Instructor Policy - Section 010 (MWF)

Math 129 - Calculus II - Fall 2020

MWF 1:00 – 1:50 pm in MCPRK 103

Description of Course

Continuation of MATH 122B or MATH 125. Techniques of symbolic and numerical integration, applications of the definite integral to geometry, physics, economics, and probability; differential equations from a numerical, graphical, and algebraic point of view; modeling using differential equations, approximations by Taylor series.

Course Prerequisites or Co-requisites

MATH 122B, 124, or 125 with a C or higher, or Math 129.

Instructor and Contact Information

Robert Sims, (520)-626-1990, rsims@math.arizona.edu

Office Hours will be held online - a link will be provided in our section's D2L site. They are scheduled for: Wednesdays from 2 to 3 and Thursdays from 1 to 2.

Course Webpage: https://math129.math.arizona.edu

My Course Website: https://www.math.arizona.edu/~rsims/ma129/ma129.html

D2L sites: There are two D2L sites for this class - one for our section, and one for all Math 129 students (the common site).

- *Our Section's D2L Site:* Will serve as the central hub for communication and materials for our course.

    - Announcements will be made on our section's D2L.

    - Links to our remote meetings and office hours will be on our section's D2L.

    - The eText and WebAssign will be delivered digitally via our section's D2L through the Inclusive Access program.

    - The course policy and the course calendar are posted in our section's D2L.

    - Grades will be posted in our section's D2L. (Please verify the accuracy of all homework, quiz, and exam scores in a timely fashion.)

- *Common D2L Site:* Will serve as a distribution center for materials common to all sections of Math 129. Namely, it will contain:

    - Links to online lectures (delivered by our course coordinator) and recordings of these lectures. You are welcome to join the livestream of the lectures (at noon and 7pm on Tuesdays and Thursdays) but are not required to do so. You are welcome to use the recorded lectures as a supplemental resource.

    - Links to the final exam.

Course Format and Teaching Methods

This class is scheduled to be taught in the In-Person modality.

Class Meetings

Meeting Times: We will be meeting remotely until the University notifies us that in-person meetings may commence. We will meet on Zoom during our scheduled class times and our class will closely reflect our in-person classes. On any given day, this may include lecture, discussion, seat-work, and group work.

When the COVID-19 situation permits teaching on campus, we will be meeting MWF from 1:00 to 1:50 pm in MCPRK 103.

Remain flexible: If pandemic conditions warrant, the University may require that we return to remote operations. If that is the case, we will notify you by D2L Announcement and email that we are moving to remote operations.

Remote/online only after Thanksgiving: After the Thanksgiving holiday, we are scheduled to move to remote teaching. That means we will meet on Zoom during our scheduled class times and our class will closely reflect our in-person classes, as they did during the start of the course.

Face coverings are required in our classroom: Per UArizona's Administrative Directive, face coverings that cover the nose, mouth, and chin are required to be worn in all learning spaces at the University of Arizona (e.g., in classrooms, laboratories and studios). Any student who violates this directive will be asked to immediately leave the learning space, and will be allowed to return only when they are wearing a face covering. Subsequent episodes of noncompliance will result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied. The student will not be able to return to the learning space until the matter is resolved.
• The Disability Resource Center is available to explore face coverings and accessibility considerations if you believe that your disability or medical condition precludes you from utilizing any face covering or mask option. DRC will explore the range of potential options as well as remote course offerings. Should DRC determine an accommodation to this directive is reasonable, DRC will communicate this accommodation with your instructor.

Physical distancing is required in our classroom: During our in-person class meetings, we will respect CDC guidelines, including restricted seating to increase physical distancing. Any student who does not maintain physical distance from others may be asked to immediately leave the learning space. Noncompliance may result in a Student Code of Conduct complaint being filed with the Dean of Students Office, which may result in sanctions being applied.

Classroom attendance:
• If you feel sick, or may have been in contact with someone who is infectious, stay home. Except for seeking medical care, avoid contact with others and do not travel.
• Notify your instructors if you will be missing an in-person or online course.
• Campus Health is testing for COVID-19. Please call (520) 621-9202 before you visit in person.
• Visit the UArizona COVID-19 page for regular updates.
• **Students** who need to miss more than one week of classes in any one semester must provide a doctor's note of explanation to DOS-deanofstudents@email.arizona.edu.

