Course Syllabus: Math 1324.006 – Mathematics for Business Applications I

Fall 2019 (Aug. 26 – Dec. 13) T/R 11 a.m. – 12:15 p.m.

Instructor: **Dr. KaSai Un** **Office Location:** **Bin 312**

Office Hours: **Tues. 12:15pm - 2 pm; Wed. 11am - 12:30pm; Thur. 12:15pm - 2 pm; or by appointments**

Office Phone: **903-886-5948** **Office Fax:** **903-886-5945**

University Email Address: **kasai.un@tamuc.edu (Subject: Math 1324…)**

Preferred Form of Communication: E-mail

Communication Response Time: within 24 hours (Monday to Friday)

COURSE INFORMATION

Material Required: Students must purchase a copy of **MyMathLab/MyLab & Mastering student access code** from either of the campus bookstores or directly from Pearson at http://www.coursecompass.com. Please get a **Binder** to keep and organize all notes and course materials. A Texas Instruments (TI-83 or TI-83 Plus) **graphing calculator** for this course is highly recommended. All exams must be completed in **pencil.**

Textbook (Optional): College Mathematics for Business, Economics, Life Sciences, and Social Sciences 13th Edition by Barnett, Ziegler, & Byleen, with ISBN # 978-0-321-94551-8. *** The MyMathLab access code includes access to an e-book, so the book is optional but the MyMathLab access code is required. Portions of Chapters 1-5 and 8 in the textbook will be discussed.

Please use the MyMathLab 14 day free trial to start working on homework if students cannot purchase it right away. The MyMathLab student access code must be purchased by the end of 2nd week of class to prevent a loss in points.

Note: If a student is retaking this class and have purchased a MyMathLab access code for Math 1324 either in Fall 2018 or Spring 2019 for the same textbook, a new code purchase may not be required.

Course Description: We will cover chapters 2, 3, 4, 5 and parts of chapters 6 and 8. Topics include functions (linear, quadratic, polynomial, rational, exponential and logarithmic), mathematics of finance (simple and compound interest, future and present value of an annuity, etc.), probability and statistics, linear programming, and systems of linear equations and matrices.

Student Learning Outcomes: Upon completion of this course, students will be able to:

1) Demonstrate knowledge and understand various compound interest formulas and solve financial problems.
2) Utilize statistical methods to interpret and predict data.
3) Use matrices and other methods to solve systems of equations.
4) Understand and solve different types of functions and their graphs, including to but not limited to linear, quadratic, exponential and logarithmic.
5) Demonstrate using logarithms to solve problems.
6) Solve business application problems using inequalities and systems of inequalities.

Core Objectives:

1) ***Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.*** This common core objective will be assessed in the exams and final exam for all sections of Math 1324.

2) ***In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.*** This common core objective will be assessed using common class activities/projects with class discussion over functions, finance, systems of equations and linear inequalities and how these topics relate to business for all sections of Math 1324.

3) ***Students will be able to interpret, test and demonstrate principles revealed in empirical data and/or observable facts.*** This common core objective will be assessed using common class activities/projects with discussion over functions, common homework problems, exams and the final exam for all sections of Math 1324.

Global Course: This course has been selected as a Global Course – tied to the Quality Enhancement Plan (QEP). Texas A&M University-Commerce QEP seeks to prepare students for an interconnected world. In relation to the QEP, students completing this course will be able to demonstrate knowledge of the interconnectedness of global dynamics (issues, trends, processes, and systems), apply knowledge of the interconnectedness of global dynamics, and view themselves as engaged citizens within an interconnected and diverse world. This course will provide activities, experiences, and opportunities to reach all of the QEP learning outcomes. One of the class projects in this course will be utilized to assess the QEP student learning outcomes for each student. **Students are responsible to upload a copy of the project to their ePortfolio in ManeSync.**

COURSE REQUIREMENTS

Instruction: Instruction will include lecture, demonstration and models, and some group work, based on time available.

Attendance & Continual Enrollment: Attendance will be taken each class. Students need to actively participate in class to receive credits. **Attendance is a must to be able to do well in this class**. It is expected that students follow the guidelines set forth by the Class Attendance Policy in the current Undergraduate Catalogue. As an additional **incentive,** ***all students with no absences and no tardiness for all classes leading up to an exam will receive 2 bonus points on that exam***. This incentive will be afforded to all three of the exams.

