MATH 120 – Foundations of Mathematics for Non-STEM Majors

COURSE SYLLABUS **Term:** May Mini **Year:** 2023

INSTRUCTOR INFORMATION

Instructor: Laura Boddicker

Office Location: Online, Remote

Office Hours: Email, Telephone or Virtual by Appointment

Office Phone:

University Email Address: Laura.Boddicker@tamuc.edu

Preferred Form of Communication: Email

Communication Response Time: 24 Hours or Less

Instructor Note:

This course is a co-requisite model course. ALL STUDENTS must also be enrolled in a section of Math 1332 or 1342.

COURSE INFORMATION

Materials

This course has been designed using Open Educational Resources (OER) and/or materials that are available through the Waters Library. All materials are embedded within the course or are accessible via the internet or accessible through the Waters Library resource portal. After taking the pretest, students are encouraged to bookmark, download, or save materials provided via the internet for use with assignments and projects in this class.

Course Description

Foundations of Mathematics for Liberal Arts Majors. Intended for Non STEM (Science, Technology, Engineering,and Mathematics) majors. In particular, students who are majoring in fields considered to be in the "liberal arts" (students who will not be continuing in an Algebra-

intensive math pathway), and who are not TSI complete, will take this course. Course topics include: Basic algebraic operations, equations and inequalities, polynomials, functions, rational expressions, exponents and radicals, quadratic equations, and graphing. The course helps prepare students for further study at the level of college mathematics, particularly in first year, non-STEM math courses. This course is considered developmental and may not be used to satisfy any mathematics or degree requirements. This course is being used as a co-requisite course to support students in their study at the college level of mathematics, specifically in Contemporary Mathematics or Elementary Statistics. The course is broken down into 4 competencies and 2 projects.

Student Learning Outcomes:

Upon successful completion of this course, students will:

1. The student will be able to view, interpret, and create graphics, tables, and multiple representations appropriately.
2. The student will demonstrate knowledge of arithmetic and basic algebraic concepts such as operations with fractions and decimals, order of operations, and basic set notation.
3. The student will be able to accurately interpret and utilize algebraic concepts such as subscripts, summation symbols, and formulas.
4. The student will be able to effectively work with radical and rational expressions, particularly within formulas utilized in the college-level course.
5. The student will demonstrate a mastery of counting techniques and a sense for the beauty of mathematics in the world around them.
6. The student will be able to navigate successfully in the college-level math course

REGULAR AND SUBSTANTIVE COURSE INTERACTION

As a general guide, students enrolled in a three-semester hour course should spend one hour engaged in instructional activities and two to three hours on out-of-class work per week in a traditional semester. Students are expected to double this effort of engagement given that this course is being delivered in a seven-week term. Educational activities in this course are designed to ensure regular and substantive interaction between students and faculty to ensure that students are able to demonstrate competency.

COURSE REQUIREMENTS

Minimal Technical Skills Needed: Students will need reliable computer and internet access for this course. Students must be able to effectively use myLeo email, myLeo Online D2L, and Microsoft Office.

Instructional Methods: This course is an online course. To be successful in this course, all content and course modules should be read and reviewed. All assignments and quizzes (both graded and not graded) must be completed. Please contact the instructor by email for any assistance.

Email your instructor as soon as you complete your pre-test so the instructor can access and grade your work.

Student Responsibilities or Tips for Success in the Course: To be successful in this course, all content and course modules should be read and reviewed. All assignments and

quizzes (both graded and not graded) should be completed. Please contact the instructor by email for any assistance.

Assessments:

Pretest and Posttest for Each Module:
The purpose of the pretests is to provide a baseline understanding of your knowledge in each module.

The posttest is an assessment of your knowledge of the material required for the module. A score of 80% or higher is required on the Posttest to demonstrate competency. If you score less than 80% on any module you will have an opportunity to review the material and re-take the module Posttest. You will have up to three attempts at passing eachcompetency. If you have not passed the module in three attempts, you will receive a letter grade of an F. In order to demonstrate competency, a score of 80% or higher is required.

Homework: It is extremely important for you to work all exercises in order to be prepared for the exams. Exercises can be accessed through your MyLeo portal in the app for "MyLeoOnline (D2L Brightspace)". **These exercises are for self-assessment** to know that you are understanding the material for the posttest. There is an answer key to check your work from each exercise. If you want further feedback forward the exercise to the instructor.

Projects: You will have two projects in this course. Each project will be based on expanding your knowledge and applying the information you have learned in a more application-based setting. A score of 80% or higher is required oneach project.

Final Grade Calculation:
The final grade will be assigned by taking the average of the four passing posttests and the grades of the projects.

A score of 80% or higher on both the Culminating Project and Posttest is required to demonstrate competency and receive credit for the course. The following items will be used to calculate the final grade in the course.

Item	Worth
Posttest 1	100 points
Posttest 2	100 points
Posttest 3	100 points
Posttest 4	100 points
Project 1	100 points
Project 2	100 points
Total	**600 points**

Note: All developmental math grades are reported with an "R" in front of them to signify that they are not college-level.

RA = 90% -100%
RB = 80% - 89.9%
RF = 79.9% or Below

The *syllabus/schedule are subject to change.*

Students are required to achieve an 80% or higher on a posttest in each competency and on the project in order to pass the course.
A grade of "B" (RB) or above must be achieved to continue to a college-level stand-alone course such as Math1332, or 1342 in the next semester. Otherwise, the co-requisite model will be repeated.

