Course Information

Course Information

Course Number: 172
Course Title: Calculus 2
Section: 200
Lecture: TR 12:45-2:00am in BLOC 161
Lab: W 1:50-2:40am BLOC 161 or 104 as announced
Credit Hours: 4   Lecture Hours: 4
Course Website: http://www.math.tamu.edu/~yasskin/currclas/172.22a/
Dept. Website http://www.math.tamu.edu/courses/math172/

Instructor Details

Instructor: Dr. Philip Yasskin
Office: BLOC 620 I, but I will not be there this semester
Phone: 979-845-3261, for leaving a message
    Personal Phone will be available in Canvas.
E-Mail: yasskin@tamu.edu Please include your phone number.
Personal Website: http://www.math.tamu.edu/~yasskin
Office Hours: T 3:00pm-4:00pm or by appointment, all on Zoom
    The Zoom link will be available in Canvas.
    If you email for an appointment, be sure to include a phone number!
Office Hours: Also any day after class.

TA: Logan Knudsen, loganpknudsen@tamu.edu

Course Description

Course Description: 4 credits. 4 Lecture Hours.
    Techniques of integration, applications of integrals, improper integrals, sequences,
    infinite series, vector algebra and solid analytic geometry.
    Designed to be more demanding than MATH 152.
    Only one of the following will satisfy the requirements for a degree: MATH 148, MATH 152,
or MATH 172.

Course Prerequisites

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

Special Course Designation

CORE Mathematics

Course Learning Outcomes

After taking this course, students should be able to:

- compute integrals using the methods of substitution, parts, trig substitutions and partial fractions.
- evaluate improper integrals and approximate integrals numerically.
- use integrals to compute: area; average value; volume by slicing and revolution;
  mass and center of mass of a bar; arclength and surface area of revolution of parametric curves;
  slope of, area inside, and arc length of polar curves; and work.
- find limits of sequences and infinite series including how to explain convergence tests and error estimates
  and how to find and use Taylor series.

Honors Course Learning Outcomes

After taking this course, students should be able to

- solve simple differential equations and apply them.
- use and apply the Maple Computer Algebra System.

Textbook and/or Resource Materials

Text:
MYMathApps Calculus 2, P. Yasskin et. al.
available at:
https://www.math.tamu.edu/maple/maplets/MYMACalc/
The book is FREE for all Aggies.

Extra Tutorial Practice:
Maplets for Calculus 1.4
available at:
https://www.math.tamu.edu/maple/maplets/MYMACalc/
You must be on a Computer which has Maple and can run Java applets,
e.g. the Univ Open Access Labs in person or remotely via https://voal.tamu.edu/.

MYMathApps Exercises:
These are not graded. Each exercise may have buttons for a Hint, Answer, Solution, Check and Remark. Try as many problems as possible. Try doing a problem. If you need to, read the Hint. Once you get an answer, check it against the Answer. If it is not correct, try again. Only read the Solution after you get it correct or you are absolutely stumped. Frequently, there is a way to Check the answer, especially on indefinite integrals. Get in the habit of checking your answers. After some problems, there is a Remark which discusses aspects of the problem which would give away the solution if it were displayed before the problem. Read the remarks.

Math Learning Center: http://mlc.tamu.edu/
The Math Learning Center (MLC) offers various forms of support for Math 172, both online and face-to-face, including drop-in Help Sessions, Tutoring by Appointment and other activities. Additionally, the MLC hosts an archive of Supplemental Material, such as recorded review sessions.
Help Sessions   http://mlc.tamu.edu/Online-Help-Services/MLC-Help-Sessions
Tutoring by Appt   http://mlc.tamu.edu/Online-Help-Services/Tutoring-Central

Maple:
We will be using the Maple Computer Algebra System.
You may purchase Maple for $42 at https://software.tamu.edu/
You do not need to purchase Maple.
You may access maple at the Univ Open Access Labs in person or remotely via https://voal.tamu.edu/.