If students represent an athletic team for this university, departmental team, scholastic team, choir, or other group and must miss class, notify me in writing with the appropriate documentation within one week of the absence in order not to be counted absent. Arrangements for make-up work will be made at that time. ***** All students should be aware that they are NOT allowed to drop this math course, and that they must be continually enrolled in a math course until they have successfully completed their college-level math course (University Policy).*****

Homework and Weekly Take Home Quizzes: Homework will be completed online through MyMathLab and immediate feedback will be given. Remember, students can try problems they miss online until you get them right to fully understand the topic. **It is my expectation that students should have a 100 on each homework assignment because of this.** Online due dates should be observed, and in general, late submissions will not be accepted. Quizzes will occasionally be given in class over the material presented in the homework. In general, NO makeup quizzes will be given. All work should be done in pencil.

If a student experiences any technical difficulties with MyMathLab, be sure to use the online help and technical support from the software company. If a student continues to have trouble accessing or navigating the software, please contact instructor through email or come by his/her office during office hours for some individual help.

Weekly Take Home Quizzes with the type of problems that students will see on exam will be given to students to practice problem by hands. They are due the next class day.

Project: You will have 2-3 application projects due, in which you will be asked to demonstrate the skills and concepts learned in class in a practical way. You will be given advance notice as to the due date of these projects. Accuracy and creativity in these projects will be expected.

Quizzes: Quizzes will be given in class periodically. **No** make-up quizzes will be given, but the lowest quiz grade will be dropped. Be sure to attend all classes so you do not miss any quizzes.

Tutoring: ***Students are required to spend an hour a week outside class tutoring. *** Students can choose to attend tutoring in the Math Skills Center, TRIO, Supplemental Instruction tutoring sessions, and other on campus tutoring sessions that are approval by the Mathematics Department.

The **Math Skills Center**, located in Binnion 328, is open ***Monday and Wednesday from 8am – 8pm, Tuesday and Thursday from 8am – 6pm, and Friday from 8am – 12pm.*** Free tutoring is available for students who need help with their math courses. In addition, the **Academic Success Center also offers supplemental instruction/tutoring for students and their hours can be found at the university web site.**

The **Mach III/TRIO Program** is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact TRIO at 903-886-5833 or in the Halladay Student Services building, Room 300.

Competency Exam: Math1324 students are required to take the competency exam which covers the prerequisite materials for this class. Calculators are allowed for competency exams. Students need to seek tutoring help if they do not pass the competency exam on the first try (in class). Students have to score 80% or higher on the test in order to pass this exam, or a zero will be recorded in the grade book. Competency exams will be graded with no partial credits. Students can retake the competency exam outside of class in the academic testing center SS 308 (up to 3 times a week) before the deadline which is **Oct. 7, 2019 by 5 p.m.** Students will receive 10% on the final grade if they pass the competency exam. Students will receive a zero for that 10% of the final grade if they do not pass the competency exam before the deadline.

Exams: There are three scheduled exams. A practice exam and answer key will be provided prior the exam. Partial credit may be given on exams IF all work is neatly shown for determination of the student's mistakes. **CELL PHONES AND OTHER ELECTRONIC DEVICES MUST BE TURNED OFF AND STORED OUT OF THE STUDENT'S REACH. The only electronic device allowed during tests and quizzes is a stand-alone calculator (such as a TI-34, TI-83, TI-84, etc.), and only with the instructor's permission. All exams must be completed in pencil; failure to complete your exam in pencil will result in a reduction of the earned grade by 5 points.**

No make-up exams will be given without prior notice of a university excused absence*. We realize that at times throughout the semester, emergency situations may arise that affect a student's performance on an exam or even prevent a student from attending on an exam day. **We can replace the lowest exam grade with the student's grade on the final exam, provided the final exam score is higher.** This provision will only be applied to **ONE** exam, so students should make every effort to be present and well-prepared for all exams. **A Practice exam and answer key will be available prior to each exam.**

Be sure to take advantage of this valuable resource!!

These test dates are tentative and are subject to change. Please see the weekly schedule below.

* University Authorized Excuses: 1) Participation in a required/authorized university activity; 2) Verified illness; 3) Death in a student's immediate family; 4) Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and others determined by individual faculty to be excusable (e.g., elective University activities, etc.)

