

1400 COLLEGE DR., WACO, TEXAS 76708

# COURSE SYLLABUS AND INSTRUCTOR PLAN

# Foundations of Math Reasoning Math 0308.L87 linked with Contemporary Mathematics (Quantitative Reasoning) Math 1332.L87

Professor Cindy Burns Fall 2021

# NOTE: This is a 16-week course. NOTE: This is an ONLINE course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website on any changes to these guidelines.

AN EQUAL OPPORTUNITY INSTITUTION

# **COURSE DESCRIPTION:**

**0308 Foundations** is a quantitative literacy-based course designed to provide students with the skills and conceptual understanding for success in a quantitative literacy course (Math 1332). It is organized around big mathematical and statistical ideas. Foundations will help students develop conceptual understanding and acquire multiple strategies for solving problems. Semester hours: 3 lecture

**1332 Contemporary Mathematics** is intended for Non-STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Semester hours: 3 lecture

## PREREQUISITES AND/OR COREQUISITES:

TSIA score less than 950 with a Diagnostic score of 3-4. This is a co-requisite class with Math 0308 and Math 1332 linked together as per Texas HB 2223.

## COURSE NOTES (1.) AND INSTRUCTOR RECOMMENDATIONS (2.):

- 1. This class is **LINKED** which means we will cover two math courses in one semester. One book will be used to cover both. Each course will have its own grading and attendance requirements and those will also be linked. It is possible to pass both courses or to pass 0308 but not pass 1332 or to fail both courses.
- All information for both courses will be available in one syllabus and in the **1332** Brightspace Course.
- Instruction in 0308/1332 will focus on the 1332 Contemporary Math concepts while using the allotted time for 0308 to do more in-depth study and practice.

This class is **ONLINE** which means all instruction is online with all assignments done online.

- Instruction is called **Classwork (CW)** and must be done before the practice of skills will open. CW is not part of the course grading. It consists of videos, pages of the e-text, interactive work, and practice problems similar to a classroom experience.
- Every section of **Homework (HW)** must be done to a grade of 85 before a quiz will open.
- The **Syllabus Quiz** will need a grade of 100 before any assignments will open. Other **quizzes** need a minimum grade of 75.
- A **Test** will open after the corresponding quiz has a grade of 75.
- Two tests and the Final Exam will be proctored by a proctoring service which means that every student will be videoed while taking the test. Students will need a webcam and to use a computer that is NOT a Chromebook or a mobile device.

Pearson's **MyLabMath** (MLM) will be the delivery system for homework, quizzes, tests, and online instruction. The fee for MLM was included in the tuition statement and no code of any sort is needed. If a physical textbook is desired, I recommend buying an older edition online via a 3<sup>rd</sup> party seller or Pearson offers a \$50 option.

- **good time management**--create a schedule including all activities to determine best time to do math.
- Inderstand the requirements--read/consult the syllabus often. Due dates are used to keep students moving at a good pace. Before any assignments will open in MLM, the student will need to score 100 on the Syllabus Quiz. All assignments can be reviewed by clicking MLM Gradebook.
- **get organized**—a lot of paper is used in the class and needs to be orderly.
- **do the work**--work regularly on assignments. Regularly means several times a week!
- dedicate yourself to the task--experts recommend spending at least twice the course hours in study weekly. In a linked class, we have 6 hours per week for instruction. If we multiply that by 2, then students need to schedule 12 hours a week of homework/study time in addition to the 6 hours of classwork.
- get help early—see the box titled, "HELP."
- use the resources MCC provides—get your money's worth!!! A complete list of support from MCC: <u>https://www.mclennan.edu/campus-resource-guide/</u>

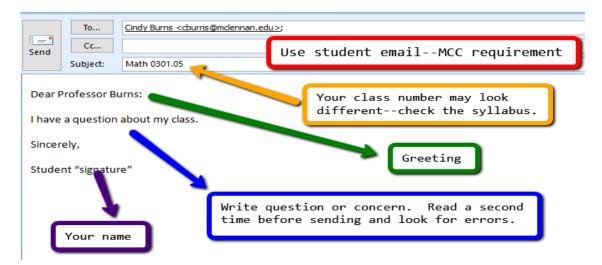
## **INSTRUCTOR INFORMATION:**

Instructor:Cindy BurnsMCC Email:cburns@mclennan.eduOffice Phone:254-299-8877Office Location:Mathematics Bldg., #219Office/Teacher Conference Hours:

On campus:Mon./Wed. 9:00-9:30 and 12:40-1:10Online:Emails answered frequently and daily EXCEPT Sunday.ZoomIf needed, I can meet via Zoom by request of a student.

