

Course Information

Course Number: 172H

Course Title: Calculus II Honors

Section: 200

Time: Lecture: TR 1:30-2:45pm

Recitation: W 2:55-3:45pm

Location: ONLINE, Zoom links are in <u>eCampus</u>

Credit Hours: 4

Class Website: http://www.math.tamu.edu/~yasskin/currclas/172H.21a/

Department Website: http://www.math.tamu.edu/courses/math172/

Math Learning Center http://mlc.tamu.edu/

Help Sessions
Tutoring by Appt

http://mlc.tamu.edu/Online-Help-Services/MLC-Help-Sessions
http://mlc.tamu.edu/Online-Help-Services/Tutoring-Central

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

E-Mail: <u>yasskin@math.tamu.edu</u> Please include your phone number.

Website: http://www.math.tamu.edu/~yasskin

Office Hours: TR 11:15am-12:15pm and 3:00pm-4:00pm or by appointment,

Zoom link is in eCampus

If you email for an appointment, be sure to include a phone number!

TA: Catherine Johnson E-Mail: johnsonc@tamu.edu

Course Description

Calculus. (4-0). Credit 4. 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 and MATH 172. Prerequisite: MATH 147, MATH 151 or MATH 171 or equivalent with a grade of C or better.

Course Prerequisites

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

Special Course Designation

CORE



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. They should be able to evaluate improper integrals and approximate integrals numerically. They should be able to use integrals to compute: area; average value; mass and center of mass of a bar; arc length and surface area of revolution of parametric curves and graphs; volume by slicing and revolution; slope, area, and arc length of polar curves; and work. Students should be able to compute limits of sequences and sums of infinite series or determine their convergence and estimate errors. They should be able to find and apply Taylor series. Honors students should be able to solve simple differential equations and apply them. Students will also learn 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/MYMACalc2/MConte

nts.html

The book is FREE for all Aggies.

Extra Tutorial Practice: Maplets for Calculus 1.4

available at:

https://www.math.tamu.edu/maple/maplets/1.4/MapletsForCalculus.html 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.

Maple Lab Manuel
Math Learning Center:

https://www.math.tamu.edu/maple/maplets/chpdfs/MapleInstructions.html 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.



Grading Policy

Assessment	Covers MYMACalc	Points	Dates
Exam 1	Chs. 1, 2, 3, 4, 6, 7, 10, 11, 12	100	Thursday, Mar 3, 2021 8:30-10:30pm ONLINE
Exam 2	Chs. 5, 8, 9, 13, 14, 15	100	Thursday, Mar 25, 2021 8:30-10:30pm ONLINE
Exam 3	Chs. 18, 19, 20, 21, 22, 23, 24	100	Thursday, Apr 22, 2021 8:30-10:30pm ONLINE
Final	All	150	Thursday, May 6, 2021 8:00-10:30am ONLINE
eHW & Quiz	All	100	Wednesday at 11:55pm or as Announced
Labs and Projects	Maple and Theory	100	as Announced
Total:		550	

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

e-Homework: https://edfinity.com/

Edfinity Homework will be due on Wednesday nights at 11:55pm unless otherwise announced. It is automatically graded. Late homework will be accepted for up to 1 week but there will be a 20% penalty on the portion that was not completed by the due date. The enrollment code for Edfinity Homework is on eccampus. You will pay \$23 when you enroll. You can get a refund during the first two weeks. So wait to enroll until you need to start on the first homework which will be not be until the second week of class.

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. Late Take-Home Quizzes will be accepted only if there is a University excused absence. There will be no make-ups for In-Class Quizzes since some will be dropped.

HW & Quiz Grades: Homework and Quizzes are grouped together for grading purposes. The lowest

5 Homework or Quiz grades will be dropped. The remaining grades will be averaged and

then rescaled to 100 points.

Projects: Students will be assigned 1 major project and several minor projects to solve in lab with

or without Maple. No previous knowledge of Maple is assumed.

