

WACO, TEXAS

COURSE SYLLABUS

And

INSTRUCTOR PLAN

Foundations of Math Reasoning

MATH 0308.L87

JESS COLLINS

NOTE: This is an 11-week Summer course.

NOTE: This course is co-requisite with MATH 1342.L87

NOTE: This is an Online course.

Foundations of Quantitative Reasoning

MATH 0308.L88

Course Description:

Foundations is a quantitative literacy-based course designed to provide students with the skills and conceptual understanding for success in a college-level statistics (Math 1342) or 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. The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. Semester Hours: 3.

Prerequisite: TSI math score of 328-341 or consent of division director

Course Notes and Instructor Recommendations:

The syllabus and the log-in information for Pearson's MyLabMath are in Brightspace while all instruction, homework, quizzes, and tests are located in MyLabMath which is an online platfom that must be purchased by the student to access course information and assignments.

You <u>do not</u> have to purchase <u>MyMathLab</u> access for this course, but <u>rather purchase MyMathLab access</u> <u>for the statistics course</u>: <u>MATH1342.L87</u>. All homework assignments, quizzes, and tests for the course will be in the MyMathLab webpages of the statistics course.

In an online class, students need to be very diligent in doing the work in a timely manner. Due dates are set to keep students moving at a good pace. Since good time-management will be important for the student's success I recommend everyone create a schedule and spend time daily on math. I recommend that you spend at least 21 hours per week in viewing the lesson videos, taking notes, studying the definitions, concepts, and procedures presented and working homework assignments. Contact me with any questions or problems that you may have.

Instructor Information:

Instructor Name: Jess Collins

MCC E-mail: jcollins@mclennan.edu Office Phone Number: 254-299-8176 Office Location: Math Bldg; Office 226 B

Office/Teacher Conference Hours: MWF 10:00 – 11:30 am by email

4:30 – 7:00 pm

TTh 9:30 – 11:00 am

7:00 – 8:30 pm

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Email Correspondence:

I will respond to student email within 24 hours for communication received Monday through Saturday of each week. It may be a bit slower response on Sunday, but I will try to respond to each email in a timely fashion. Be sure to contact me with questions and comments that you have about the course; I want to provide the help you need to be successful in the course.

Follow the instructions below when contacting me by email:

Use your School email address...@mclennan.edu

At the top of your email, indicate the course number and section: MATH 030A8.L88 Clearly express your questions (or comments) about any problems you are having in the course Give your first and last Name at the bottom of the email.

This will help me organize and file your questions so that I can email you in a timely fashion.

Text & Materials:

Students DO NOT need to purchase the <u>MyMathLab Access code</u> for the textbook. Instructional material will be provided through Brightspace.

Students will purchase access to MyMathLab from the MATH 1342.L88 Instructor Plan. Login Instructions for MyMathLab are there as well.

- 2. ACCESS TO A COMPUTER WITH HIGH SPEED INTERNET SERVICE. A cell phone will not work.
- 3. Access to a printer—to print handouts normally handed out in a face-to-face class
- 4. Access Scanner or ability to photograph test work and input this into a document to submit.
- 5. Graph (or quad) paper—10 sheets min—may print from www.incompetech.com/graphpaper/plain/
- 6. Calculator (scientific, non-graphing, non-phone)
- 7. Pencils, colored pens, binder, notebook paper, 3x5 index cards (suggested)

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

Course Objectives:

This course is a quantitative reasoning course which means students will learn to use, understand, and communicate about quantitative information. 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 problems.
- 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.

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Bookstore Website: http://www.mclennan.edu/bookstore/

HELP!!

- > It there are problems with understanding the homework:
 - o Use the Ask My Instructor button in MyLab Math (MLM) to send me an email.
 - Include your work!
 - o Try watching a video from youtube.com or khanacademy.org.
 - Visit a tutor by ZOOM on MCC website: enter 2542998500 as the meeting ID
 - o Contact a Success Coach www.mclennan.edu/completion-center/success-coaches or 254-299-8226.
- > If there are problems with the Pearson website:
 - o Try using a different browser or clearing the browsing history on your computer.
 - o Contact Pearson for customer support at 1-844-292-7015.
- > If there are problems with your computer:
 - Clear the browsing history regularly.
 - Call MCC's Technical Support at 254-299-8077

Course Outline or Schedule:

This schedule is subject to change as we navigate through the semester. I will make announcements of any upcoming changes in Brightspace and in MyMathLab. I will post these announcements in a timely fashion.

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MATH 0308.L88/ MATH 1342.L88 CO-REQUISITE COURSES SUMMER 2023

TENTATIVE CALENDAR

Week	Dates	Topics	Dev Lessons	Stat Lessons
1	May 30 –	Common fractions	Lesson 1	
	June 4	Decimal fractions	Lesson 2	
		Percent	Lesson 3	
		Percentage Problems	Lesson 3b	
		Order of Operations	Lesson 4	
2	June 5 – 11	Venn diagrams,	Lesson 5	
		Bar graphs	Lesson 6	
		Pie charts	Lesson 6b	
		Statistical Thinking		Lesson 1
		Types of Data		Lesson 2
3	June 12 – 18	Data		Lesson 3
		Frequency Distributions	Lesson 7	Lesson 4
		Histograms		Lesson 5
		Deceptive Collecting		Lesson 6
		Sample Graphs		
4	June 19 –	Ratio & Proportion	Lesson 8	
	25	Solving Proportions	Lesson 9	
		Dimensional Analysis	Lesson10	
		Algebraic concepts for solving linear	Lesson 11	
		equations		
		Solve Linear Equations	Lesson 12	
		•		
5	June 26 –	Interpret & use formulas	Lesson 13	
	July 2	Geometric Formulas	Lesson 14	
		Statistical Formulas	Lesson 15	
		Averages	Lesson 16	Lesson 7
		Weighted Mean		Lesson 7
		Variation		Lesson 8