Replies to emails will be within 24 hours, but not on Sunday **AND if the email is written in the correct form**. Phone calls will be returned during on campus conference hours.

- **Correct form for emails:** 
  - Subject line has the class title and number-Math 1332.L87
  - It is addressed as: Dear Mrs. Burns or Professor Burns
  - It is signed with the student's first and last name
  - Comes from student email account (MCC requirement) or from MyLabMath
  - Below is a sample email in proper form



# **REQUIRED TEXT & MATERIALS:**

We use MyLabMath from Pearson for online work. The cost is included in student's tuition statement. Nothing needs to be purchased from the bookstore. See COURSE NOTES if a textbook is desired.

- 1. Title: Thinking MathematicallyAuthor: Robert BlitzerEdition: 7thPublisher: Pearson
- 2. ACCESS TO A DESKTOP OR LAPTOP COMPUTER WITH HIGH SPEED INTERNET SERVICE and a WEBCAM—THE PROCTORING SERVICE WILL NOT WORK ON A CHROMEBOOK OR A MOBILE DEVICE. THE WEBCAM IS NEEDED FOR TEST PROCTORING AND TO ENGAGE IN A ZOOM MEETING IF NEEDED.
- 3. 1½ in. 3-ring binder with 5 dividers & paper OR spiral with 2-4 pockets—for note-taking and paper organization → Label dividers: handouts, notes, homework, practice tests, quizzes/tests
- 4. Pencils/pens plus a colored pen/pencil or highlighter-to grade own work or underline important info.
- 5. Calculator-scientific, non-graphing, non-phone

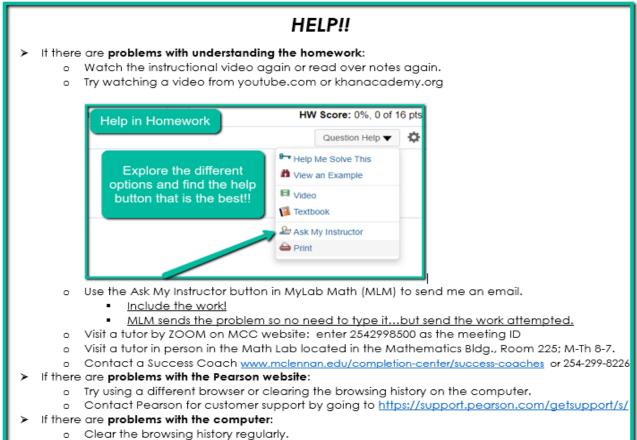
# MCC Bookstore Website: <u>http://www.mclennan.edu/bookstore/</u>

## METHODS OF TEACHING AND LEARNING:

Students will spend considerable time in and out of the classroom:

- watching and listening to instruction,
- taking notes,
- practicing new skills,
- doing homework, quizzes, and tests, and
- seeking help if needed.

Learning a new skill takes patience and practice...and lots of both!!



o Call MCC's Technical Support at 254-299-8077 or email: helpdesk@mclennan.edu

# COURSE OBJECTIVES AND/OR COMPETENCIES:

FOR 1332: Upon successful completion of this course, students will:

- 1. Apply the language and notation of sets.
- 2. Determine the validity of an argument or statement and provide mathematical evidence.
- 3. Solve problems in mathematics of finance.
- 4. Demonstrate fundamental probability/counting techniques and apply those techniques to solve problems.
- 5. Interpret and analyze various representations of data.
- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings, including, but not limited to, personal finance, health literacy, and civic engagement.

FOR 0308: Upon successful completion of this course, students will:

- 1. Use appropriate symbolic notation and vocabulary to communicate, interpret, and explain mathematical concepts.
- 2. Define, represent, and perform operations on real numbers, applying numeric reasoning to investigate and describe quantitative relationships and solve real world problems in a variety of contexts.
- 3. Use algebraic reasoning to solve problems that require ratios, rates, percentages, and proportions in a variety of contexts using multiple representations.
- 4. Apply algebraic reasoning to manipulate expressions and equations to solve real world problem.
- 5. Use graphs, tables and technology to analyze, interpret, and compare data sets.
- 6. Construct and use mathematical models in verbal, algebraic, graphical, and tabular form to solve problems from a variety of contexts and to make predictions and decisions.