Class Recordings: For lecture recordings, which are used at the discretion of the instructor, students must access content in D2L only. Students may not modify content or re-use content for any purpose other than personal educational reasons. All recordings are subject to government and university regulations. Therefore, students accessing unauthorized recordings or using them in a manner inconsistent with UArizona values and educational policies are subject to suspension or civil action.

Course Communications

It is the student's responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during scheduled classes, by email, or through D2L. My preferred mode of communication is by email, and I anticipate being able to respond within 24 hours. Course-wide announcements will be distributed using D2L.

Course Goals and Objectives

Math 129 covers the fundamentals of the integral calculus, including:
• developing the techniques of analytical and numerical integration, including improper integrals;
• applying the definite integral to problems arising in geometry and in physics;
• developing the concept of infinite series and the ability to calculate and use Taylor series;
• analyzing first order differential equations from a graphical and algebraic point of view and modeling physical and biological situations by differential equations;
• promoting problem-solving and critical thinking skills through the application of calculus concepts to various situations.

Learning Outcomes

Upon completion of the course, the student will:
• identify appropriate integration technique(s) and successfully execute them;
• for a given geometric, or physical quantity, set up an integral that measures the quantity, and use integration techniques to calculate it;
• determine if an infinite series or improper integral converges to a finite value; calculate, manipulate, and determine the radius of convergence of Taylor series;
• solve first order differential equations analytically and graphically and determine an appropriate differential equation to model various physical and biological situations.

Course Materials

The course materials include the textbook (*Calculus Single Variable*; Sixth Edition by Hughes-Hallett et al.; published by Wiley) and access to the online homework system (WebAssign).

Course materials are being delivered digitally via D2L through the Inclusive Access program. Please access the material through D2L the first day of classes to make sure there are no issues in the delivery, and if you are having a problem or question it can be addressed quickly.

You automatically have access to the course materials FREE through September 6, 2020. You **must** take action (even if you have not accessed the materials) to opt-out if you do not wish to pay for the materials, and choose to source the content independently. **The deadline to opt-out is 9:00pm MST, September 6, 2020. If you do not opt-out and choose to retain your access, the cost of the digital course materials will appear on your October Bursars account.** Please refer to the Inclusive Access FAQs at https://shop.arizona.edu/textbooks/Inclusive.asp for additional information.

Required Materials

A graphing calculator is a tool that will be used in this course. We recommend any model in the TI-83 or TI-84 series. Models that can perform symbolic calculations (also known as CAS) are NOT allowed on exams and quizzes. CAS models include (but are not limited to) the TI-89, TI

NSpire CAS and HP 50g. Students are not allowed to share calculators during exams and quizzes. If you have a mobile device, you will be required to download the free Desmos Test Mode App, which may be used as a graphing calculator during the final exam. Instructor reserves the right to require the Desmos Test Mode App on all midterm exams and quizzes.

Equipment and software requirements: For this class you will need daily access to a device with webcam and microphone and reliable internet signal that can:

• Access D2L

• Join Zoom meetings

• Watch videos posted on D2L

• Access WebAssign and the eText

• Scan and upload written work

• View pdf documents

Note: enrolled students can borrow technology from the UA Library on a first come, first served basis. See https://new.library.arizona.edu/tech/borrow for details.

University-wide Policies link

The Links to the following UA policies are provided here, https://academicaffairs.arizona.edu/syllabus-policies:

• Absence and Class Participation Policies

• Threatening Behavior Policy

• Accessibility and Accommodations Policy

• Code of Academic Integrity

• Nondiscrimination and Anti-Harassment Policy

Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Netiquette

Netiquette is an abbreviation for "internet etiquette" – more simply put, guidelines for communicating online to ensure meaningful and polite exchanges. The common standards listed below work well for both the online classroom and beyond in professional online communication:

• Behavior. Maintain the same standard of behavior and ethics that you would follow in a face-to-face context.

• Tone. Treat others with respect. Be mindful of your tone and how that is conveyed in your writing style. DO NOT USE ALL CAPS. It is considered shouting and not appropriate in a classroom. Avoid sarcasm and irony as it is easily misinterpreted in an online environment.

- Clarity and Content. Be succinct. Write, reread, and then post. Carefully consider what you have written. Does it make sense? Is it free from errors? Does it add to the conversation? Is it unnecessarily confrontational or offensive?

- Contribute. Online learning is not passive. It is expected that you will share your knowledge and insight. Be an active contributor to the learning community.

- Be forgiving. If someone makes a mistake or does something inappropriate, address it privately and politely. You can always let the instructor know and ask them to address it as well.

