

Syllabus: Math 2850-021, Summer 2014
Elementary Multivariable Calculus
Instructor: Paul Hewitt

Office: UH 4080c Hours: Mon–Thu, 10:30–11:00am
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I am available at other times by appointment.

Welcome to Calc III! In this course we will apply the methods of Calc I and II to parametric curves and real functions of several variables. A large part of the course is devoted to a vector-based study of the geometry of 2- and 3-dimensional space.

Textbook

Thomas' Calculus (12th edition) by Thomas, Weir, and Hass. An electronic version is available at a 30% discount from <http://www.coursesmart.com>.

Catalog description and prerequisites

Geometry of functions of several variables, partial differentiation, multiple integrals, vector algebra and calculus (including Theorems of Green, Gauss and Stokes), and applications. The prerequisite is a passing grade in Math 1860 or equivalent.

Exams

There will be four midterm exams, each consisting of 10 multiple-choice questions worth 5 points each. The first midterm exam will be on the second day of class and will be a diagnostic review of Calc I and II. The problems to study for this first exam will be posted online. The problems on the remaining exams will be taken from the homework and quizzes, with only minor changes.

At the end of the semester you will have the option *either* to drop your lowest midterm exam score from your final grade *or* to take an optional comprehensive, 150-point final exam. In the latter option all four midterm exams and the final exam will contribute towards your final grade.

Quizzes

There will a 2-question multiple-choice quizzes almost every day, with each questions worth 1 point. The problems on the quizzes will be taken from the homework, with only minor changes. Your 10 best quiz scores will count towards your final grade. Since there will be approximately 15 quizzes altogether any missed quizzes will be among the scores dropped from your final grade.

Homework

I will post homework assignments from the text. These will not be collected. They are intended to prepare you for the quizzes and exams.

On the day before midterm exams 2–4 you will turn in for grade two quiz problems of your choice from any of the quizzes since the previous midterm. For these homework assignments you must show all steps of your solution in detail, and use complete sentences in your explanations, in order to get full credit. These problems are worth 5 points each.

Final grades

It is possible to earn up to 200 or 400 points, depending on whether or not you opt to take the final exam. In either case your final grade will be based on the percentage of total possible points earned, according to the following scale:

A: 90%, B: 80%, C: 70%, D: 60%.

However I will adjust the exam scores so that the medians align with these expectations. (That is, I will “curve” the exams.) I give few + or – grades.

Course calendar

Week	Class topics	Assignments due	Exams
1	Review of Calc I and II Sections 12.6, 13.1–13.3		Tue, 24 June: Exam 1 Review of Calc I and II
2	Sections 14.1–14.8	Thu, 3 July: Assignment 1 2 problems from quizzes 1–4	
3	Sections 15.1–15.2, 15.4		Tue, 8 July: Exam 2 Sections 14.1–14.8
4	Sections 15.5–15.7	Wed, 16 July: Assignment 2 2 problems from quizzes 5–9	Thu, 17 July: Exam 3 Sections 15.1–15.2, 15.4–15.7
5	Sections 16.1–16.4		
6	Sections 16.5–16.6	Wed, 30 July: Assignment 3 2 problems from quizzes 11–16	Thu, 31 July: Exam 4 Sections 16.1–16.6
			Fri, 1 August: Final Exam Optional comprehensive exam

Contingencies

I reserve the right to adjust the course content and calendar as need arises due to unforeseen circumstances.

Important Dates

The last day to drop this course is Monday, 30 June. The last day to withdraw with a grade of W from this course is Friday, 18 July.

Missed Class Policy

In accordance with The University of Toledo Missed Class Policy (http://www.utoledo.edu/facsenate/missed_class_policy.html) if circumstances governed by this policy result in you missing an exam then you must contact me immediately by email, or in person, and provide official documentation to justify your absence and arrange to make up the missed exam.

Academic Dishonesty

Any act of academic dishonesty will result in an F on the item in question. A second offense will result in an F for the course. The University of Toledo policy on academic dishonesty, found at <http://www.utoledo.edu/dl/students/dishonesty.html>.

Nondiscrimination Policy

The University of Toledo is committed to a policy of equal opportunity in education, affirms the values and goals of diversity.

Students with Disabilities

The University will make reasonable academic accommodations for students with documented disabilities. Students should contact the Office of Accessibility (RH1820; 419.530.4981; officeofacademicaccess@utoledo.edu) as soon as possible for more information and/or to initiate the process for accessing academic accommodations. For the full policy see: <http://www.utoledo.edu/success/academicaccess/sam/index.html>

Student Privacy

Federal law and university policy prohibits instructors from discussing a student's grades or class performance with anyone outside of university faculty/staff without the student's written and signed consent. This includes parents and spouses. For details, see the Confidentiality of Student Records (FERPA) section of the University Policy Page at <http://www.utoledo.edu/policies/academic/undergraduate/index.html>

Tutoring

Tutoring help is available during each week of the semester in the Mathematics Learning and Resource Center, located in Room B0200 in the lower level of Carlson Library (phone ext 2176). The center operates on a walk-in basis. MLRC hours can be found at <http://math.utoledo.edu/mlrc/MLRC.pdf>.