Math 2414.03E, Calculus II

CLASS SYLLABUS: Fall 2024

INSTRUCTOR INFORMATION

Instructor: Dr. Tingxiu Wang, Professor of Mathematics

Office Location: Binnion 306 Online Office Hours: MWF 9:00 AM – 10:00 AM
Or by appointment

Office Phone: 903-886-5958 Office Fax: 903-886-5945

Email Address: Tingxiu.wang@tamuc.edu Preferred Form of Communication**: email**

Communication Response Time: usually within 24 hours during weekdays, M-F.

COURSE INFORMATION

Course: MATH 2414, Calculus II, 4 credit hours

Course Description: Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Prerequisites: MATH 2413 with a minimum grade of C.

Course Materials:

- Textbook: Calculus, 9th Edition, by James Stewart. We will study Chapters 5, 6, 7, 8, 10, and 11. We may occasionally cover enrichment activities not in the text. The 8th edition is still usable if you can match the chapters with the Nineth edition. Although it is not required, it will be helpful to have a textbook.
- Technology: Use of a graphing calculator having at least the capabilities of the TI-83 will be helpful throughout the course. TI-Nspire is highly recommended. A computer algebra system will be used for some problem exploration, enhanced conceptual understanding, and to engage students as active participants in the learning process.

Student Learning Outcomes: Upon successful completion of this course, students will:

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.

COURSE REQUIREMENTS

Evaluation methods can include grading homework, quizzes, chapter tests, projects and final exam.

Time for this course: How much time do you need for this class? A thumb of rules in education is that the number of hours for a class is equal to three times of the credit hours per week in a long semester. Calculus II is a four-credit hour course. Thus, you would need 12 hours per week for this class. Each day, you would need about 30 minutes to review lecture notes and 1.5 hour to do homework. Some students feel that this class requires more time to study. That is correct because this is a four-credit hour class. So, it requires 25% more time than a three-credit hour class.

Attendance: It is difficult to learn math by teaching oneself. Attendance is expected. If you have to be absent, you are responsible for all announcements and materials presented in the class. If you miss a class, you need to catch up by yourself. Tutors in the math skills center may help you.

Homework: *Without practice, no one can learn. Without sufficient practice, no one can learn well*. Homework practice questions listed in Appendix A are for additional practice. They will not be collected, nor graded.

Quizzes: There will be 10 take-home quizzes. Each quiz is worth 12 points. A total of 120 points will be used to determine the course grade. Each Quiz is due by 11:59 PM on a Sunday. Please see the due date at the end of this file. Either submit your quizzes to D2L, Activity, with the file name in the format: LastName-Q#, or turn in the Monday class. For example, John Smith submits Quiz 3. Use the file name, Smith-Q3.PDF. A late submission will have a 3-point deduction.

Tests: There will be three tests. Each test is worth 80 points. A make-up test (except the last one) will be given only under a very special circumstance and if I am notified before the exam. The make-up test may be *more difficult* than the classroom test and must be made up within one week. To be eligible for taking a test, one must earn at least 60% of the homework for the test.

Final Test: The Final is comprehensive and worth of 120 points. It is scheduled at 8:00am-10:00am, Monday, December 9, 2024.

Grading: There will be a total of 480 points for this class in terms of ten quizzes and three tests.

Quizzes	120 points
Tests	240 points
Final	120 points
Total	480 points

Your course grade will be based on the percentage of the points you make to the total points available in the course: A >= 90%, B >= 80%, C >= 70% D >= 60% F < 60%.

TECHNOLOGY REQUIREMENTS

- Required Technology: This is a face-to-face class. You can come to campus to find a computer to use in case you need it.
- TI-Nspire or other calculators with similar capability is highly recommended.
- When you submit a quiz or test, make one PDF file in terms of the order of quiz/test questions and in the portrait orientation. Make sure your PDF files are scanned clearly, or they will be invalid. Please visit the following video clips for making one PDF file:
  - Using CamScanner: https://www.youtube.com/watch?v=sZFcQJCmtMI
  - Android: https://www.youtube.com/watch?v=FWlVYd2Zc-E
  - iPhone: https://www.youtube.com/watch?v=10XH6VfGLqI
- D2L/LMS: All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). You will obtain the course materials through LMS.