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6	July 3 –	Percentiles, Boxplots		Lesson 9
	July 9	Probability	Lesson 17	Lesson 10
		More Probability	Lesson 18	Lesson 10b
7	July 10 –	Probability Distributions		Lesson11
1	July 16	Binomial Probability		Lesson 12
		Introduction to Linear Relationships	Lesson 19	
		Slope and other characteristics of a Linear Relationship	Lesson 20	
		Scatterplots	Lesson 21	
		Graphing a Linear Relationship	Lesson 22	
8	July 17 –	Correlation	Lesson 23	
0	July 17 – July 23	Standard Normal Distribution	Lesson 25	Lesson 13
	July 23	Applications of Normal Distribution		Lesson 14
		Sampling Distributions		Lesson 15
		Central Limit Theorem		Lesson 16
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9	July 24 – July	Confidence Intervals		Lesson 17
	30	Estimating a Population Proportion Estimating a Population Mean		Lesson 18
		Estimating a ropulation weam		Lesson 19
10	July 31 -	Hypothesis Testing		Lesson 20
	August 6	Testing a hypothesis for Population		Lesson 21
		Proportion		
		Testing a hypothesis for a Population		Lesson 22
		Mean		
11	August 7 -	Review		
**	11	Final Exam		
		Final Exam will be available in		
		MyLabMath on Tuesday, August 8		

Course Grading Information:

Grading will be either Credit or No Credit

Credit at least 70% average on assignments as

Credit...at least 70% average on assignments, quizzes, and tests

Homework Assignments	30% of final grade
Vocabulary & Video Quizzes	10% of final grade
Written Problem Solving Assignments	10% of final grade

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Exams	50% of final grade
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Grades CR: average of at least 70%

NC: average less than 70%

You must also pass the statistics course, MATH 1342.L88, to receive credit for this course. Homework assignments are found on the MyMathLab website. Your grades will be kept in a gradebook on that website.

Late Work, Attendance, and Make Up Work Policies:

Homework assignments from each Unit have a specific due date. All assignments must be completed with at least a grade of 70% by the due date in order to take the Unit Exam. At the end of the semester, I will drop the lowest grade from each of the Unit homework assignments (three grades will be dropped). After taking the Unit Exam, previous homework assignments will be reopened for you to complete or increase your grade. You can work the homework assignments as many times as you like, raising your grade on each to 100%.

Exams must be taken on time; you will have <u>at least two days</u> to log in and take the Unit Exam. You may take each Unit Exam two times and I will record the highest grade in the gradebook. Be sure to contact me if there is any difficulty in being able to take the exam in the indicated time window. <u>You will have 90 minutes to take each Unit Exam.</u>

Quizzes and other assignments must be completed by the specified due date for the assignment. <u>There will be no makeup work for these</u>, but I will drop the two lowest grades before calculating the Quiz average for the course.

You must pass the statistics course, MATH 1342.L88, in order to receive credit for this course.

Attendance:

Since this is an online class, I will keep track of your attendance by your work on homework assignments, quizzes, and exams. If you complete at least two homework assignments during the week, I will count you present for the week. If you work on one assignment during the week, I will report one absence for the week. If you do not work on any homework assignments during the week, I will report two (2) absences for the week. If you accumulate 8 absences, you will be dropped from the course.

* Click Here for the MCC Attendance/Absences Policy

(www.mclennan.edu/highlander-guide-2016-17/policies)

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

Updated 11/04/2022



ACADEMIC RESOURCES/POLICIES

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 254-2998122 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 acting Title IX Coordinator at titleix@mclennan.edu or by calling, Dr. Claudette
Jackson, (Diversity, Equity & Inclusion/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center 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 http://www.lighthouse-services.com/mclennan/.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. 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.

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 http://www.mclennan.edu/campus-resource-guide/

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom from 7:30 am - 6:00 pm Monday through Thursday and 7:30 am - 5:00 pm on Friday. You can contact the Academic Support and Tutoring team via Zoom (https://mclennan.zoom.us/j/2542998500) or email (ast@mclennan.edu) during the above mentioned times.

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 either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg. Both the Completion Center and Paulanne's 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

https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency Grant Application.pdf.

MCC Academic Integrity Statement:

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

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to https://www.mclennan.edu/center-for-teaching-and-learning/FacultyandStaffCommons/requirements.html for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

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.

Email Policy:

McLennan Community College would like to remind you of the policy (http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf) 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. For more information about your student email account, go to www.mclennan.edu/studentemail.

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 Helpdesk@mclennan.edu for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

Email Setup for iPhones and

iPads

Email Setup for Androids

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.

For more helpful information about technology at MCC, go to MCC's Tech Support Cheat Sheet or email helpdesk@mclennan.edu.

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.