Final Exam: The final exam will be a departmental, comprehensive exam. All students will take the exam at the same time on **Tuesday, Dec. 10, between 10:30 a.m. and 12:30 p.m.** Please note that this is an unusual time and make your arrangements to be present. Make-up final exams will not be allowed. The location of the final exam will be announced toward the end of the semester (Departmental policy).

*** NO MAKE-UP FINAL EXAM WILL BE ALLOWED WITHOUT APPROVAL!!! ***

GRADING POLICY:

Daily Grade (Homework/Quizzes/Tutoring/Attendance/Projects)	**15 %**
Competency Exam	**10 %**
Exams	**50 %**
Final Exam	**25 %**
Total	**100%**

Grade: A = 90-100, B = 80-89, C = 70-79, D = 60-69, F = 59 or below

TECHNOLOGY REQUIREMENTS

Technology Requirements: The graphing calculator of TI 83/TI 84 or equivalent will be highly recommended. Calculators other than Texas Instruments calculators may be used but classroom instruction on calculators will be given for TI equipment only. **Note: Calculators that solve problems for students, including but not limited to TI-Nspire, TI 89 or higher, Casio Prizm, Casio Touch or higher are **NOT** allowed to be used for this class. ** Students are also required to clear the memory of graphing calculators before and after each exam.

Students need to check their e-mail regularly with the address that they have provided to the instructor for class announcements. Access to MyMathLab, a computer, and the internet will be needed for online homework assignments.

Calculator Loan Program: The Mathematics Department has set up a calculator loan program to support students. Students can borrow a calculator for a semester with a fee ($10 to $15 for TI-83/84). It is first come, first served basis.

MyLeo Online Learning Management System (LMS):

D2L in MyLeo: 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 in MyLeo/D2L

MyLeo Support: You will need your campus-wide ID (CWID) and password to log into your course in D2L. 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

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement: It is important that students are actively engaged in class activities. Questions are welcome in the classroom. Students are welcome to schedule with instructors for extra help outside classroom during office hours**.**

Getting Help Outside of Office Hours: Utilizing the **multimedia library and online help from the MyMathLab** computer software program is suggested as a valuable resource for many students to improve their grades in Math classes. Also, the free tutoring on campus and from online is also highly recommended.

Student Health Services are located at Henderson Hall (Corner of Lee St. and Monroe St.). It **offers health care to the student body of Texas A&M University – Commerce. It provides primary health care services including treatment of illness, injury, and women's health. Tel:** (903) 886-5853.

University Police Department is **located at** Henderson Hall. For Emergency, please call: 911
For Non-Emergency, please call: 903.886.5868

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Academic Integrity: In order to insure fairness and high academic standards, any actions which violate the principles of academic integrity through dishonesty or cheating are given serious consideration.
In order to understand what constitutes a violation of academic integrity and the consequences of such behavior, the university's policies may be reviewed at:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf. In particular, awareness of the following definitions is essential in order to know what represents academic dishonesty (pages 6 – 7):

"**Cheating**: Intentionally using or attempting to use unauthorized materials, information, notes, study aids or other devices or materials in any academic exercise. Unauthorized materials may include anything or anyone that gives a student assistance, and has not been specifically approved in advance by the instructor."

"**Complicity**: Intentionally or knowingly helping, or a attempting to help, another to commit an act of academic dishonesty."

"**Plagiarism**: The appropriation of another person's ideas, processes, results, or words without giving appropriate credit."

While majority of students are honest in doing their school work. However, due to recent cheating events, action must be taken to protect the academic integrity of classrooms**. There is a NO TOLERANCE policy for cheating and if a student is caught cheating, he/she will either get a zero for the test or fail this course.** Cheating in this course is defined as the following:

- Giving or receiving answers during an exam or quiz.
- Viewing the exam or quiz answers of nearby classmates.
- Having notes/practice work available during quizzes or tests.
- Possession or access to test items before the test is given.
- Deception in getting an excused absence to obtain the undeserved opportunity to make-up work.
- Use of cell phones or text messaging technology during exams or quizzes. **Students may NOT use the calculator on their cell phones or any other similar electronic devices (such as I-Pods, I-Touch, etc.). IF ONE OF THESE DEVICES IS AVAILABLE, IN ANY WAY, DURING AN EXAM OR QUIZ, THE STUDENT WILL BE GIVEN AN AUTOMATIC "0" ON THE ASSIGNMENT.**
- Improper citations in written works, or using another person's ideas and words as students own without giving proper credit.
- **Any** method, no matter how well rationalized or accepted, which improves a person's grade by any means other than study and skillful performances on exams and/or other assignments.

