MATHEMATICS
TEXAS A&M UNIVERSITY

Math 172 Syllabus

Course title and number	**MATH 172, Sections 501 & 502**	
Term	Fall 2019	
Class times and location	**S501:** Lecture TR, 12:45 – 2:00pm	at BLOC 164
	S501: Recitation W, 9:10 – 10am	at BLOC 163.
	S502: Lecture TR, 2:20 – 3:35pm	at BLOC 164
	S502: Recitation W, 4:10 – 5pm	at BLOC 121.

Course Website: https://www.math.tamu.edu/ irinaholmes/M172F19/M172F19-TAMU.html

Instructor Information

Name	**Irina Holmes**
e-mail address	irinaholmes@tamu.edu
Office	Blocker 641G
Office hours	Tuesday: 11am – 12pm,
	Thurs: 11am – 12pm & By Appointment.

TA Information

Section 501 TA:	**Kelly Barnes**	kellybarnes@tamu.edu
Section 502 TA:	**Hunter Merriman**	hunter.merriman@tamu.edu

Course description and Prerequisites

Description: Topics covered include: techniques of integration, applications of integrals, improper integrals, sequences and infinite series. This is a second course in calculus for math, chemistry, and physics majors and covers most of chapters 6 through 10 of the textbook. It is designed to be more rigorous and demanding than MATH 152.

Prerequisites: MATH 147, MATH 151 or MATH 171 or equivalent with a grade of C or better.

Learning Objectives

Students in this course students will:

- Recognize and recall the main definitions and results explained in the course.
- Develop quantitative and problem-solving skills.
- Recognize situations in which calculus concepts and results can be applied to other areas in mathematics and related fields.
- Identify and reproduce the theoretical framework underlying the definition of integrals, the concept of Riemann sums and how it relates to definite integrals.
- Be able to set up and calculate definite integrals; use techniques of integration; use integrals to find areas, volumes and arc length; solve problems involving work and force.
- Master the concept of convergence and divergence of sequences and infinite series and the various convergence tests for series.
- Be able to make error estimates for series.
- Thoroughly understand the notion of power series and applications.
- Be expected to present simple proofs, definitions and statement of theorems.

Textbook and/or Resource Material

- *Calculus: Early Vectors*, by James Stewart, BROOKS/COLE-CENGAGE Learning (hardcover, lose-leaf or electronic edition).

Grading Policies

This course grade will be determined from 2 midterm exams, one final exam, and quizzes. The midterm exams are each worth 25% of the grade, the final exam is worth 30% of the grade, and the quizzes are worth the remaining 20%. At the end of the semester, your grade on the Final Exam, if higher, can be used to replace your lowest Midterm grade.

- **Homework:** Homework will be assigned every week but will not be collected. However, the weekly quizzes will be based on the homework, so it is the responsibility of every student to complete the homework each week. Recitations may be used to ask for assistance with homework problems, or any other questions you may have about the material in the course.
- **Quizzes:** There will be weekly quizzes, except on exam weeks. Quizzes will be given in the last 15-20 minutes of recitation.
- **Midterms:** The tentative dates for the two midterms are October 3 and November 14, both in lecture.
- **Final Exam:** Consult the University Final Exam Schedule for date, time and location (TBA).
- **Grading Scale:** Letter-grade assignment will be at least as generous as the following standard scale:

Range	Grade
$900 \leq$ pts	A
$800 \leq$ pts < 900	B
$700 \leq$ pts < 800	C
$600 \leq$ pts < 700	D
pts < 600	F

- **Excused absences:** Attendance is mandatory and may affect your grade. For excused absences we refer the student to Student Rule 7 at http://studentrules.tamu.edu/rule7.htm. Excuses for absences during an exam must be substantiated by appropriate documentation.
- **Make-up** exams will be only allowed due to excused absences and the timeline must be discussed with the instructor, following Student Rules. If you foresee the need to be absent during an exam, you must notify the instructor in advance.

Course Topics We will plan to cover the following chapters from the book:

- Chapter 5 - Riemann Integrals (Review, first week).
- Chapter 6 - Applications of Integrals.
- Chapter 7 - Techniques of Integration.
- Chapter 8 - More Applications of Integrals (only parts of the chapter).
- Chapter 10 - Parametric Curves.
- Chapter 11 - Infinite Series.

Americans with Disabilities Act (ADA)

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 contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu/

Academic Integrity

For additional information please visit: http://aggiehonor.tamu.edu
"An Aggie does not lie, cheat, or steal, or tolerate those who do."
In this course students can discuss homework assignments and solutions. It is NOT permissible to discuss any aspect of any test or examination until ALL students have completed the exam. The penalties for violating this policy will range from an F on an assignment or test, to failing in the course.

Title IX and Statement on Limits to Confidentiality

Texas A&M University and the College of Science are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees – including instructors – cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (https://scs.tamu.edu/). Students and faculty can report non-emergency behavior that causes them to be concerned at http://tellsomebody.tamu.edu.