Exams: There will be 3 midterm exams (given as night exams) and a final exam. As of now, I

expect these will be posted on eCampus and proctored using HonorLock. No calculators are allowed on exams. Make-Ups for Major Exams will be given only in case of an absence authorized under University Regulations. 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.



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. In order for you to be eligible for this, you must have taken all 4 exams.

Late Work Policy

This is discussed above under Grading Policy.

Course Schedule

Wee	k Starting	g Covers	Topics	
		MYMACalc		
1	1/18	Chs: 1,2,3	Antiderivative, Riemann Sums, FTC, Substitution	
2	1/25	Chs: 10,4	Area, Average Value, Parts	
3	2/1	Chs: 11,6	Mass, C of M, Trig Int	
4	2/8	Chs: 12,7	Arc Length, Surface Area, Trig Subst	
5	2/15		Snow Days	
6	2/22	Chs: 9,13	Volume	
7	3/1	Chs: 14	Partial Fractions, Work	3/3 Exam 1
8	3/8	Chs: 8,5	Improper Int, Numerical Int	
9	3/15		Catch up	3/18 Attend Friday Classes
10	3/22	Chs: 18,19	Sequences, Series	3/25 Exam 2
11	3/29	Chs: 20,21	Convergence of Series	
12	4/5	Chs: 22,23	Power and Taylor Series	
13	4/12	Chs: 24	Applications of Taylor Series	
14	4/19		Catch up, Review	4/22 Exam 3
15	4/20	Chs: 16,17	Differential Equations	
16	4/26	Chs: 15	Polar Coords, Catch up	4/30 Q-drop
17	5/3		5/5 8:00-10:30am Final Exam	



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. Zoom will give me a

record of your attendance.

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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or posted on a computer is copyrighted by the instructor. This includes but is not limited to syllabi, homework, quizzes, labs, web-pages, additional problem sets, class notes, inclass 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

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 <u>Student Rule 7</u> 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 <u>Student Rule 7</u> 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" (<u>Student Rule 7, Section 7.4.2</u>).

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



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).

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 in the Student Services Building or at (979) 845-1637 or visit <u>disability.tamu.edu</u>. 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.

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 <u>University Rule 08.01.01.M1</u>):

- 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.



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 <u>Title IX webpage</u>.

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 the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can 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.

College and Department Policies

College and departmental units may establish their own policies and minimum syllabus requirements. As long as these policies and requirements do not contradict the university level requirements, colleges and departments can add them in this section.



COVID-19 Temporary Addendum to Minimum Syllabus Requirements

Campus Safety Measures

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University has adopted policies and practices for the Spring 2021 academic term to limit virus transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. **Students** who have a fever or exhibit symptoms of COVID-19 should participate in class remotely if that option is available, and should not participate in face-to-face instruction.
- Face Coverings—<u>Face coverings</u> (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. Description of
 face coverings and additional guidance are provided in the <u>Face Covering policy</u> and <u>Frequently</u>
 <u>Asked Questions (FAQ)</u> available on the <u>Provost website</u>.
- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in course and course-related activities.
- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting
 classrooms and other teaching spaces. Leave classrooms promptly after course activities have
 concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting
 to enter classrooms and other instructional spaces.
- To attend a face-to-face class, students must properly wear an approved face covering If a
 student refuses to wear a face covering, the instructor should ask the student to leave and join
 the class remotely. If the student does not leave the class, the faculty member should report
 that student to the <u>Student Conduct office</u> for sanctions. Additionally, the faculty member may
 choose to teach that day's class remotely for all students, or dismiss the class in the case of a
 traditional face to face lecture.

Personal Illness and Quarantine

Students required to quarantine must participate in courses and course-related activities remotely, if that option is available, and **must not attend face-to-face course activities**. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Students experiencing personal injury or Illness that is too severe for the student to attend class qualify for an excused absence (See <u>Student Rule 7, Section 7.2.2</u>.) To receive an excused absence, students must comply with the documentation and notification guidelines outlined in Student Rule 7.