Assignments and Examinations

WebAssign Homework: (75 points) A computer grading program called WebAssign will be used for problems assigned from the text. The due dates for all assignments are posted in WebAssign - it is your responsibility to know when the assignments are due. Late work is not accepted. A final WebAssign homework score based on 75 possible points will be computed. WebAssign will produce a percentage based on the problems you have gotten correct. I will multiply that percentage by 75 to produce your final score.

Written/Presentation Work: (90 points) Hand-written homework showing all work with proper notation will be submitted. These problems will come from the text and/or from a set of problems created by your instructor. A final written/presentation work score based on 70 possible points will be computed. I will average your scores, dropping the lowest, and multiply the corresponding percentage by 90 to produce your final score.

Quizzes: (85 points) Short quizzes will be given regularly. The quizzes are closed-book and closed-notes, and will be administered outside of class time on the dates listed in the calendar posted in D2L. The quizzes will be delivered using WebAssign (or Gradescope) and students will be expected to upload solutions to selected problems. They will usually consist of 1 or 2 problems based on the WebAssign assignments. Grading disputes regarding a quiz must be addressed within one week after the quiz score has been returned. A final quiz score based on 85 possible points will be computed. I will average your scores, dropping the lowest, and multiply the corresponding percentage by 85 to produce your final score.

In-Class Exams: (300 points) Four in-class exams are tentatively scheduled for Monday, September 14th; Wednesday, October 7th; Wednesday, October 28th, and Friday, November 20th. Each exam will be worth 75 points. All exams are closed book and closed notes. They will be delivered using WebAssign and students will be expected to upload solutions to selected problems. They will be proctored using Zoom, with video sharing. Any student who has concerns about sharing video during an exam must meet with their instructor at least two weeks prior to the exam to discuss options. This is not a conversation that can take place immediately prior to an exam**.** If you miss an exam for any reason, contact your instructor as soon as possible. In general, there will be no make-up exams without prior arrangement with the instructor. However, a make-up exam may be given in exceptional circumstances. Approval in these cases is at the sole discretion of the instructor and/or the dean of students, and decisions will be made on a case-by-case basis. This may require providing a detailed account of the situation. According to university policy, no exams will be held on the week of December 7th.

Final Examination

(150 points) The final exam is a comprehensive common exam that is closed book and closed notes. It is scheduled for Monday, December 14th from 8:00 – 10:00 am (see the University's Final Exam Schedule at http://www.registrar.arizona.edu/schedules/finals.htm). It will be delivered using WebAssign and students will be expected to upload solutions to selected problems. It will be proctored using Zoom, and any student who is unable or unwilling to share their video during the final exam

must contact their instructor at least a week prior to the exam to so a suitable proctoring alternative can be arranged. Additional information and a study guide can be found at https://math129.math.arizona.edu.
The University's Exam regulations will be strictly followed https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information.

Grading Scale and Policies

Your final course grade will be determined by a percentage of the 700 total possible points in the course. Grades will be no lower than the following:

A: 100-90%   B: 89-80%   C: 79-70%   D: 69-60%   E: 59-0%

No extra credit or bonus points are offered in this course.

Note: A grade of C or better in Math 129 is a necessary prerequisite for Math 223 (Vector Calculus) and Math 254 (Differential Equations). Students who receive a D in Math 129 will receive credit for the course towards graduation requirements, and will be able to use their course for the general education math requirement, but will not be automatically qualified to register for Math 223 or 254.

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete and http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal respectively.

You may drop the class without a W through September 6 using UAccess. The class will appear on your UAccess record, but will not appear on your transcript. You may withdraw with a W through November 1 using UAccess. The University allows withdrawals through November 22, but only with the Dean's approval. Late withdraws are dealt with on a case by case basis, and requests for late withdraw without a valid reason may or may not be honored.

Dispute of Grade Policy: Any questions regarding the grading of any assignment, quiz, or exam need to be cleared up within one week after the graded item has been returned.

Additional Resources for Students

UA Academic policies and procedures are available at http://catalog.arizona.edu/policies

Student Assistance and Advocacy information is available at http://deanofstudents.arizona.edu/student-assistance/students/student-assistance

Academic advising: If you have questions about your academic progress this semester, or your chosen degree program, please note that advisors at the Advising Resource Center can guide you toward university resources to help you succeed.

Life challenges: If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office can be reached at 520-621-2057 or DOS-deanofstudents@email.arizona.edu.

