a framework for the class.   Not every topic in the textbook will be addressed during this course.   The instructor will communicate which sections of each chapter will be covered.

C. **HOMEWORK QUESTIONS:**   Homework questions will be assigned for each topic or group of topics within a textbook chapter.   It is imperative that you complete the homework problems to understand the material and to do well on exams.   Exam questions will generally follow homework questions.

D. **EXAMS**:   There will be four (4) unit exams and a final exam.   Questions used for the exams will be similar to those given in the homework assignments. Exam questions may also come from additional material or examples covered in lecture.

Exams for this course *must* be proctored.   The instructor will communicate more about this at the beginning of the course.   The ProctorU test proctoring service will be utilized throughout the Cycle.   ***See the ProctorU addendum at the end of this syllabus for details.***

Plagiarism is defined as copying any content without identifying the source. This also includes taking another person's or AI entity's ideas or constructs and presenting them as your own. The use of AI generated content in student work is prohibited (even if cited) as it does not represent original work created by the student and is an unreliable aggregate of ideas from other sources. Plagiarism of any kind will not be tolerated.

E. **BIBLICAL INTEGRATION ASSIGNMENTS:** Each student will complete two Biblical Integration assignments during the course of the term; one will be discussion based and one will be essay based. Instructions for these assignments will be provided by the instructor at the beginning of the course.

F. **MISSED OR LATE HOMEWORK:** Grades for late homework will be reduced by 15% per day for the parts not completed by the due date. All homework assignments must be turned in by the end of the Cycle to receive credit for the course.

G. **HOW TO GET HELP:**
As instructor, I have a vested interest in your success as a student; therefore, feel free to contact me via email or phone any time you have need (see email address and phone numbers above). Also, please bring any difficulties that you are having to my attention so that they may also be addressed during class time.

The Clark Academic Center (learning@calvary.edu) is dedicated to providing free academic assistance for all CU students. Student tutors aid with all facets of the writing process, tutor in various subject areas, prepare students for exams and facilitate tests. Please take advantage of this service.

Students with disabilities have the responsibility of informing the Accommodations Support Coordinator (aso@calvary.edu) of any disabling condition that may require support.

V. **GRADING -** *See grading scale in the university catalog.*

Homework sets:	20%
Exams:	70%
Biblical Integration Essays:	10%

VI. **MATERIALS – Required   [read below *thoroughly*]**

A) Blitzer, Robert. *Thinking Mathematically*. Pearson, 2023, 8th ed.   ISBN #978-0137551224

The MyLab Math tool will be used with this text during the Cycle; and is therefore *required*. The student may purchase the e-text with MyLab Math tool for use in this course (*a hard-copy text is not required*). For more information, see pearson.com.

MyLab Math with Pearson e-text – 18 week instant access.   ISBN #978-0137551354 $89.99

Important Note: Each student will need a Pearson Course ID specific to this course. Students **MUST** purchase this through the class CANVAS website to ensure that they are in the correct

MyLab Math course.   Instructions will be provided.

B) The Bible is a required textbook in every course at Calvary University. To facilitate academic level study, students are required to use for assignments and research an English translation or version of the Bible based on formal equivalence (*meaning that the translation is generally word-for-word from the original languages*), including any of the following: New American Standard (NASB), English Standard Version (ESV), New King James (NKJV), or King James (KJV). Other translations and versions based on dynamic equivalence (*paraphrases, and thought-for-thought translations like NLT and NIV*) may be used as supplemental sources. Please ask the professor if you have questions about a particular translation or version.

VII.   TENTATIVE CLASS SCHEDULE

WEEKS	TOPICS
1-2	Introduction, Critical Thinking, and Set Theory
3-4	Logic, Number Representation, and Number Theory
5-6	Real Numbers, Sequences, Equations, and Inequalities
7-8	Fundamentals of Algebra, Graphs, Functions, and mathematical Models
9-10	Personal Finance and the Metric System
11-12	Measurement and Geometry
13-14	Basic Trigonometry, Permutations, Combinations, and Probability
15-16	Statistics

ProctorU Addendum

Calvary University uses ProctorU test proctoring service.   ProctorU is a live online proctoring service that allows you to take your exam from the comfort of your home. ProctorU is available 24/7, however, **you will need to schedule your proctoring session at least 72 hours in advance to avoid any on-demand scheduling fees**. Creating a ProctorU account is simple. You can do so by going to https://go.proctoru.com/students/users/new?institution=2045.

