

Department and University Policies

Math 129 - Calculus II

Spring 2019

The information in this document applies to all sections of MATH 129. Your instructor will post a syllabus detailing policies specific to your section. You are responsible for the information in both documents.

Instructor and Contact Information

Please see your instructor's policy.

Course Webpage: <u>https://math129.math.arizona.edu</u>

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, 125 or 129 with C or higher.

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 either physics or probability;
- 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, probabilistic, 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 Communications

Course-wide announcements will be distributed using WebAssign.

Please see your instructor's policy for their preferred method of communication.

Absence and Class Participation Policy

Students are expected to attend every scheduled class. *Please see your instructor's policy for section specific information in addition to the University policies below.*

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

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: <u>https://deanofstudents.arizona.edu/absences</u>

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 January 22, 2019. 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, January 22, 2019. If you do not opt-out and choose to retain your access, the cost of the digital course materials will appear on your Bursars account.** Please refer to the Inclusive Access FAQs at

https://shop.arizona.edu/textbooks/Inclusive.asp for additional information.

Please see your instructor's syllabus for information about section specific materials.

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 <u>NOT</u> allowed on exams and quizzes. CAS models include (but are not limited to) the TI-89, TI NSpire CAS, HP 50g, and Casio Classpad 330. Students are not allowed to share calculators during exams and quizzes.

Please see your instructor's policy for additional information.

Tentative Schedule

Suggested calendars for MWF and TR classes can be found at https://math129.math.arizona.edu. These calendars are guidelines and may differ from the one used by your instructor.

Please see your instructor's policy, especially for information about exam dates.

Accessibility and Accommodations

At the University of Arizona we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <u>https://drc.arizona.edu/</u>) to establish reasonable accommodations.

Final Examination

The final exam is a comprehensive common exam. It is scheduled for Monday, May 6th 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 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

Please see your instructor's policy.

University policy regarding grades and grading systems is available at <u>http://catalog.arizona.edu/policy/grades-and-grading-system</u>.

Note that 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 January 22 using UAccess. The class will appear on your UAccess record, but will not appear on your transcript. You may withdraw with a W through March 26 using UAccess. The University allows withdrawals through April 9, 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.

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.).

Please see your instructor's policy for additional information.

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 <u>http://policy.arizona.edu/</u>education-and-student-affairs/threatening-behavior-students.

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

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.

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-privacyact-1974-ferpa?topic=ferpa

Subject to Change Statement

The information contained in the instructor's course syllabus, other than the grade and absence policies, as deemed appropriate by the instructor, are subject to change with reasonable advance notice. In particular, the dates of midterm exams, the number of exams, and the order in which topics are covered may differ from the dates and arrangement in the tentative weekly schedule.