



Instructor Policy - Section 009 (MWF)

Math 129 - Calculus II

Days & times: MWF 1-1:50
Classroom: R P Harvill Bldg, Rm 313

Instructor and Contact Information

Matthias Morzfeld ENR2 S331, 520 621 0673, mmo@math.arizona.edu

Office Hours: M 2-3 in MTL121 (tutoring), Tu 11-12 and F 2-3 in ENR2 S331

Course Webpage: <http://math.arizona.edu/~calc>

Class Webpage: <http://math.arizona.edu/~mmo/math129/math129.html>

Course materials will be delivered digitally via D2L through the Inclusive Access program. The course policies and the course calendar are also posted in D2L.

A computer grading program called WebAssign will be used throughout the course.

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 and WebAssign. The best way to reach me is by email. I will usually respond within 48 hours.

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 3, 2018. 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 3, 2018. 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.

Absence and Class Participation Policy

Participating in the course and attending lectures are vital to the learning process. As such, attendance is required at all scheduled class meetings. Students who miss class due to illness or emergency are required to bring documentation from their health-care provider or other relevant, professional third parties. Failure to submit third-party documentation will result in unexcused absences.

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at: <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: <https://deanofstudents.arizona.edu/absences>

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.).

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Accessibility and Accommodations

At the University of Arizona we strive to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, you are welcome to let me know so that we can discuss options. You are also encouraged to contact Disability Resources (520-621-3268) to explore reasonable accommodation.

For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>. If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

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.

UA Nondiscrimination and Anti-harassment Policy

The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

Course Objectives and Expected Learning Outcomes

Math 129 covers the fundamentals of the integral calculus. Upon completion of the course, the student will: be able to use techniques of analytical and numerical integration; be able to apply the definite integral to problems arising in geometry and in either physics or probability; be able to work with the concept of infinite series and be able to calculate and use Taylor series; be able to analyze first order differential equations from a graphical and algebraic point of view and model physical and biological situations by differential equations.

Assignments and Examinations

Homework: (100 points) Homework will be submitted in two formats throughout the semester. A computer grading program called WebAssign will be used for problems assigned from the text. Hand-written homework showing all work with proper notation will also be submitted. These problems will come from the text and/or from a set of problems created by your instructor. Handwritten homework is due every Wednesday in class before class starts. I do not accept late homework. I will drop your lowest two homework sets. Handwritten homework assignments are posted on the class website (math.arizona.edu/~mmo/math129/math129.html) A final homework score based on 100 possible points will be computed. Handwritten homework and weassign carry equal weights.

In-Class Exams: (400 points) Four in-class exams are tentatively scheduled for Wednesday, September 12th; Monday, October 8th; Friday, November 2; and Friday, November 30th. Each exam will be worth 100 points. All electronic devices must be turned off during all exams. In general, there will be no make-up exams in the course. However, in complex and unusual circumstances which are beyond your control, a make-up exam may be given on a case-by-case basis. This will require providing a detailed account of the situation and supporting documents. Approval in these cases is at the sole discretion of the instructor and/or the dean of students. According to university policy, no exams will be held on the week of December 3rd.

Final Examination

(200 points) The final exam is a comprehensive common exam. It is scheduled for Monday, December 10th from 8:00 – 10:00 am (see the University's Final Exam Schedule at <http://www.registrar.arizona.edu/schedules/finals.htm>). Additional information and a study guide can be found at <http://math.arizona.edu/~calc>. 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%

Neither exam scores nor final grades will be curved. 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. a detailed explanation of the methods of evaluation and how the final grade will be calculated, including components/assignments, weightings, evaluation criteria, explanation of how late work will be graded, and description of extra-credit opportunities.

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 2 using UAccess. The class will appear on your UAccess record, but will not appear on your transcript. You may withdraw with a W through October 28 using UAccess. The University allows withdrawals through November 16, but only with the Dean’s approval. Late withdrawals 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.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See:

<http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://new.library.arizona.edu/research/citing/plagiarism>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor’s express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions.

Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

Course Prerequisites or Co-requisites

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

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>

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/Exams
1: Aug 20 - Aug 26	Integration by substitution and parts	Sec 7.1	
2: Aug 27 - Sep 2	Tables of integrals, partial fractions, & trig substitution	Sec 7.2 & 7.3	HW #1
3: Sep 3 - Sep 9	Numerical methods of integration	Sec 7.4	HW #2
4: Sep 10 - Sep 16	Improper integrals	Sec 7.5	Exam #1
5: Sep 17 - Sep 23	Comparison of improper integrals	Sec 7.6	HW #3
6: Sep 24 - Sep 30	Areas & volumes, applications to geometry	Sec 7.7 & 8.1	HW #4

7: Oct 1 - Oct 7	Density	Sec 8.2 & 8.4	HW #5
8: Oct 8 - Oct 14	Applications to physics OR Distribution functions, probability, mean, & median		Exam #2
9: Oct 15 - Oct 21	Sequences, geometric series, convergence of series	Sec 8.5 & 9.1 OR Sec 8.7 & 8.8 & 9.1	HW #6
10: Oct 22 - Oct 28	Tests for convergence, power series & intervals of convergence	Sec 9.2 & 9.3 & 9.4	HW #7
11: Oct 29 - Nov 4	Taylor polynomials	Sec 9.5 & 10.1	Exam #3
12: Nov 5 - Nov 11	Taylor series, finding & using Taylor series	Sec 10.2	HW #8
13: Nov 12 - Nov 18	What is a differential equation, slope fields	Sec 10.3 & 11.1	HW #9
14: Nov 19 - Nov 25	Separation of variables, growth & decay	Sec 11.2 & 11.4	HW #10
15: Nov 19 - Nov 25	Applications & Modeling	Sec 11.5 & 11.6	Exam #4

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.