This course will use a variety of internal and external instruments to assess the core objectives of critical thinking, communication, and empirical/quantitative analysis.

<u>Critical Thinking</u>: Students used inductive and deductive reasoning, explore problems using logical process of inquiry, analysis evaluation and synthesis. Assessment will use discussion, independent practice, collaborative experience, instructional technology, departmental test bank and/or CAAP test.

<u>Communications</u>: Students turn in written assignment involving topics related to College Algebra or other mathematics. They then share their result with their instructor and/or colleagues in class via written, oral, and/or visual methods. Assessment will use at least one of the following: board work, class time explanation, personal interview, case study presentation, poster board presentation, small group presentation, or online presentation.

Evaluation process will use departmental rubric for communication assessment.

	4 Student demonstrates full knowledge with no mistakes and elaborates	3 Student demonstrates good knowledge but does not elaborate.	2 Student demonstrates limited knowledge but makes several mistakes	l Student does not have a grasp of the mathematical information.
LANGUAGE	on math concepts.			
IN ORAL LANGUAGE	4 Student uses fluent and accurate words to describe mathematical concepts and processes.	3 Student uses somewhat appropriate words to describe mathematical concepts and processes.	2 Student uses vague words to describe mathematical concepts and processes.	l Student uses incorrect and confusing words to describe math concepts and processes.
IN VISUAL LANGUAGE	4 Student uses appropriate and accurate visual representation of math concepts and processes.	3 Student uses somewhat appropriate and accurate visual representation of math concepts and processes.	2 Student uses some inaccuracy in visual representation of mathematical concepts and processes.	1 Student uses total inaccuracy in visual representation of math concepts and processes.

Empirical/Quantitative Analysis: Students work on various mathematical problem solving skills throughout the course. The course focuses on the manipulation and analysis of numerical data or observable facts as presented in application problems and/or problem skill sets in which students demonstrate their ability to reach informed conclusions using mathematical process. Assessment will include discussion, independent practice, collaborative experience, instructional technology to include questions from a departmental test bank and/or the CAAP test.

**<u>COURSE OUTLINE OR SCHEDULE:</u>** The outline is located on pg. 8 of the syllabus for use as a checklist.

# **COURSE GRADING INFORMATION:**

For 1332, students will receive a letter grade of either A, B, C, D or F based on averages below:  $A = 90\% + B = 80-89\% \quad C = 70-79\% \quad D = 60-69\% \quad F = below 60\%$ 

Grading in the 1332 course will be based according to the following percentages.

Homework: 20% Quizzes (5): 15% Tests (4): 40% Final Exam: 25%

**For 0308**, students will receive CR (credit) if he/she passes 1332. If a student fails 1332, then the grade for 0308 will be based on homework (50%) and the average of Test 1 and Test 2's grades (50%). If that average is above 70 or above, the student will receive CR. If average is lower than 70, then student will receive NC (No Credit).

Student's **GRADEBOOK** is in Brightspace/Content/MyLab Math Gradebook.

# Homework:

Homework problems may be found by clicking the **All Assignments** button in Brightspace/Content.

- Homework (HW) will open after the corresponding Classwork (CW) is done with a score of 85.
- Homework assignments are due the following Sunday as listed in the Course Schedule, p. 8.
- Each missed problem can be re-done until it is correct so it is possible to score 100.
- After the due date, homework may still be completed with a 1% per day penalty.
- EVERY HOMEWORK SECTION MUST BE DONE WITH A MINIMUM GRADE OF 85 TO OPEN A QUIZ.

# <u>Quizzes:</u>

Quizzes may be found by clicking the All Assignments button in Brightspace/Content.

- The first quiz tests knowledge about the requirements for this class. Students must score 100 on the Syllabus Quiz before any classwork (CW) or homework (HW) assignments will open.
- The next four quizzes are practice test quizzes for the four tests.
- The quizzes are timed to give the student the experience of a timed test before taking a test.
- EACH QUIZ NEEDS A MINIMUM GRADE OF 75 BEFORE THE CORRESPONDING TEST WILL OPEN.