You cannot distribute the course materials without permission of the instructor. To access LMS, go to myLeo, then Apps, then My Leo Online D2L Brightspace. You also have an email account via myLeo - all my emails sent from D2L (and all other university emails) will go to this account, so please be sure to check it regularly.

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

You need your campus-wide ID (CWID) and password to log into the course. 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**.**

Course readings, assignments and discussions will be completed /turned in through LMS. Your grades will be available in LMS. The course materials are only for this course. You cannot distribute the course materials without permission of the instructor

This course is presented with video lectures with practice questions. There are 10 sets of practice questions. You should begin by reading the course syllabus, paying particular attention to the Suggested Day-by-Day Schedule.

Note: 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

Interaction with Instructor: You may email and telephone your instructor, and visit your instructor at LMS. I will try to respond your email within 24 hours, Monday through Thursday. My response over the weekend may have a delay.

Math Lab: Free tutoring service offered by the Mathematics Department (Binnion Hall Room 328) with the following hours: Monday-Thursday, 10am–5pm; and Friday. 10am–2pm.

The TAMUC One Stop Shop- provides as many student resources as possible in one location.
http://www.tamuc.edu/admissions/oneStopShop/

The TAMUC Academic Success Center provides academic resources to help you achieve academic success.
http://www.tamuc.edu/CampusLife/CampusServices/AcademicSuccessCenter/default.aspx

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

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

- All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook. http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx
- Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: https://www.britannica.com/topic/netiquette

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

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

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 have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-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.

Counseling Service

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Campus Concealed Carry Statement

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 the Carrying Concealed Handguns On Campus document and/or consult your event organizer. Web url: http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

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.

Day-by-Day Schedule

This schedule is for reference. The actual coverage of each day may be different. Please attend each class to learn what is taught. If you miss a class, you need to catch up by yourself.

MATH2414, Calculus II
MTWRF: 8:00am-8:50am, Binnion 302

Week of	Monday	Tuesday	Wednesday	Thursday	Friday
Aug. 26	Syllabus 5.1	5.1, 5.2	5.2	5.3	Practice Class
Sept. 2	Labor Day Campus Closed	5.4	5.4	6.1	Practice Class
Sept. 9	6.2, 6.3 Quiz 1 due	6.4, 6.5	6.4	6.6	Practice Class
Sept. 16	6.7 Quiz 2 Due	6.8	6.8	7.1	Practice Class
Sept. 23	Review Quiz 3 Due	Test 1[1]	7.1, 7.2	7.2	Practice Class
Sept. 30	7.3	7.4	7.4, 7.5	7.5	Practice Class
Oct. 7	7.6 Quiz 4 Due	7.7	7.8	7.8	Practice Class
Oct. 14	8.1 Quiz 5 Due	8.2	8.3	8.4	Practice Class
Oct. 21	Review Quiz 6 Due	Test 2[2]	10.1	10.2	Practice Class
Oct. 28	10.3	10.3	10.4	10.5	Practice Class
Nov. 4	Quiz 7 Due	10.5	10.6	11.1	Practice Class
Nov. 11	11.2 Quiz 8 Due	11.2	11.3	11.4	Practice Class
Nov. 18	11.5 Quiz 9 Due	11.6	11.6, 11.7	11.7	Practice Class
Nov. 25	11.8	11.9	11.10	Thanksgiving University Closed	Thanksgiving University Closed
Dec. 2	11.10	Review	Test 3[3]	Review	Review
Dec. 9	Final 8am-10am				

[1] Test 1 covers Chapters 5 and 6.
[2] Test 2 covers Chapters 7 and 8.
[3] Test 3 covers Chapters 10 and 11.
[4] The Final Exam covers all we study in this semester.

WELCOME TO THIS CLASS