A. COURSE INFORMATION

Course number/section: Math 2414-002
Class meeting time: Lecture TR 4:00-6:30pm Lab MW 4:00-5:50pm
Class location: Lecture IH 158 Lab CI 223
Course Website: bb9.tamucc.edu

B. INSTRUCTOR INFORMATION

Instructor: Dr. Aubrey Rhoden
Office location: CI 213B
Office hours: 1-3 pm TWR
Telephone: 316-825-3445
e-mail: aubrey.rhoden@tamucc.edu
Appointments: Appointments outside of office hours are available by request

C. COURSE DESCRIPTION

Catalog Course Description
Limits, continuity, derivatives, applications of the derivative, and an introduction to integrals. Contains a laboratory component. Counts as the mathematics component of the University Core Curriculum.

D. PREREQUISITES FOR THE COURSE

Prerequisites
Math 2413 (Calculus I)

Corequisites
Enrollment in lab Math 2414-221

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
Calculus: Early Transcendentals, 7th Ed. By J. Stewart

Webassign Class Key
TBD

Supplies
Paper and pen or pencil

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the courses student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Compute the area between two curves, in both rectangular and polar coordinates; compute volumes and surface areas of solids of revolution, in both rectangular and polar coordinates; compute arc length of both polar and rectangular curves

2. Compute the value of integrals by the methods of integration by parts, trigonometric substitutions, and partial fractions

3. Compute the value of improper integrals

4. Compute limits of sequences and series

5. Determine the radius of convergence of power series; differentiate and integrate power series

6. Represent a known function as a Taylor series; approximate a known function with a Taylor polynomial and determine the error involved

7. Justify and explain their steps in problem solving. In particular, students should be able to construct correct and detailed mathematical arguments to justify their claimed solutions to problems
G. INSTRUCTIONAL METHODS AND ACTIVITIES

Weekly Quizzes and Homework: Homework will be assigned each week through webassign and is due on Sundays. You will be given in-class (during lab meetings) quizzes which assume your having completed and mastered the homework.

Attendance: Attendance for this course and its associated labs is required. Excellent attendance records as well as positive group evaluations will help your grade in that borderline course-grade decisions will be influenced by these records. It is in your best interest to arrive on time to class (quizzes take place during the first ten minutes of lab and homework is due at the beginning of class).

Lab Information: Again, attendance is required. In the lab, you will:

- work on computer based labs to learn how to program the mathematics taught during lecture.
- take weekly quizzes (except for weeks in which midterms are given) based upon mastery of the suggested homework assignments.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Midterm 1</td>
<td>15%</td>
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<tr>
<td>Midterm 2</td>
<td>15%</td>
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<tr>
<td>Midterm 3</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
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<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Labs</td>
<td>20%</td>
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<tr>
<td>Quizzes</td>
<td>5%</td>
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I. COURSE CONTENT/SCHEDULE

Important dates:
June 1  First Day of Classes
June 10  Midterm 1
June 24  Midterm 2
July 15  Midterm 3
July 22  Last Day of Classes
July 22  Final Exam

Schedule:
### Week 1
- 5.5 - 6.3

### Week 2
- 6.5, Review, Test, 7.1 - 7.3

### Week 3
- 7.4 - 7.8, 8.1

### Week 4
- 8.2, Review, Test, 11.1 - 11.2

### Week 5
- 11.3 - 11.6

### Week 6
- 11.7 - 11.10

### Week 7
- Review, Test, 10.1 - 10.2

### Week 8
- Review, Final Exam

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

### J. COURSE POLICIES

#### Attendance/Tardiness
Attendance for this course is required.

#### Late Work and Make-up Exams
Late work is not accepted unless previously approved. In the event of an excused absence for an exam, it is the student’s responsibility to arrange for a time to make up the exam as soon as possible.

#### Extra Credit
Extra credit will be given on some assignments for completing advanced problems, but there will be no extra credit assignments given to students on an individual basis to improve a grade.

#### Cell Phone Use
Cell phone use is not allowed during class.

#### Laptop Use
Laptop or tablet use is not allowed during class.

#### Food in Class
Food is not allowed in the classroom.

#### Missed Exam
All absences from class or exams will be considered unexcused unless they are documented in advance as excusable with the instructor or as soon as possible in the case of emergencies. No credit will be awarded for work missed resulting from unexcused absences.

#### Participation
Participation in class discussion is important, and students that actively participate generally gain a better understanding of the material.
K. COLLEGE AND UNIVERSITY POLICIES

• Academic Honesty:
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery, or plagiarism. (Plagiarism is the presentation of the work of another as ones own work.)
For the complete statement, see http://catalog.tamucc.edu/content.php?catoid=10&navoid=313%23
Academic_Integrity#Academic_Honesty

• Classroom/Professional Behavior
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructors ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc. Also, Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

• Deadline for Dropping a Course with a Grade of W (University)
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

• Grade Appeals Appeals (College of Science and Engineering)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate
academic standards as outlined in the class syllabus, equitable evaluation proce-
dures, or appropriate grading, may appeal the final grade given in the course. The
burden of proof is upon the student to demonstrate the appropriateness of the ap-
peal. A student with a complaint about a grade is encouraged to first discuss the
matter with the instructor. For complete details, including the responsibilities of
the parties involved in the process and the number of days allowed for completing
the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade
Appeal Procedures. These documents are accessible through the University Rules
website at
http://www.tamucc.edu/provost/university_rules/index.html,
and the College of Science and Engineering Grade Appeals webpage at
http://sci.tamucc.edu/students/GradeAppeal.html
For assistance and/or guidance in the grade appeal process, students may contact
the chair or director of the appropriate department or school, the Office of the
College of Science and Engineering Dean, or the Office of the Provost.

- Disability Services
Disability Services (DS) is the hub for coordinating services and accommodations to
ensure accessibility and utilization of all programs for all Texas A&M University-
Corpus Christi students with disabilities. Our services are designed to meet the
unique educational needs of enrolled students with documented permanent or tem-
porary disabilities. DS provides intake and consultation services to students seeking
to register with our office. DS reviews an individuals documentation of disability
and assesses eligibility for services and the determination of reasonable accommo-
dations. For more information visit the Disability Services Office at 116 Corpus
Christi Hall or go to http://disabilityservices.tamucc.edu/

- Notice to Veterans
If you are a returning veteran and are experiencing cognitive and/or physical access
issues in the classroom or on campus, please contact the Disability Services office
for assistance at (361) 825-5816.

- Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes
could not be held on the campus of Texas A&M University Corpus Christi; this
course would continue through the use of Blackboard and/or email. In addition, the
syllabus and class activities may be modified to allow continuation of the course.
Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be oper-
ational within two days of the closing of the physical campus. However, students
need to make certain that the course instructor has a primary and a secondary
means of contacting each student.

GENERAL DISCLAIMER
I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.