

2022 Fall Course Syllabus - Mathematics 1041

Course: Mathematics 1041.0017.

Course Title: Calculus I.

Credits: 4 credits.

How this course will be taught: In person.

Time: TR 1:30-3:10.

Place: Wachman 208.

Instructor: Gerardo A. Mendoza.

Instructor Office: Wachman 618.

Instructor Email: gerardo.mendoza@temple.edu

Instructor Phone: 1-5053.

Course Web Page: <http://math.temple.edu/~gmendoza>.

Office Hours: Wednesday, 1:00-3:00. Office hours by appointment are also possible (try to arrange one day in advance). Or just come to my office: if I have time, I'll see you.

Prerequisites: A Math 1041 placement or a grade of C or higher in Math 1022 or transfer credit for Math 1022.

Course Materials: Textbook: James Stewart's Calculus, Early Transcendentals, 8th Edition.

Many of the homework problems for the course are available on WebAssign, which requires a new edition of the text or a separately purchased code. For that reason, we advise that you do not buy a used version of the text. The text is available here:

https://www.cengage.com/coursepages/Temple_MATH_1041

There are also videos for this course here:

https://math.temple.edu/ugrad/learning_tools/videos1041/.

Course Goals: 1. You will compute limits and derivatives using techniques developed during the semester.

2. You will apply limits and derivatives to practical problems including optimization, motion, and related rates.

3. You will connect the concepts of approximation and limit to geometric questions which generate the definitions of asymptote, derivative, and tangent line.

4. You will relate the derivative and integral and use this relationship to compute basic integrals.

5. You will become a more independent mathematical thinker, exploring concepts and solving problems that are foundational to future coursework.

Topics Covered: The three central objects of the semester are limits, derivatives, and integrals. In studying these objects, we will see the connections between them, how to compute different types of them, and how to apply such calculations to some practical problems.

Course Grading: Quizzes (incl Review Quiz): 18%, Test 1: 24%, Test 2: 24%, Comprehensive Final Exam: 34%. Correspondence between the numerical and letter grades: 93-100

A, 90-92 A-, 87-89 B+, 83-86 B, 80-82 B-, 77-79 C+, 73-76 C, 70-72 C-, 65-69 D+, 55-64 D, 50-54 D-, 0-49 F.

Exam Dates: Test 1 - Friday, 30 September, (5:30-7:00 pm); Test 2 - Friday, 11 November, (5:30-7:00 pm); Final Exam - Thursday, 8 December, (3:30 - 5:30 pm) You must set the above times aside for the tests. Tests will not be rescheduled without a legitimate reason.

Attendance Policy: Attendance is required. Students who miss more than 4 TR classes without an excuse will have their grades lowered by one notch (e.g., from B to B-). Those who miss more than 8 TR without an excuse will have their grades lowered by two notches, etc.

Attendance and Your Health: To achieve course learning goals, students must attend and participate in classes, according to your instructors' requirements. However, if you feel unwell or if you are under quarantine or in isolation because you have been exposed to the virus or tested positive for it, you should not come to campus or attend in-person classes or activities. Students have the responsibility to contact their instructors to create a plan for participation and engagement in the course as soon as they are able to do so and to make a plan to complete all assignments in a timely fashion when illness delays their completion.

Final Exam: Thursday, 8 December, (3:30 - 5:30 pm). Exam rooms will be announced at least one week in advance of the exam. Important: please note that if you miss the final exam and do not make alternative arrangements before the grades are turned in, your grade for the course will be F.

Common Review Quiz: The Review Quiz will be given on WebAssign at the end of first week of classes. It will be based on precalculus material. Students who perform poorly on the Review Quiz may be better served in Math 1022, Precalculus. The score for the Review Quiz will count for 1% of your Course Average. (You can take the review quiz even before you buy the textbook. The first two weeks of WA access only requires the "class key" that you can find on Canvas.).