Students found guilty of an act of academic dishonesty in this course will be subject to receiving an "F" in this course.

Classroom Behavior: Appropriate classroom behavior is required to attend this class. All cell phones and electronic devices must be put on silent or turned off during class. NOTE: THIS INCLUDES BLUETOOTH AND OTHER DEVICES THAT ARE PLACED IN THE EAR. Phones and electronics are distractions for instructor and the other students in the class. All people will be treated with respect and talking that disrupt the class is not allowed. If disruptions occur during class time, a student will be asked to leave class and will earn a zero on any applicable grades for that class period. Serial disrupters will be asked to withdraw from this class.

Early Intervention for First Year Students: Early intervention for freshmen is designed to communicate the University's interest in their success and a willingness to participate fully to help students accomplish their academic objectives. Grades for students in freshmen level classes will be reported to the Registrar's Office at the end of the fifth week of class during the fall and spring semesters. The Registrar's Office will report grades to students, Advising Services, Academic Departments (faculty advisors) and mentors. This procedure will allow students to be knowledgeable about their academic progress early in the semester. The university, through Advising Services, faculty advisors and mentors, will take steps to assist students who may be experiencing difficulty to focus on improvement and course completion. Grade reports will be mailed by the end of the sixth week of the semester.

Student Conduct: *** "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (Student's Guide Handbook, Policies and Procedures, Conduct). Rude and/or disruptive behavior will not be tolerated. No electronic devices (except calculators) are allowed during class time. Cell phones, smart watches, and other electronic devices are to be put away during class time and exams. *** The use of vapor/e-cigarettes, smokeless tobacco, snuff and chewing tobacco are prohibited inside classrooms and university buildings.

TAMUC Attendance: 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

ADA Statement, Students with Disabilities: 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 students have a disability requiring an accommodation, please contact: Office of Student Disability Resources and Services, Texas A&M University-Commerce, Gee Library- Room 162, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148, email: StudentDisabilityServices@tamuc.edu. Website: http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice: This statement presents the University's commitment to a safe, accepting environment for all students regardless of sexual orientation, gender identification, or gender expression: A&M-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.

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
(http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStu

dents/34.06.02.R1.pdf) and/or consult your event organizer). 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

1314 MW Tentative Schedule (Fall 2019) For Students

Week	Dates	Topics
1	Aug. 26 – 30	Syllabus, Review for Comp. Exam, & Intro of MML, 1.2, & 2.1
2	Sept. 2 – 6	2.1, 2.2, 2.3
3	Sept. 9 – 13	In Class Comp. Exam, & 2.3, 2.4
4	Sept. 16 – 20	4.1, 4.2,& 4.3
5	Sept. 23 – 27	Review Exam 1 & Exam 1
6	Sept. 30 – Oct. 4	2.5 & 2.6
7	Oct. 7 – 11	3.1 & 3.2 Oct. 7 *** Deadline for Comp. Exam ***
8	Oct. 14 – 18	3.3 & 3.4,
9	Oct. 21 – 25	Wrap up and Review for exam 2, & Exam 2
10	Oct. 28 – Nov. 1	8.1, 8.2, & 8.3
11	Nov. 4 – 8	8.4 & Mean, Median, Mode, 8.5 & Standard Deviation
12	Nov. 11 – 15	Normal Distribution, 5.1 & 5.2
13	Nov. 18 – 22	5.2, 5.3 & Review for exam 3
14	Nov. 25 – 29	Exam 3 & Thanksgiving Holiday
15	Dec. 2 – 6	Review for Final Exam
16	Dec.10 Tuesday	FINAL EXAM, Dec. 10 from 10:30a.m. – 12:30p.m. **NOTE SPECIAL TIME!!**

***** By Remaining Enrolled In This Course, All Students Agree To Abide By The Policies Of This Class, As Stated In The Syllabus *****