Physical and mental-health challenges: If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

Confidentiality of Student Records

http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa

Scheduled Topics/Activities

Week	Topics	WebAssign	HW/Quizzes/Exams
1: Aug 24 - Aug 30	Integration by substitution and parts	Sec 7.1	Quiz #1 & HW #1
2: Aug 31 - Sep 6	Tables of integrals & Trig substitution	Sec 7.2	Quiz #2 & HW #2
3: Sep 7 - Sep 13	Partial fractions	Sec 7.3	HW #3
4: Sep 14 - Sep 20	Numerical methods of integration, Improper integrals	Sec 7.4 & 7.5	Exam #1 & Quiz #3 & HW #4
5: Sep 21 - Sep 27	Comparison of improper integrals	Sec 7.6	Quiz #4 & HW #5
6: Sep 28 - Oct 4	Areas & volumes, Applications to geometry	Sec 7.7 & 8.1	Quiz #5 & HW #6
7: Oct 5 - Oct 11	Density	Sec 8.2	Exam #2
8: Oct 12 - Oct 18	Applications to physics, Sequences, geometric series	Sec 8.4 & 8.5	Quiz #6 & HW #7
9: Oct 19 - Oct 25	Convergence of series, Tests for convergence	Sec 9.1 & 9.2	Quiz #7 & HW #8
10: Oct 26 - Nov 1	Power series & intervals of convergence	Sec 9.3 & 9.4	Exam #3
11: Nov 2 - Nov 8	Taylor polynomials, Taylor series	Sec 9.5 & 10.1	Quiz #8 & HW #9
12: Nov 9 - Nov 15	Finding and Using Taylor series	Sec 10.2	Quiz #9 & HW #10
13: Nov 16 - Nov 22	What is a differential equation	Sec 10.3 & 11.1	Exam #4
14: Nov 23 - Nov 29	Slope fields, Separation of variables	Sec 11.2	HW #11
15: Nov 30 - Dec 6	Growth & decay, Applications & Modeling	Sec 11.4 & 11.5	Quiz #10 & HW #12
16: Dec 7 - Dec 9	Review	Sec. 11.6	

Subject to Change Statement

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor

Where to go, who to call if you're in crisis:

Located in Tucson? Call the Community-Wide Crisis Line 24 hours a day, 7 days a week at 520-622-6000.

Are you a University of Arizona student? If it is not an emergency and you are a UA student, call or walk-in to Counseling and Psych Services at 520-621-3334 Monday - Friday. Walk-in triage is available between 9 am and 4 pm Monday - Friday.

Are you a concerned friend? Concerned friends can find out more about helping a friend who might be experiencing problems through our Friend 2 Friend website.

Resources for sexual assault, relationship violence, and stalking.

24-Hour Hotlines:

The National Suicide Prevention Lifeline is a 24-hour, toll-free, confidential suicide prevention hotline available to anyone in suicidal crisis or emotional distress. By dialing 1-800-273-TALK (8255), the call is routed to the nearest crisis center in our national network of more than 150 crisis centers. The Lifeline's national network of local crisis centers provides crisis counseling and mental health referrals day and night.

Crisis Text Line: Text HOME to 741741 from anywhere **in the United States**, anytime, about any type of crisis. A live, trained Crisis Counselor receives the text and responds, all from a secure online platform. Find out more about how it works at crisistextline.org.

Suicide Prevention for LGBTQ Youth through the Trevor Project:

- **The Trevor Lifeline** is a 24/7 suicide hotline: 866-4-U-TREVOR (1-866-488-7386)

- **TrevorChat:** Online instant messaging available 7 days a week, 3 pm - 10 pm ET (12 pm -- 7 pm PT)

- **TrevorText:** Confidential and secure resource that provides live help for LGBTQ youth with a trained specialist, over text messages. Text TREVOR to 1-202-304-1200 (available 7 days a week, 3 pm - 10 pm ET, 12 pm -- 7 pm PT)

Veterans' Suicide Prevention Lifeline: 1-800-273-TALK (1-800-273-8255)

SAMHSA Treatment Referral Hotline (Substance Abuse): 1-800-662-HELP (1-800-662-4357)

National Sexual Assault Hotline: 1-800-656-HOPE (1-800-656-4673)

Loveisrespect (National Dating Abuse Helpline): Call 1-866-331-9474 (TTY: 1-866-331-8453). Text LOVEIS to 22522 - you'll receive a response from a peer advocate prompting you for your question. Go ahead and text your comment or question and we will reply.