Grading Policy .

Exams:
There will be 3 midterm exams and a final exam. You must have your ID with you at all exams. CALCULATORS and PHONES are NOT allowed. Make-Ups for Major Exams will be given only in case of an absence authorized under University Regulations. You will need a note from your doctor or your academic dean's office. If you know in advance that you will miss an exam, please contact me in advance. If you email me, be sure to include your phone number.

Online Homework:
Edfinity Online Homework
available at:
https://edfinity.com/
See Canvas for instruction to access Edfinity.
Students are expected to purchase a subscription to Edfinity.com for $25. You will have 2 weeks to request a refund.

Quizzes:
Quizzes may be given in lecture or lab and may not be announced or they may be Take-Home-Quizzes due on announced dates. Quizzes will count like Edfinity homeworks.

Maple Labs:
Maple lab assignments will be given in some labs. Students will work individually or in pairs. They are due at the beginning of the next lab. Lab assignments will count like Edfinity homeworks.

Homework, Quiz, Labs:
There will be no make-ups for In-Class Quizzes. Rather, the lowest 5 e-Homework or Quiz or Lab grades will be dropped. The remaining grades will be averaged and then rescaled to 100 points.

Lab Projects:
There will be 2 projects, possibly using Maple. Students will work individually or in pairs. They are due on announced dates. We will try to use 3D Printing.

Math is Comprehensive:
All Math is comprehensive in nature (in that every concept uses concepts previously covered). Therefore, each exam may cover material from previous exams. Further, to recognize that you may have learned material by the end of the course that you had difficulty with earlier, if the score on your final exam is higher than your lowest midterm exam score, then the score on the final exam will replace that score on that midterm in the course grade calculation. To be eligible for this, you must have taken all 4 exams.

This table shows exam dates, material covered and points

Assessment	Covers MYMACalc	Points	Dates
Exam 1	Chs. 1, 2, 3, 4, 6, 7, 10, 11, 12	100	Thursday, Feb 17, 2022
Exam 2	Chs. 9, 8, 13, 14, 16	100	Thursday, Mar 24, 2022
Exam 3	Chs. 17, 18, 19, 20, 21, 22, 23, 24	100	Thursday, Apr 21, 2022
Final	All	150	Tuesday, May 10, 2022 8:00-10:00am BLOC 161
eHW, Quiz & Labs	All	100	Wed at 11:55pm or as Announced
Projects	All	100	As Announced
Total:		**650**	

I may curve any grade or the total and then compute the course grade from the following list:
650 points ≥ A ≥ 585 points > B ≥ 520 points > C ≥ 455 points > D ≥ 390 points > F ≥ 0 points

Late Work Policy

Late Exams:
Make-Ups for Major Exams will be given only in case of an absence authorized under University Regulations. You will need a note from your doctor or your academic dean's office. If you know in advance that you will miss an exam, please contact me in advance. If you email me, be sure to include your phone number.

Late Take-Home Quizzes or Lab Assignments:
Late Take-Home Quizzes or late Lab Assignments will be accepted only if there is a University excused absence.

Course Schedule

This table shows chapters and topics covered each week of the course.

Week	Starting	Covers MYMACalc	Topics	
1	1/17	Chs: 1,2,3	Antideriv, Riemann Sums, FTC, Substitution	Maple lab
2	1/22	Chs: 10,4	Area, Average Value, Parts	Maple lab
3	1/31	Chs: 11,6	Mass, C of M, Trig Int	Maple lab
4	2/7	Chs: 12,7	Arc Length, Surface Area, Trig Subst	Maple lab
5	2/14	Ch. 9	Partial Fractions, Review	Exam 1
6	2/21	Chs: 13	Volume	Maple lab
7	2/28	Chs: 14,8	Work, Improper Int	Maple lab
8	3/7	Chs: 16	Separable & Linear Diff Eqs	3/7 MidGrades Maple lab
	3/14		Spring Break	
9	3/21	Ch: 17	Applications of Diff Eqs, Review	Exam 2
10	3/28	Chs: 18,19	Sequences, Series	Maple lab
11	4/4	Chs: 20,21	Convergence of Series	Maple lab
12	4/11	Chs: 22,23	Power and Taylor Series	Maple lab
13	4/18	Ch: 24	Applications of Taylor Series, Review	4/19 Q-drop Exam 3
14	4/25	Ch: 15,5	Polar, Numerical Int	Maple lab
15	5/2	All	Catch Up, Review for Final	5/4 Last class
16	5/10	All	Final Exam, Tuesday	8:00-10:00 a.m.