Acceleration Process

Students enrolled in competency-based education courses in the College of Innovation and Design are permitted to accelerate from one CBE course to another during a seven-week academic term under certain conditions. The request to accelerate from one course to another must be initiated by the student upon successful completion of currently enrolled CBE courses. Students are responsible for maintaining communication with faculty and their assigned advisor(s) throughout the acceleration process. Students who fail a course or who drop/withdraw from a CBE course are not eligible for acceleration. Student may only request permission to accelerate in one course at a time. Request to accelerate is initiated and completed by 5:00 pm CST on the fifth Friday of a seven-week academic term.

Process

1. Student successfully completes all required coursework in their CBE courses(s) with a grade of "A" or "B."
2. Student receives emailed verification from the assigned instructor that the course has been satisfactorily completed (Grade of A or B only).
3. Student contacts assigned advisor to provide proof of completion and discuss eligibility for acceleration into another course.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu**.**

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

This is an online course; therefore, expect most communication to be online as well. If you have any questions or are having difficulties with the course material, please contact your instructor. Correspondence will always be through university email (your “myLeo” mail) and announcements in myLeo online (D2L). The instructor will make every effort to respond to emails within 24 provided the correspondence follows the requirements listed below. Students are encouraged to check university email daily.

All emails from students should include:

- **Course name and subject in the subject line (ex. EDCB 517 – Posttest)**
- **Salutation**
- **Proper email etiquette (no “text” emails – use proper grammar and punctuation)**
- **Student name and CWID after the body of the email**

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

TAMUC Attendance

Attendance and Continual Enrollment:

Math 120 in a non-credited course and each student must receive a "B" (RB) or higher to move on to a stand-alone college-level math course in the next semester, if they do not pass both of the co-requisite math courses this semester.Due to the nature of this course, **attendance is a must to pass this class**. It is expected that you follow the guidelinesset forth by the Class Attendance Policy in the current Undergraduate Catalogue. Attendance in this course is participating and doing your work in a timely manner.

Also, all students should be aware that they are NOT allowed to drop a developmental math course, and that they must be continually enrolled in a math course until they have successfully completed their college-level math course. In addition, beginning Fall 2018, the state of Texas is requiring all Institutions of Higher Education to use the **"co-requisite model"** for all developmental courses. Thus, if you are enrolled in this course, you are ALSO enrolled in a college-level math course, for a total of SIX hours of math this semester. Therefore, all students should take this courseseriously and make every effort to be in attendance and to be successful on the daily assignments and exams.

Participation from students regularly is encouraged. There will be optional discussions, and assignments that are not required. Students are encouraged to participate as regular exposure to course content will result in a better chance atsuccessful completion of the course.

The only required assignments in this course are the pretests for each competency (there are 4 competencies which means 4 pretests). While pretests are required to pass the course, the grade does not count toward your final grade. Agrade of 80% or higher is required on a posttest to test out of each of the 4 competencies. You have 3 attempts to achieve a grade of 80% or higher in each of the 4 competencies. Aside from the test, there are two required course projects that each student is required to participate in.

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all their scholastic work. For more details and the definition of academic dishonesty see the following procedures:
Undergraduate Academic Dishonesty 13.99.99.R0.03
Undergraduate Student Academic Dishonesty Form
Graduate Student Academic Dishonesty Form

CID Policy on Academic Integrity

Academic dishonesty includes cheating, complicity in cheating, multiple submissions (or substantial portions) of the same work for credit without authorization, submitting another's work, plagiarism, submitting algorithmically (AI) plagiarized work, and other acts that may reasonably be called academic dishonesty.

- Students who commit academic dishonesty will receive a grade of 0 for the assignment in the course and be issued a Written Warning that is reported to the CID Assistant Dean's office and listed in a database.
- If the student does NOT have a previous Written Warning for academic dishonesty reported in CID courses and has additional attempts available for the assignment, the student may resubmit the assignment (this applies to CBE courses only).
- If the student has a Written Warning of academic dishonesty reported in CID courses, the student may NOT resubmit the assignment, and the instructor will follow the procedure detailed in Policy 13.99.99.R0.03 for Undergraduate Academic Dishonesty and report the incident to the Provost Office.

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Velma K. Waters Library Rm 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit **www.tamuc.edu/counsel**

COURSE OUTLINE / CALENDAR

Topics Covered (tentative schedule): Tentatively, the following content will be covered during the following weeks.Changes to this schedule will be made during class, if needed.

Suggested Schedule		
Week	Competency	Activities
1	Venn, Diagrams, Tree Diagrams, Graphing, Tables	Pretest, Videos, Readings, Exercises, Review, Posttest
2	Subscript & Summation Notation, Factorials Notation, Fundamental Counting Principle, Radicals, At most, At least, Estimation, Rounding, Dimensional Analysis	Pretest, Videos, Readings, Exercises, Review, Posttest
3	Substitute into an Expression, Evaluate Formulas, Percent, Decimals, Simple Interest, Compound Interest	Pretest, Videos, Readings, Exercises, Review, Posttest
4	Prime and Composite Numbers, Prime Factorization, Rules of Divisibility Fibonacci, Golden Ratio, Sequences	Pretest, Videos, Readings, Exercises, Review, Posttest
5	Venn Diagram Project	Work on Project
6	Buying a Car Project	Work on Project
7	Projects	Finish Projects

*****All submissions must be turned in by the end of the last day of the term**

***** Remaining enrolled in this course constitutes acceptance of all policies contained in this syllabus.**

Any changes to this syllabus and/or schedule will be communicated directly to you in class by the instructor. You areresponsible for being aware of any such changes. ***Good luck and work hard!!***

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