A. COURSE INFORMATION
Course number/section: MATH 2413.061/062/071/072
Class meeting time: TR, 12:30-1:45 PM
Class location: CI-122
Course Website: www.bb9.tamucc.edu

B. INSTRUCTOR INFORMATION
Instructor: Dr. Abdullah Abu-Rqayiq
Office location: CI - 356
Office hours: TR 11:00 - 12:30, 3:30 -4:30
E-mail: Abdullah.aburqayiq@tamucc.edu
Appointments: To schedule an appointment, please email me in advance.

C. COURSE DESCRIPTION
Catalog Course Description
Limits, continuity, derivatives, applications of the derivative, and an introduction to integrals. Contains a laboratory component.

Extended Course Description
In this course we will learn about derivatives and integrals of functions in one variable. The course begins with limits and uses them to define the derivative of a function. Differentiation rules are followed by applications of differentiation. Finally, we look at integrals followed by some applications of integrals.

D. PREREQUISITES AND COREQUISITES
Prerequisites
MATH 1314 (College Algebra) and MATH 1316 (Trigonometry), or MATH 2312 (Precalculus), or placement into MATH 2413.

Corequisites
MATH 2413.2XY, the lab for the class. Meets various times and days.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
Textbook

Supplies
In addition, you will need a graphing calculator. WebAssign access code. It is available as a bundle with the textbook or separately as a standalone access code at the bookstore. A scientific calculator is required for this class. Other calculators will not be supported by the instructor. Announcements, materials, and communication will be through the Blackboard
https://bb9.tamucc.edu/.
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. Calculate and determine the existence of limits using the definition of limit, basic properties, and L’Hospital’s Rule. Use calculations of limits to determine local and end behavior of functions.
2. Calculate derivatives of functions from the definition, by applying appropriate rules, and by using implicit and logarithmic differentiation.
3. Interpret derivatives as slopes of tangent lines and instantaneous rates of change. Relate units of a derivative to the units of the dependent and independent variable.
4. Apply derivatives of functions appropriately to: create linearization and differentials of functions, determine and apply related rates of change to solve problems; solve optimization problems; and determine geometric features of graphs of functions.
5. Determine if functions meet hypotheses of theorems and draw appropriate conclusions. Give examples and counterexamples.
6. Use Riemann sums to approximate areas and to estimate accumulations of rates.
7. Use anti-derivatives, the Fundamental Theorem of Calculus, and appropriate u du substitutions to evaluate integrals. Then interpret the results of integration as either a signed area under a curve, or as a function.
8. Recognize and determine the relationships between the graphs of a function, its derivatives and its integral.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The instructional method is a combination of lectures and student activities. Students are expected to participate through in-class activities, preparation for class meetings, and homework.

H. MAJOR COURSE REQUIREMENTS AND GRADING

The student learning outcomes described in Section F will be measured via progress on homework, quizzes, tests and the final exam. Every problem in the homework can be worked multiple times. There is no reason not to obtain a good grade on every homework assignment. Doing so will strengthen your performance on quizzes and tests. The homework will be open all semester. It is strongly recommended that you complete the homework for a section or chapter prior to the quiz and the exams. The final exam is comprehensive and is written by the Mathematics Department. All students will take a common final exam. I do expect you to remember all concepts that I teach as noted on this syllabus.
Grades will be assigned according to the following scale:
A – 90%-100%  B - 80%-89.99%  C – 70%-79.99%  D – 60%-69.99%  F - below 60

**Homework (10%)** – Homework will be assigned at the end of each lesson through WebAssign. At the end of the semester the two lowest homework grades get dropped. Office hours are a great opportunity to ask questions about homework. On-campus free tutoring in the CASA is another way to getting help with the homework.

**Labs (25%)** – The lab part of the course is graded by the TA. You will get a separate handout about that grading.

**Quizzes (15%)** – There will be five quizzes through the semester given as mastery assessments. Dates and times for those quizzes will be announced through the Blackboard.

**Exams (30%)** - There will be two midterm exams through the semester. Exams will be given in-class. Calculators will be allowed unless otherwise instructed. Exam dates will be announced at least one week in advance, but a tentative exam scheduled is given. An exam grade may be replaced by the final exam score.

