Administrative Master Syllabus

Cover Sheet

Purpose: The Administrative Master Syllabus provides a general course description, defines the required elements of the course, and establishes a faculty-driven foundation for course assessment to ensure continuous improvement in student learning, irrespective of the course timeframe, or mode of course delivery.

Course Title: Mathematics for Business & Social Sciences
Course Prefix and Number: MATH 1324
THECB Approval Number (10 digit): 2703015219
Department: Mathematics
Division: Math, Science, Kinesiology
Course Type: (check only one)

☐ Academic General Education Course (From ACGM but not a CBC Core Course)
☐ Academic CBC Core Course
☐ WECM Course (Special Topics or Unique Needs Course: Y ☐ or N ☐)

Weekly Contact Hours (Lecture – Lab – External): 3 - 0 - 0

Course Catalog Description:
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. (The content level of MATH 1324 is expected to be at or above the level of MATH 1314-College Algebra.)

Prerequisites/Co-requisites:
TSI Math Required

Approval: The contents of this document have been reviewed and are found to be accurate.

Prepared by (Content Expert): C.Villarreal
Digitally signed by C.Villarreal
Date: 2022.10.11 14:23:33 -05'00'

Reviewed by Director or Coordinator: Richard Cowart
Digitally signed by Richard Cowart
Date: 2022.10.26 09:02:05 -05'00'

Approved by Dean of CTE or NAH or TGE: Mark L. Secord
Digitally signed by Mark L. Secord
Date: 2022.11.30 15:03:14 -06'00'

Revised 8/11/2021
Master Course Syllabus

Course Name: MATH 1324 Mathematics for Business & Social Sciences

Course Description: This course is a study of the application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. (The content level of MATH 1324 is expected to be at or above the level of MATH 1314-College Algebra.)

Semester Hour Credit: 3

Lecture Hrs. per Week/Lab Hrs. per Week/External Hrs. per Week: 3-0-0

Curriculum Capacity:

- Face-to-Face Lab
- Online Lab
- Face-to-Face Lecture
- Online
- Virtual Face-to-Face
- Interactive video (multi-locations)
- Hybrid
- Clinical

Recommended enrollment threshold:

- Face-to-Face Lab
- Online Lab
- Face-to-Face Lecture
- Online
- Virtual Face-to-Face
- Interactive video (multi-locations)
- Hybrid
- Clinical

Revised 2021-2022
Textbook and/or other major required readings:

**Title:** College Mathematics for Business, Economics, Life and Social Sciences with MyMathLab (MML) Inclusive access. (Textbook Optional.)

**Author:** Barnett, Ziegler, Byleen

**Publisher:** Pearson

**Edition:** 14th

**ISBN:**

*The Student Learning Outcomes for the course are the same regardless of modality or location.*

**Course Outcomes**

(WECM or LDACGM)

1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.
5. Apply matrix skills and probability analyses to model applications to solve real-world problems.

The following general education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) are addressed in this course: General education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) assessed are indicated with an asterisk *.

- **Critical Thinking Skills:** Students will demonstrate an ability to use creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- **Communication Skills:** Students will display effective development, interpretation and expression of ideas through written, oral and visual communication.
- **Empirical/Quantitative Skills:** Students will display competence in the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

The following program student learning outcome are assessed for this course:

- **Science and Technology Literacy:** Students will develop a capacity to use knowledge of how technology and science affect their lives.
- **Analytical Reasoning:** Students will use logical reasoning in problem solving.
Evaluation Methods:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Avg</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz Avg (Practice Exams)</td>
<td>15%</td>
</tr>
<tr>
<td>Test Avg (Regular Exams)</td>
<td>40%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

Course Grading: Please see individualized instructor policies for course evaluation methods. Students will be assessed on the same measure across each discipline as per CBC guidelines.

Major Course Assignments and/or Exams counting for at least 10% of a final course grade:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework Avg</td>
<td>15%</td>
</tr>
<tr>
<td>Quiz Avg (Practice Exams)</td>
<td>15%</td>
</tr>
<tr>
<td>Test Avg (Regular Exams)</td>
<td>40%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

Grade Scale:

- 90-100 = A
- 89-80 = B
- 79-70 = C
- 69-60 = D
- 59 or Below = F

Course Subject Matter Outline:

- Unit 1: Ch1&4 - Linear Equations and Inequalities, Systems of Linear Equations, Matrices
- Unit 2: Ch5&6 - Linear Inequalities and Linear Programming
- Unit 3: Ch2 - Functions
- Unit 4: Ch3 - Mathematics of Finance Sets and Counting Principles
- Unit 5: Ch7&8 - Sets, Counting, Probability

Additional Course Requirements:

**Required:** Students must have access to a desktop or laptop computer with webcam and microphone and be able to accept and install necessary downloads for Pearson MML and remote proctoring applications and lockdown browsers in a given semester. No chromebooks, tablets, or other mobile devices permitted as they are not fully compatible. If the computer is a school issued device then the student is responsible for having their school IT provide them with one that satisfies these requirements on the first day of the semester.

**Required:** Internet Access

**Required:** TI-83/84 Plus Scientific Graphing Calculator. (Other scientific calculators may be allowed but must be approved by the instructor in advance as a comparable equivalent but not higher functioning than the TI-83/84 series calculator.)
Class Attendance and Classroom Conduct Policies

Attendance Policy: Please see individualized instructor policies for attendance, which is pursuant to any related policy as outlined by the college handbook, financial aid agreements, or any other college related understanding (e.g., athletics, organizations).