Optional Course Information Items

Name & Email:
Be sure to use your tamu.edu email address to log into Zoom and Edfinity and be sure your Name appears in Zoom and Edfinity as it does on Howdy.

FERPA:
Due to FERPA privacy issues, I cannot discuss grades over email or phone. If you have a question about your grade, please schedule a one-on-one Zoom meeting with me.

Final Conflicts:
If you have 3 exams on the day on your 172 final, please tell me about this before Exam 2. We will see what we can work out.

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All material handed out or written on the board or spoken in class or posted on a computer is copyrighted by the instructor. This includes but is not limited to syllabi, homework, quizzes, labs, webpages, additional problem sets, class notes, in-class materials and exams. Because these are copyrighted, neither you nor anyone else has the right to copy them unless I expressly grant permission.

University Policies

This section outlines the university level policies. The TAMU Faculty Senate established the wording of these policies.

[NOTE: Faculty members should not change the written statements. A faculty member may add separate paragraphs if additional information is needed.]

Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to **Student Rule 7** in its entirety for information about excused absences, including definitions, and related documentation and timelines.

Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to **Student Rule 7** in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" (Student Rule 7, Section 7.4.1)**.**

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" (Student Rule 7, Section 7.4.2).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See Student Rule 24)**.**

Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" (Section 20.1.2.3, Student Rule 20).

Texas A&M at College Station

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at **aggiehonor.tamu.edu.**

Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources office on your campus (resources listed below). Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

Texas A&M at College Station

Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit disability.tamu.edu.

Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see University Rule 08.01.01.M1):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

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Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with Counseling and Psychological Services (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's Title IX webpage.

Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care by utilizing available resources and services on your campus.

Texas A&M College Station

Students who need someone to talk to can contact Counseling & Psychological Services (CAPS) or call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at suicidepreventionlifeline.org.

Campus Specific Policies

Classroom Access and Inclusion Statement

Texas A&M University is committed to engaged student participation in all of its programs and courses and provides an accessible academic environment for all students. This means that our classrooms, our virtual spaces, our practices and our interactions are as inclusive as possible and we work to provide a welcoming instructional climate and equal learning opportunities for everyone. If you have an instructional need, please notify me as soon as possible.

The Aggie Core values of respect, excellence, leadership, loyalty, integrity and selfless service in addition to civility, and the ability to listen and to observe others are the foundation of a welcoming instructional climate. Active, thoughtful and respectful participation in all aspects of the course supports a more inclusive classroom environment as well as **our mutual** responsibilities to the campus community.

Statement on the Family Educational Rights and Privacy Act (FERPA)

FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. Currently enrolled students wishing to withhold any or all directory information items may do so by going to **howdy.tamu.edu** and clicking on the "Directory Hold Information" link in the Student Records channel on the MyRecord tab. The complete **FERPA Notice to Students** and the student records policy is available on the Office of the Registrar webpage.

Items that can never be identified as public information are a student's social security number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

Directory items include name, UIN, local address, permanent address, email address, local telephone number, permanent telephone number, dates of attendance, program of study (college, major, campus), classification, previous institutions attended, degrees honors and awards received, participation in officially recognized activities and sports, medical residence location and medical residence specialization.

College and Department Policies