**Final Exam (25%)** – The final exam will be comprehensive and required of all students.

### I. COURSE CONTENT/ SCHEDULE

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<td>2 (Aug 25)</td>
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<td>3( Sept 1, 3)</td>
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<td>11 (Oct 27, 29)</td>
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<td>Review &amp; Exam 2</td>
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<td>13 (Nov 10, 12)</td>
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<td>15 (Nov 24, 26)</td>
<td>Review, Thanksgiving Holyday (26-29)</td>
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J. COURSE POLICIES

COVID-19

Face Coverings—Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Extra masks will be made available if needed.

General

You are expected to do all online assignments, attend class meetings, do worksheets that will be posted regularly on the Blackboard, and take the scheduled exams and quizzes. You also need to do assignments on time and contact me whenever help is needed.

Attendance/Tardiness
• Attendance will be taken each class.
• For most students attending class is a faster way of learning the material than trying to catch up on missed material solely from the book.

Missed Exam
No make-ups will be given without written evidence of an official University excused absence. For an absence to be considered excused, the student must notify his or her instructor in writing (acknowledged e-mail message is acceptable) prior to the date of absence if such notification is feasible. In cases where advance notification is not feasible (e.g. accident or emergency) the student must provide notification by the end of the second working day after the absence. In the case of illness or injury, students are required to obtain a confirmation note from a health care professional affirming date and time of a medical office visit regarding the illness or injury.

Cell Phone Use
Cell phone during exams is prohibited in any circumstances. Students using their cell phones during exams or quizzes will get automatic zero on that assignments.

Semester Exams and Final Exam
• Two in-class semester tests will be administered during class times. The dates will be announced in class. These dates may be changed with due notice announced during class time. You can use your own calculators and it cannot be shared.
• The final exam will be a comprehensive examination over all materials covered during the semester. Absolutely no early final examination, so make travel arrangements accordingly. Without taking final exam, it will be an “F” for the semester grade regardless.

Participation
Students are encouraged to participate in class discussions.

J. COURSE POLICIES

Attendance - Attendance of class meetings is very important to learn the material. In order to better understand the material, you need to attend meetings, do the WebAssign homeworks, and
take the required quizzes and exams. You also need to ask questions. The office hours are offered to help you with any issue arises during the semester and to answer your questions.

Other Class Policies
1. Students are expected to check Blackboard regularly, check their official emails regularly, and work assignments before the due dates.
2. Assignments will be posted to Webassign, if you are absent it is your responsibility to check, and assignments due as specified. If you have problems accessing the system you must let me know as soon as possible.
3. Two semester tests will be administered during class times. The dates will be announced in Blackboard. These dates may be changed with due notice announced during class time. Bring your own calculators. Cell phones cannot be used as calculators.
4. The final exam will be comprehensive covering all material covered during the semester.

A. RESPONSIBILITIES
1. You are responsible for the information contained in the university ACADEMICCALENDAR – 2019. In particular, you are responsible for dropping the class if needed. Friday, December 4, 2018 is the last day to drop the class.
2. You are responsible for contacting me, if you miss a due date.
3. You are responsible for seeking help from the Center for Academic Student Achievement, a private tutor, coming to my office hours, or attending a student study group; if you have difficulty with a skill and/or concept.
4. You are expected to comply with the rules in the Student Handbook and Student Code of Conduct, as well as the processes in the latter, which are administered by the Office of Student Affairs. The Student Handbook and Student Code of Conduct are accessible at http://judicialaffairs.tamucc.edu/studentcofc.html

K. COLLEGE AND UNIVERSITY POLICIES

• Academic Integrity (University)
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, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work). In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

• 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 instructor’s 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.
• **Statement of Civility**

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)**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/calendar/](http://www.tamucc.edu/academics/calendar/)) for the last day to drop a course.

• **Grade Appeals (College of Science and Engineering)**

As stated in University Procedure 13.02.99.C0.03, 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 procedures, 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 appeal. A student with a complaint about a grade is required 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.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf](http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf). 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**

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 believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.
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. [http://disabilityservices.tamucc.edu/](http://disabilityservices.tamucc.edu/)

- **Civil Rights Complaints**

Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy.

**Limits to confidentiality.** Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center.

- **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 operational 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.

### L. OTHER INFORMATION

- **Academic Advising**

The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to
check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**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.