Telephone Support: Toll Free: 866-722-2838 or Direct Line: 361-354-2508

I.T. Support Blackboard

http://coastalbend.edu/it/

IT Help Desk
1-361-354-2508
helpdesk@coastalbend.edu

Live Chat: Fall/Spring Hours: Monday - Thursday from 8 a.m. to 5 p.m. Summer Hours: Monday – Thursday from 7 a.m. to 6 p.m.

Tutoring Services: Coastal Bend College is committed to the academic success of all students enrolled at the college. A variety of services, including academic support, individual tutoring sessions, group tutoring sessions, and online tutoring, are available to students depending on the availability of tutors for the subject matter requested. All tutoring is provided at no cost to current CBC students who are currently enrolled at CBC. On-demand tutoring services are accessible 24 hours a day, seven days a week through the TutorMe platform, which may be accessed through your Blackboard account. To request a tutor, please complete the online tutor request form found at http://www.coastalbend.edu/tutoring/ to submit your request. If you have any questions about tutoring programs, you can contact tutoring@coastalbend.edu.

<table>
<thead>
<tr>
<th>Beeville</th>
<th>Alice</th>
<th>Kingsville</th>
<th>Pleasanton</th>
</tr>
</thead>
<tbody>
<tr>
<td>3800 Charco Road</td>
<td>704 Coyote Trail</td>
<td>1814 Brahma Blvd.</td>
<td>1411 Bensdale</td>
</tr>
<tr>
<td>Beeville, TX 78102</td>
<td>Alice, TX 78332</td>
<td>Kingsville, TX 78363</td>
<td>Pleasanton, TX 78064</td>
</tr>
<tr>
<td>1-866-722-2838</td>
<td>1-866-891-2981</td>
<td>1-866-262-1615</td>
<td>1-866-361-4222</td>
</tr>
</tbody>
</table>

Grady C. Hogue Learning Resource Center (Library): Located on the Beeville campus, the operation hours are Monday - Friday from 8:00 a.m. to 5:00 p.m.

(Summer semesters will observe the CBC campus operation hours) For locations and hours of the CBC library in Alice, Kingsville, and Pleasanton sites please visit the library web page link below.

Grady C. Hogue Learning Resource Center (Library): http://lrc.coastalbend.edu/about

Revised 2021-2022
Financial Aid: Resources are available for students for financial aid, work study, and veteran benefits. For additional information, visit our website at http://coastalbend.edu/finaid or contact us at 361-354-2238. Office hours: Monday - Friday from 8:00 a.m. to 5:00 p.m.

ADA Statement: No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g). See at: GA (Legal)

Students with Disabilities: Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You will need to provide documentation to the Director of Accessibility Services so the most appropriate accommodations can be determined. Specialized services are available through the Office of Accessibility Services (OAS) (SSB 4.104, 471-6259). For more information, please email oas@coastalbend.edu.

Scholastic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College’s rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. See at: FLB (Local) and FM (Local).

Use of E-mail for Official Correspondence to Students: All students should be familiar with the college’s official email student notification policy. Students are expected to check their CBC email on a frequent and regular basis to stay current with college-related communications, recognizing that certain communications may be time-critical.

Copyright Law and Intellectual Property Rights Policy: Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, CT (Legal).

Coastal Bend College, its faculty, students and employees must comply with Copyright Law. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy CT (Legal) and CT (Local).

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

Revised 2021-2022
**Intellectual Property:** Student /Third Party Works: Rights to copyrightable or patentable works created by a student or a third party, that is, not a College District employee, shall reside with the author/creator. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy [CT (Legal)] and [CT (Local)].

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

**NOTE:** The College website ([http://coastalbend.edu](http://coastalbend.edu)) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.

Student success is our number one priority at Coastal Bend College and we realize that prompt, effective communication (such as emails, assignment feedback, discussion boards and announcements) plays a significant role in achieving that goal. It is vitally important that you have the proper contact information for your instructor. This should include their phone number, email address, and if applicable, their office number, and office hours. **Faculty schedules can be located online at [http://coastalbend.edu/hb2504/](http://coastalbend.edu/hb2504/)**

If you have any problems contacting your instructor, or do not receive a prompt response to your inquiries, please contact the Dean or Division Coordinator/Program Director as soon as possible. Their contact information is provided below:

<table>
<thead>
<tr>
<th>Mark L. Secord, Dean</th>
<th>Richard E. Cowart, EdD., Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer and General Education</td>
<td>Coordinator</td>
</tr>
<tr>
<td>361-354-2408</td>
<td>Math, Science, Kinesiology</td>
</tr>
<tr>
<td><a href="mailto:secordm@coastalbend.edu">secordm@coastalbend.edu</a></td>
<td>361-592-1615 ext. 4024</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:recowart@coastalbend.edu">recowart@coastalbend.edu</a></td>
</tr>
</tbody>
</table>

We wish you all the best in your education and encourage you to contact us if you have any questions or concerns.

Keeping student success in sight, faculty in each of the courses will review the course information, including specific reading schedules, assignments, and testing information, with students during the first week of class.

Additionally, the course information will be posted to Blackboard.

*This master syllabus is subject to change due to unforeseen circumstances.*