# <u>Unit Tests:</u>

Tests may be found by clicking the **All Assignments** button in Brightspace/Content.

- Tests have a **75 minute time limit** which is the same as a face-to-face long semester class.
- Each test will be available after the corresponding practice quiz has a grade of 75.
- Two attempts are given for tests unless taken after the due date.
- A scientific, non-phone calculator may be used.
- Notes may be used.
- Test 2 and 4 will be proctored. Students will enter the test as usual and follow the directions. Respondus Monitor will check that the computer's webcam is working correctly before starting. Students will need a school I.D. or a driver's license. Everyone is videoed while taking the test and the video will check for improper behavior during a test.
- The tests have strict due dates to keep everyone moving at a good pace through the class. If a test is not done by the due date, then the student will lose one attempt. A test's availability will disappear one week after the due date. If a student does not take a test, then the student needs to drop the class since all work for this class must be done.

# <u>Final Exam:</u>

At the end of the semester students will take an **online PROCTORED comprehensive FINAL EXAM**.

- The Final Exam will have a **two-hour limit** and there is only one chance to take it.
- A scientific, non-graphing, non-phone calculator may be used.
- Notes may be used.
- THE FINAL WILL OPEN IF ALL TESTS HAVE BEEN TAKEN.
- No one will be able to pass this course without taking the final exam.

# LATE WORK, ATTENDANCE, AND MAKE UP WORK POLICIES:

- Late work: Assignments for a week will close each Sunday at 11:59 p.m. Students may continue to work on homework assignments after the due date but will incur a 1% per day penalty. Quizzes will not incur a penalty if done or re-done after their due dates. If a test is taken late, then the opportunity to take it twice is eliminated. All assignments except the final will close permanently on the Sunday before the final.
- <u>Attendance</u>: Regular attendance is required by the college and is beneficial to the learning process.
  However, in an online class attendance is very flexible and therefore needs to be planned. Schedule time in your week, preferably every day, to work on math. Attendance will be recorded in Brightspace.
  - Attendance is based on work activity and test completion. Students will be marked absent if no work is done in a 7-day period ending Sunday night or when a test is not done by its due date. There are 16 attendance checks. Students with 4 absences will be dropped. If a student is dropped from a linked class, then he/she will be dropped from both courses.

## A student may also be dropped from this class for:

- Never attended...if student does not reply to the DAY ONE email and isn't working.
- Lack of participation...if student misses 2 tests and does not provide excused reasons.
- Lack of participation...if student does not work on homework for two consecutive weeks.
- Make-up Work: ALL OF THE WORK IN THIS ONLINE CLASS MUST BE DONE. Penalties are in place for late work (see above). NO MAKE-UP TESTS. If a serious situation affects a student's progress, the student needs to share that information with the instructor so options may be discussed.

## STUDENT BEHAVIORAL EXPECTATIONS OR CONDUCT POLICY:

- Students are expected to:
  - "attend" class on a regular basis and participate in the learning process.
  - o treat other humans with respect and fairness.
  - o use resources provided by the instructor or Pearson or other online resources.
  - display integrity while taking tests.
    - DON'T CHEAT YOURSELF OF AN EDUCATION!
    - If a student is found to be doing anything that is not ethical, then the student will be reported for suspicious test-taking behavior.
    - If cheating is discovered, then the grade for that assignment will become zero.

## <u>\* Click Here for the MCC Attendance/Absences Policy</u>

(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have guidelines specific to this course.

# \* **TO GET STARTED IN THIS COURSE:** An email will be sent on the first day of class; go to Brightspace on the first day, read the announcement, and watch the attached video.

## Course outline/schedule:

This schedule is subject to change and if changes are made, then students will be notified by an announcement in Brightspace. **PAY CLOSE ATTENTION TO DUE DATES AND PLAN A SCHEDULE ACCORDINGLY!!** 