Academic Support: The Student Success Center (SSC, found in Charles library) and the Math TA and CA Consulting Center (MCC, Wachman 1036) both provide excellent free tutoring for this course throughout the semester. Information regarding these centers, including hours, will be posted on the course Canvas page. Please try these centers if you're feeling stuck, even if it's only for an hour. Some information can be found here:

<https://www.math.temple.edu/ugrad/tutoring/MCC.html>

and here:

<https://studentsuccess.temple.edu/>.

Homework: There will be no graded homework (but we may occasionally have a 'take home quiz' which will be graded as a quiz). I will assign problems (available from my website) after each class that will help guide your study. These and additional problems from the book will serve as a basis for successive quizzes.

Quizzes: There will be a 20-25 min. quiz about once per week (when there is no midterm). Each quiz will consist of problems similar to the ones that I will be posting, plus those assigned from the textbook. There will be no make up quizzes. The lowest score will be dropped.

Calculators: No calculators or cheat sheet will be allowed on any exams or in-class quizzes.

Make Up Policy: There will be no regularly scheduled make up exams. In the case of a documented emergency that prevents a student from taking a test as scheduled, the student

must contact their instructor and the course coordinator immediately in order to discuss alternative arrangements.

CANVAS: This is a registered CANVAS course. Please check CANVAS daily for important announcements.

Exam Security Policy: We have a zero tolerance policy towards cheating. Students caught cheating on a problem in a test (receiving outside help, using unauthorized resources or devices such as calculators, online resources, etc.) will receive a score of 0 for the entire test. This is consistent with the Temple University Academic Honor Code (see Policy # 03.70.12¹) that states: “Every member of the university community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are responsible for adhering to the principles of academic honesty and integrity”. More serious penalties are possible and those caught cheating will be reported to the office of student conduct.

Disability Statement: Any student who has a need for accommodations based on the impact of a documented disability or medical condition should contact Disability Resources and Services (DRS) in Howard Gittis Student Center South, Rm 420 (drs@temple.edu; 215-204-1280) to request accommodations and learn more about the resources available to you. If you have a DRS accommodation letter to share with me, or you would like to discuss your accommodations, please contact me as soon as practical. I will work with you and with DRS to coordinate reasonable accommodations for all students with documented disabilities. All discussions related to your accommodations will be confidential.

Academic Freedom: Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02²).

Add/Drop Policy: Students will be charged for a course unless dropped by the Drop/Add deadline date. Check the University calendar for exact dates.

During the Drop/Add period, students may drop a course with no record of the class appearing on their transcript. Students are not financially responsible for any courses dropped during this period. In the following weeks prior to or on the withdrawal date students may withdraw from a course with the grade of “W” appearing on their transcript. After the withdrawal date students may not withdraw from courses. Check the University Calendar³ for exact dates. See the full policy.⁴

Incomplete Policy: The grade “I” (an “incomplete”) is only given if students cannot complete the course work due to circumstances beyond their control. It is necessary for the student to have completed the majority of the course work with a passing average and to sign an incomplete contract which clearly states what is left for the student to do and the deadline by which the work must be completed. The incomplete contract must also include a default grade that will be used in case the “I” grade is not resolved by the agreed deadline. See the full policy.⁵

Student Support Services: The following academic support services are available to students:

¹<https://secretary.temple.edu/sites/secretary/files/policies/03.70.12.pdf>

²<http://policies.temple.edu>

³<http://www.temple.edu/registrar/documents/calendars/>

⁴<http://bulletin.temple.edu/undergraduate/academic-policies/withdrawal-policies/>

⁵<http://bulletin.temple.edu/undergraduate/academic-policies/incomplete-coursework/>

- The Math Consulting Center
- Student Success Center
- University Libraries
- Undergraduate Research Support
- Career Center
- Tuttleman Counseling Services
- Disability Resources and Services

If you are experiencing food insecurity or financial struggles, Temple provides resources and support. Notably, the Temple University Cherry Pantry and the Temple University Emergency Student Aid Program are in operation as well as a variety of resources from the Division of Student Affairs.