Students must read all information and comply with all directions below to be successful for their proctored exam experience. Calvary University hopes that students will have a smooth experience, and to decrease student anxiety and increase success, please use this guide to help you plan for your test. Please note that, per ProctorU, there will be penalties for students who miss their testing window. Technical trouble will not be an

excuse for missing the window. Therefore, pay attention to all details within this guide, and all links included.

System Requirements: Please see the information below supplied by ProctorU for system requirements. If your computer does not have these capabilities, please consider borrowing a computer as you will still be required to complete the exam using the live proctor system with ProctorU. Please note that you will not be able to take your exam(s) in the Calvary University Library due to the activity that will be picked up in a public place.

In order to use ProctorU, you will need a high-speed internet connection, a webcam (internal or external), a Windows or Apple Operating System, and a government issued photo ID. ProctorU recommends that you visit https://test-it-out.proctoru.com/ prior to your proctoring session to test your equipment. They recommend you click on the button that says "connect to a live person" to fully test out your equipment. If using Firefox, please make sure that you are using the current version of your Firefox browser and have downloaded the ProctorU extension available at https://www.proctoru.com/firefox.

Type	Minimum	Recommended	Calvary University Minimum
Web Camera	640×480 resolution	1280×720 resolution	1280×720 resolution
PC Users	Windows Vista	Windows 10 (10 S is not supported)	same
Mac Users	OS X 10.5 or higher	OS X 10.13 High Sierra	same
Internet Download Speed	.768 Mbps	1.5 Mbps	3 Mbps
Internet Upload Speed	.384 Mbps	1 Mbps	2 Mbps
RAM	1024 MB	2 GB	same
Ports	1935, 843, 80, 443, 61613, UDP/TCP	1935, 843, 80, 443, 61613, UDP/TCP	same

- Desktop computer or laptop (not a tablet, Chromebook or cell phone).
- Webcam and microphone (built-in or external) – test your webcam at https://test.webrtc.org/

- Connection to network with sufficient internet speed: at least 3 Mbps download speed and 2 Mbps upload – test internet speed at www.speedtest.net
- Operating systems: Windows Vista or newer, Mac OS X 10.5 – or newer
- Browser with pop-up blocker disabled: Google Chrome v39 or later, Mozilla Firefox v34 or later.

Additionally, please visit and review the test-taker resource center by going to https://www.proctoru.com/proctoru-live-resource-center. You should expect the startup process with the proctor to take about 10-15 minutes. However, this time will not affect your exam time. Please feel free to direct any questions to the student support team via the live chat within your account.

****If you have any questions or concerns, contact Proctor U's technical support team 24/7 via their live chat support at https://www.proctoru.com/contact-us

Costs for ProctorU exams are listed below and are payable to ProctorU at the time of the test.   These costs assume that a student will schedule their exam at least 72 hours in advance of the exam start time:

- 60 minutes or less - $8
- 61 – 120 minutes - $10
- 121 – 180 minutes - $12

For those not scheduling an exam at least 72 hours in advance, late scheduling charges are added in addition to the above fee structure. There are two options for late scheduling:

- "Take It Soon" allows a test to be scheduled less than 72 hours but more than 24 hours before the desired start time.   This option includes an additional fee of $8.00.   (Total cost for a 60 minute exam scheduled as "Take It Soon" would be $16.)
- "Take It Now" allows a test to be taken on-demand with no appointment needed. This option includes an additional fee of $12.00. (Total cost for a 60 minute exam scheduled as "Take It Now" would be $20.)

These options are for the convenience of the examinee. Any charges applicable to the examinee must be paid with a credit or debit card. The test taker will be required to enter payment information on a secure page connected to a third-party card processor. The page is encrypted and secure and ProctorU does not see or store any credit card data.

Examinees will be required to re-enter payment information each time new charges are incurred.