MATH 1332 Contemporary Mathematics

COURSE SYLLABUS

Term: Year:

INSTRUCTOR INFORMATION

Instructor:

Office Location: Online, Remote

Office Hours: Email, Telephone, or Virtual by Appointment

Office Phone:

University Email Address:

Preferred Form of Communication: Email

Communication Response Time: 24 Hours or Less

Instructor Notes:

COURSE INFORMATION

Materials - Textbooks, Readings, Supplementary Readings

This course has been designed using Open Educational Resources (OER) and/or materials that are available through the <u>Waters Library</u>. 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

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. Additional topics may be covered. Prerequisites: TSI completion.

This course is broken up into 5 competencies. Each competency covers a different topic: Logic, Sets, Finance, Probability, and Statistics.

Student Learning Outcomes

- 1. Determine the validity of an argument or statement and provide mathematical evidence.
- 2. Apply the language and notation of sets.
- 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.

Additional competencies throughout course:

- 6. Demonstrate the ability to choose and analyze mathematical models to solve problems from real-world settings.
- 7. Critical thinking Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.
- 8. Communication In written, oral, and/or visual communication, Texas A&M University Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.
- 9. Empirical and Quantitative Skills Students will be able to interpret, test, and demonstrate principles revealed in empirical data and/or observable facts.

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 a reliable computer and internet access for this course. Specific capabilities of the computer are discussed later in the syllabus. Students are required to demonstrate proficiency in myLeo navigation in order to participate in this course.

Fluency in programs like Microsoft Word, PowerPoint and Excel may further contribute to student success in this course.

Instructional Methods

This course is 100% online. As such, communication and assignment submission is all done electronically. Power points, resources, assignments and tests are all located within the online course.

Should you have trouble finding anything, please e-mail the instructor to point you in the right direction. While not all discussions and assignments are required, students are encouraged to participate in all activities. Should you find yourself struggling with assignments in the course, please watch videos and complete all reading before e- mailing the instructor to ask for further assistance in comprehending certain subject matter.

It is unacceptable to not participate in assignments/discussions etc. and then claim the material was too difficult to comprehend. Your participation will directly affect your success in the course. The more hours you spend in the course utilizing provided resources, the more likely you are to succeed in the course.

Student Responsibilities or Tips for Success in the Course Students are encouraged to log-in to the course every 24 hours. While not required, students are encouraged to complete an entire competency every week. This means by week 5 of the 7-week semester, they have attempted to test out of all 5 competencies. This allows the student sufficient time to re-do any failed competency posttests.

Students are encouraged to e-mail the professor as they encounter concepts that after reading and utilizing course resources (supplemental documents, Youtube videos, etc.), still do not understand.

Assessments

Pre-test

The purpose of the pre-test is to provide a baseline understanding of your knowledge in this competency. Pre-tests are taken once and should be completed upon the first couple of days of a CBE academic term or entry into a course if a student is an accelerator. The pre-test is required before you begin studying course materials. If students do not make at least 80% on the pretest, they will be expected to complete assignments, quizzes, and other course content to prepare for the post-test and culminating project. Students are required to complete the post-test even if scoring 80% or higher on the pre-test. The grade on the pre-test does **not** count in the final grade for this course.

Posttest for 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 each competency. 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. DUE: Last day of week 7, Friday by 11:59 PM CST.

Project

You will also have a project in this course. The 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. **DUE DATE if you want feedback for revisions: End of week 6. HARD DUE DATE: Last day of week 7, Friday by 11:59 PM CST.**

GRADING

Final grades in this course will be based on the following scale:

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Grade Item	Points	
Module 1 Post-Test	100pts	
Module 2 Post-Test	100pts	
Module 3 Post-Test	100pts	
Module 4 Post-Test	100pts	
Module 5 Post-Test	100pts	
Course Paper	100pts	
Total	600 pts	

A = 540-600 points

B = 480-539 points

F = 479 points or Below

*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.

Final Grade Calculation

The final grade will be assigned by taking the average of the five passing posttests and the grade of the project.

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.

Technical Support

If you are having technical difficulty with any part of Brightspace (D2L), please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here: https://community.brightspace.com/support/s/contactsupport

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

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 at successful completion of the course. The only required assignments in this course are the pre-tests for each Competency (there are 5

competencies which means 5 pre-tests). While pre-tests are required to pass the course, the grade The syllabus/schedule are subject to change.

does not count toward your final grade. A grade of 80% or higher is required on a posttest to test out of each of the 5 competencies. You have 3 attempts to achieve a grade of 80% or higher in each of the 5 competencies. Aside from the tests, there is one required course project that each student is required to participate in.

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

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

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure</u> 13.99.99.R0.01.

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:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u> <u>Undergraduate Student Academic Dishonesty Form</u> 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 <u>Policy</u> <u>13.99.99.R0.03</u> for Undergraduate Academic Dishonesty and report the incident to the Provost Office.

Use of Artificial Intelligence

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

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

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.

A&M-Commerce Supports Students' Mental Health – Counseling Services

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

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 <u>Carrying Concealed Handguns On Campus</u> 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.

COURSE OUTLINE / CALENDAR

Suggested Schedule			
Wee k	Competenc y	Activities	
1	Logic	Pretest, Readings, practice, Posttest	

2	Set Theory	Pretest, Readings, practice, Posttest
3	Finance	Pretest, Readings, practice, Posttest
4	Probability	Pretest, Readings, practice, Posttest
5	Statistics	Pretest, Readings, practice, Posttest
6	Project	Work on project
7	Project	Finish Project

^{*}All submissions must be turned in by the end of the last day of the term.