WEEK	BEGINS	CLASSWORK (CW) & HOMEWORK (HW) SECTIONS COVERED Assignments are due the following Sunday at 11:59 p.m.	DUE DATES
1	Aug. 23	Introductions/read syllabus/take Syllabus QUIZ	
	Ŭ	1.1 Inductive & Deductive Reasoning	SQ & HW
		1.2 Estimation, graphs, math models	due Aug. 29
2 Aug. 30		1.3 Problem solving	
		2.1 Basic Set Concepts	HW due Sep. 5
		2.2 Subsets	
	Sep.6	LABOR DAY HOLIDAY	
		2.3 Venn Diagrams and set operations with 2 sets	HW due Sep. 12
4 Se	Sep. 13	2.4 Venn Diagrams and set operations w/ 3 sets	
		Take Practice Test 1 QUIZ and review vocabulary from CW notes.	HW, PTQ1, & T1 due
		TAKE TEST 1—CRITICAL THINKING & SET THEORY (online)	Sep. 19
5 Sep	Sep. 20	8.1 Percent, Sales Tax, and Discounts	
		8.2 Income Tax	HW Sep. 26
6	Sep. 27	8.3 Simple Interest	
		8.4 Compound Interest	HW due Oct. 3
		8.5 Annuities	
	Oct. 4	8.6 Cars	
		8.7 Cost of Home Ownership	HW due Oct. 10
8	Oct. 11	8.8 Credit Cards	
		Take Practice Test 2 Quiz and review vocabulary from CW notes.	HW, PTQ2, & T2
	0 1 10	TAKE TEST 2—PERSONAL FINANCE      (Proctored online)	due Oct. 17
9	Oct. 18	2.5 Survey Problems	
		8.1 Percent Formula	HW due Oct. 24
10	Oct OF	9.1 Dimensional Analysis	
10	Oct. 25	9.2 Metric Conversions	LINA due Oct 21
		9.3 Temperature Conversions	HW due Oct. 31
11	Nov 1	10.2 Triangles	
11	Nov. 1	10.3/10.4 Perimeter and Area 10.5 Volume and Surface Area <b>Take Practice Test 3 QUIZ and review vocabulary from CW notes.</b>	HW, PTQ3, & T3
		TAKE TEST 3—DIMENSIONAL ANALYSIS & MATH MODELS (online)	due Nov. 7
12 No	Nov. 8	11.1 Fundamental Counting Principle	
12	1100.0	11.2/11.3 Permutations/Combinations	HW due Nov. 14
		11.4 Fundamentals of probability	1100 000 1100. 14
13	Nov 15	11.6 Events with NOT, OR, AND	
15	1404.10	12.1 Sampling, Frequency Distributions, Graphs	HW, PTQ4, & T4 due
		12.2 Measures of Central Tendency	Nov. 21
14 No	Nov. 22	12.3 Measures of dispersion	
	1.07.22	12.4 Normal Distribution	HW due Nov. 28
		THANKSGIVING HOLIDAY	
15	Nov. 29	Take Practice Test 4 Quiz and review vocabulary from CW notes.	All assignments due
		TAKE TEST 4—PROBABILITIES & STATISTICS (Proctored online)	Dec. 5.
16	Dec.6	FINAL EXAM—Cumulative assessment—exam proctored online	FINAL finished before
			6 p.m. on Dec. 9

# McLennan C O M M U N I T Y

# COLLEGE

# ACADEMIC RESOURCES/POLICIES

# Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <a href="http://www.mclennan.edu/campus-resource-guide/">http://www.mclennan.edu/campus-resource-guide/</a>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing <u>SuccessCoach@mclennan.edu</u>. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

# MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <a href="https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html">https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html</a> to find out more about the emergency grant. The application can be found at <a href="https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf">https://www.mclennan.edu/foundation/docs/Emergency\_Grant\_Application.pdf</a>.

# Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

# **Backup Plan for Technology:**

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

# Minimum System Rquirements to Utilize MCC's D2L|Brightspace:

Go to <u>https://www.mclennan.edu/center-for-teaching-and-</u> <u>learning/Faculty%20and%20Staff%20Commons/requirements.html</u> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

# **Email Policy:**

McLennan Community College would like to remind you of the policy (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

## Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

# Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email <u>Helpdesk@mclennan.edu</u> for help.

## Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

# MCC Academic Integrity Statement:

Go to <u>www.mclennan.edu/academic-integrity</u> for information about academic integrity, dishonesty, and cheating.

# Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

# Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at <u>titleix@mclennan.edu</u> or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <u>http://www.lighthouse-services.com/mclennan/</u>.

Go to McLennan's Title IX webpage at <u>www.mclennan.edu/titleix/</u>. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

# **Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.