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: Calculus II
Course Prefix and Number: MATH 2414
THECB Approval Number (10 digit): 2701016019
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): 4 - 2 - 0

Course Catalog Description:
Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Prerequisites/Co-requisites:
Prerequisite: MATH 2413

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: 2022.08.19 12:29:03 -05'00'

Reviewed by Director or Coordinator: Richard Cowart
Digitally signed by Richard Cowart
Date: 2022.11.02 14:36:59 -05'00'

Approved by Dean of CTE or NAH or TGE: Mark L. Secord
Digitally signed by Mark L. Secord
Date: 2022.11.03 14:28:10 -05'00'

Revised 8/11/2021
Master Course Syllabus

Course Name: MATH 2414 Calculus II

Course Description: Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Semester Hour Credit: 4

Lecture Hrs. per Week/Lab Hrs. per Week/External Hrs. per Week: 4-2-0

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

Textbook and/or other major required readings:

- **Title:** Calculus with MyMathLab (MML) Inclusive access. (Textbook Optional.)
- **Author:** Briggs/Cochran/Gillett
- **Publisher:** Pearson
- **Edition:** 3rd

Revised 2021-2022
The Student Learning Outcomes for the course are the same regardless of modality or location.

Course Outcomes
(WECM or LDACGM)

1. Use the concepts of definite integrals to solve problems involving area, volume, work, and other physical applications.
2. Use substitution, integration by parts, trigonometric substitution, partial fractions, and tables of anti-derivatives to evaluate definite and indefinite integrals.
3. Define an improper integral.
4. Apply the concepts of limits, convergence, and divergence to evaluate some classes of improper integrals.
5. Determine convergence or divergence of sequences and series.
6. Use Taylor and MacLaurin series to represent functions.
7. Use Taylor or MacLaurin series to integrate functions not integrable by conventional methods.
8. Use the concept of polar coordinates to find areas, lengths of curves, and representations of conic sections.

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 *.

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

Evaluation Methods:

Homework Avg = 15%
Quiz Avg (Practice Exams) = 15%
Test Avg (Regular Exams) = 40%
Final Exam = 30%

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.

Revised 2021-2022
Major Course Assignments and/or Exams counting for at least 10% of a final course grade:

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

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
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<tr>
<td>89-80</td>
<td>B</td>
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<tr>
<td>79-70</td>
<td>C</td>
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<tr>
<td>69-60</td>
<td>D</td>
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<tr>
<td>59 or Below</td>
<td>F</td>
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Course Subject Matter Outline:

Unit 1: (Ch6) Applications of Integration  
Unit 2: (Ch8) Integration Techniques  
Unit 3: (Ch9, Ch10) Sequences and Infinite Series; Power Series  
Unit 4: (Ch11) Parametric and Polar Curves

Additional Course Requirements:

Prerequisite: MATH 2413 with a grade of C or better.

Required: Access to a desktop computer or standard laptop having a webcam and microphone on the first day of classes to complete all Assignments/Exams during the semester. No exception. Pearson Lockdown Browser+Respondus Monitor video proctoring will be active on noted Assignments/Exams. Chromebooks, tablets, or other mobile devices are not allowed as they are not fully compatible.

Required: Internet Access

Required: TI-83/84 Plus Scientific Graphing Calculator. Other comparable scientific calculators may be allowed but must be approved by the instructor in advance. Calculators capable of symbolic manipulation (CAS models) are not allowed.

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).

Revised 2021-2022
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 Beeville, TX 78102 1-866-722-2838</td>
<td>704 Coyote Trail Alice, TX 78332 1-866-891-2981</td>
<td>1814 Brahma Blvd. Kingsville, TX 78363 1-866-262-1615</td>
<td>1411 Bensdale Pleasanton, TX 78064 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

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.

Revised 2021-2022
**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](mailto: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 (Local)](#).

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

**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)](#).

Revised 2021-2022
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) 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/

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>
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<tbody>
<tr>
<td>Transfer and General Education</td>
<td>Math, Science, Kinesiology</td>
</tr>
<tr>
<td>361-354-2408</td>
<td>361-592-1615 ext. 4024</td>
</tr>
<tr>
<td><a href="mailto:secordm@coastalbend.edu">secordm@coastalbend.edu</a></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.