

Contemporary Mathematics

LSCM 1325 New Orleans Baptist Theological Seminary Leavell College Spring 2017 Elizabeth Travieso etravieso23@bellsouth.net Office phone 305-888-9777

Monday	8:00 - 10:00 pm	LSCM1325 Contemporary Math IN ENGLISH
Thursday	6:00 - 7:59 pm	LSCM1325 Contemporary Math IN SPANISH

Course Description

This course is intended to provide the student with essential mathematical concepts including uses of mathematical modeling and logical thinking in problem solving. Selected topics will include logic and sets, the real number system, functions and their graphs, probability and statistics.

Student Learning Outcomes

At the conclusion of the semester, the student will be able to:

- 1. Distinguish between inductive and deductive reasoning.
- 2. Identify mathematics concepts used in contemporary situations.
- 3. Classify elements of the real number line.

Course Text

Smith, Karl J. The Nature of Mathematics, 13th edition. + MindTap® Math, 1 term (6 months) Printed A. 13 edition. Boston: Cengage Learning, 2017.

All students will need to purchase the Mindtap bundle of the textbook. There are two options. One option includes the textbook as a loose leaf hard copy. The second option is Mindtap access only. The textbook is available through Mindtap as an ebook. Either option is acceptable. Students must have a current access to Mindtap. The following ISBN numbers are for each option:

Mindtap access only: 9781305876590

Mindtap access + loose leaf text: 9781337131209

Materials

Textbook, 3-Ring binder with dividers, paper, pencils, eraser, colored pen or marker (not blue or black) and calculator.

Course Methodology

This course will consist of lectures, class/group discussions and activities, homework and projects.

Additional Course Information

This course uses Blackboard to assist with information distribution. The professor will post announcements and grades in the course shell. Students should check regularly as professor will also post links to helpful websites and videos. The course utilizes Mindtap, an online, enhanced learning environment. Students will complete coursework within Mindtap.

- Absence Policy: Per the catalog, "Students may not miss more than 9 class hours for a 3-semester hour course."
 Roll will be taken at the beginning of each period. It is the responsibility of the student to contact the professor if he/she is tardy and the roll has already been taken.
- 2. Homework Problems will be assigned from the section(s) taught in class.

 The homework will be discussed and corrected at the beginning of each class.
- 3. Exams: The objective specifically related to each chapter will be evaluated through a chapter test on the assigned day. All course objectives will be evaluated through a midterm and comprehensive final exam on the assigned day. Students are responsible for scheduling makeup exams. All makeup must be taken within one week of the time the student returns to class.
- 4. Course Evaluation: The final grade for the course will consist of the following:

Homework/Projects	20%
Chapter Tests	40%
Midterm exam	20%
Final Exam	20%

Bibliography

Bullock, Gregory. *Algebra in Words: A Guide of Hints, Strategies and Simple Explanations*. Acute Books: 2014.

Conway, J. H. The Book of Numbers. New York: Springer -Verlag, 1996

Coughlin, R. The Ascent of Mathematics. New York: McGraw-Hill, 1984.

Courant & Robins. What is Mathematics? Oxford: Oxford University Press. 1969.

Feller, William. Introduction to Probability Theory. New York: Wiley, 2008.

Freedman, David, Robert Pisani, Roger Purves, *Statistics*, 4th ed., New York: W. W. Norton & Company, 2007.

Gelfand, Israel M. and Shen, Alexander. Algebra. Berlin: Birkhäuser: 2002.

- Huettenmueller, Rhonda. *Algebra DeMYSTiFieD*. 2nd ed. New York: McGraw-Hill Professional, 2010.
- Kline, M. *Mathematical Thought from Ancient to Modern Times*. New York: Oxford University Press, 1972.

Lang, Serge. Algebra. 2nd ed. New York: Addison-Wesley Pub. Co., 1984

Course Schedule

Week of January 23	INTRODUCTION TO COURSE, Chapter 1: The Nature of Problem Solving (Intro & 1.1		
January 30	Chpt. 1 cont. Inductive and Deductive Reasoning, Scientific Notation (1.2 & 1.3)		
February 6	Chapter 2: The Nature of Sets Test Chapt. 1 (2.1)		
February 13	Chpt. 2 cont.: Operations, Applications, Finite and Infinite Sets (2.2, 2.3, & 2.4)		
February 20	Chapter 3: The Nature of Logic Test Chapt. 2 (3.1 & 3.2)		
February 27	Chapter 3 cont., Operators, Nature of Proof & Problem Solving (3.3, 3.4 & 3.5)		
March 6	Chapter 4: The Nature of Numeration Systems, 4.1 4.2 MIDTERM (Chpts. 1-3)		
March 13	Spring Break		
March 20	Chpt. 4 cont.: Different Numeration Systems and Binary (4.3 & 4.4)		
March 27	Chapter 5: The Nature of Numbers (5.1 5.2) Test Chapt. 4		
April 3	Chapter 5 cont.: Integers and Rational Numbers (5.3 & 5.4)		
April 10	Chapter 5 cont.: Irrational Numbers, Groups Fields & Real Numbers (5.5 & 5.6)		
April 17	Chapter 12: The Nature of Counting, Test Chap. 5 (12.1 12.2 12.3)		
April 24	Chapter 11: The Nature of Financial Management, Test Chap. 12 (11.111.2)		
May 1	Chpt. 11 cont.: Sequences and Series (11.3 & 11.4) Review for Final		
May 4 May 8		Thursday class Monday class	

The key to success in this math class is to try. Do all the work. Give your best answers. If you are confused, contact the professor. His job is to help you.