

# LCGE1372-30 Contemporary Mathematics Spring 2021 (213)

Monday, 8:00 -10:00 pm

Chrisnel Lamy, MS Adjunct Professor Cell: 516-444-2138

Clamy26@gmail.com

#### **Mission Statement**

New Orleans Baptist Theological Seminary and Leavell College prepare servants to walk with Christ, proclaim His truth, and fulfill His mission.

## **Course Description**

Students will learn 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. *Prerequisite: None.* 

#### **Course Student Learning Outcomes (CSLOs)**

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

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

#### **Course Texts**

Smith, Karl J. *The Nature of Mathematics*. 13<sup>th</sup> edition. + webassign, 1 term (6 months), 13 edition. Boston: Cengage Learning, 2017.

All students will need to purchase the textbook through the Webassign course. Please follow the instructions provided in the Student Quick Start Guide available in the Blackboard course under the information tab.

#### **Course Requirements and Grading**

- 1. Complete homework assignments. 20%
- 2. Five Sectional tests. 40%

3. Complete midterm exam. 20%

# 4. Complete comprehensive final exam. 20 %

COURSE GRADING		<b>GRADING SCALE</b>
Participation/Homework	20%	A: 93 - 100
Sectional Exams	40%	B: 85 - 92
Midterm	20%	C: 77 – 84
Final Exam	20%	D: 70 – 76
		F: below 70

# **Course Schedule**

Week	Week of	Tonic	Textbook Reading	Assignment
1	Jan 25	Introduction, Chapter 1: <i>The Nature of Problem</i> <i>Solving</i>	Chapter 1 (Intro & 1.1)	Pretest
2	Feb 1	Chapter 1 cont'd: Inductive and Deductive Reasoning, Scientific Notation	Chapter 1 (1.2 & 1.3)	
3	Feb 8	Chapter 2: <i>The Nature of Sets</i>	Chapter 2 (2.1)	Test Chapt. 1
4	Feb 15	Chapter 2 cont'd: <i>Operations, Applications,</i> <i>Finite and Infinite Sets</i>	Chapter 2 (2.2, 2.3, & 2.4)	
5	Feb 22	Chapter 3: <i>The Nature of Logic</i>	Chapter 3 (3.1 & 3.2)	Test Chapt. 2
6	March 1	Chapter 3 cont'd: <i>Operators, Nature of Proof</i> & <i>Problem Solving</i> (3.3, 3.4 & 3.5)	Chapter 3 (3.3, 3.4 & 3.5)	
7	March 8	Chapter 4: <i>The Nature of Numeration</i> <i>Systems</i>	Chapter 4 (4.1 & 4.2)	MIDTERM (Chpts. 1-3)
8	March 15-19	Spring Break		
9	March 22	Chapter 4 cont'd: <i>Different Numeration</i> <i>Systems and Binary</i>	Chapter 4 (4.3 & 4.4)	

			Textbook	
Week	Week of	Торіс	Reading	Assignment
10	March 29	Chapter 5:	Chapter 5	Test Chapt. 4
		The Nature of Numbers	(5.1 & 5.2)	
11	April 5	Chapter 5 cont'd:	Chapter 5	
		Integers and Rational	(5.3 & 5.4)	
		Numbers		
12	April 12	Chapter 12:	Chapter 12	Test Chap. 5
		The Nature of Counting	(12.1, 12.2 12.3)	
13	April 19	Chapter 11:	Chapter 11	Test Chap. 12
		The Nature of Financial	(11.1 &11.2)	
		Management		
14	April 26	Chapter 11 cont'd:	Chapter 11	
	-	Sequences and Series	(11.3 & 11.4)	
15	May 3	Review		
16	May 10	Final Exam		Final Exam

## ADDITIONAL COURSE INFORMATION

- 1. <u>Attendance Policy</u>: Leavell College follows the attendance policy as stated in the Leavell College catalog.
- 2. <u>Policy for Late Submissions:</u> All late assignments will be penalized five points for the first day and one point per day thereafter, with no assignments being accepted more than one week past the due date.
- 3. <u>Plagiarism Policy</u>: A high standard of personal integrity is expected of all Leavell College students. Copying another person's work, submitting downloaded material without proper references, submitting material without properly citing the source, submitting the same material for credit in more than one course, and committing other such forms of dishonesty are strictly forbidden. *Although anything cited in three sources is considered public domain, we require that all sources be cited*. Any infraction may result in failing the assignment and the course. Any infraction will be reported to the Dean of Leavell College for further action.
- 4. <u>Classroom and Online Decorum</u>: Each student is expected to demonstrate appropriate Christian behavior. The student is expected to interact with other students in a fashion that will promote learning and respect for the opinions of the others in the course. A spirit of Christian charity is expected at all times. Electronic devices should be used only for classroom purposes as indicated by the professor.

- 5. <u>Special Needs</u>: If you need accommodations for a disability, please set up a meeting with the professor for consideration of any modifications you may need.
- 6. <u>Emergency Plan</u>: In the event the NOBTS schedule is impacted due to a natural event, go to the seminary's website for pertinent information. Class will continue as scheduled through the Blackboard site. Please note announcements and assignments on the course's Blackboard site.
- 7. <u>Technical Assistance</u>: For general NOBTS technical help, go to <u>www.NOBTS.edu/itc/</u>

#### **Selected 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*, 4<sup>th</sup> 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.