

MATH 1571H - Honors Calculus 1

Fall 2026 Syllabus, Section 01, CRN 41492,

Credit hours: 4

Instructor

Sergio Zapata Ceballos

Email: srzapataceballos@ysu.edu

Public Instructor Information

Instructor Title: Assistant Professor

Instructor Professional Qualifications:

Ph. D., Mathematics, University of Western Ontario

Master's, Mathematics, University of Western Ontario

Instructor Office Location: 639 Cafaro Hall

Instructor Office Phone: (330) 941-1421

Course Description

1571H. Honors Calculus 1. A sequence of integrated courses in analytic geometry and calculus. A detailed study of limits, derivatives, and integrals of functions of one and several variables with applications. Prereq.: At least Level 70 on the YSU Mathematics Placement Test or C or better in both MATH 1510 and MATH 1511 or C or better in both MATH 1510C and MATH 1511C or C or better in MATH 1513. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Calculus	James Stewart	

You need to buy Cengage Unlimited and will have access to the homework system (WebAssign). Through WebAssign, you will have access to an electronic copy of the textbook.

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Tentative Course Schedule

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Functions and Limits: 1.1 - 1.3		
8/31	Functions and Limits: 1.3 - 1.6		
9/7	Functions and Limits: 1.6 - 1.7		
9/14	Functions and Limits: 1.8 Derivatives: 2.1		
9/21	Derivatives 2.1 - 2.2		
9/28	Derivatives 2.3 - 2.6		
10/5	Derivatives 2.6 - 2.9		
10/12	Applications of Differentiation: 3.1 - 3.2		
10/19	Applications of Differentiation: 3.2 - 3.5		
10/26	Applications of Differentiation: 3.5 - 3.7		
11/2	Applications of Differentiation: 3.9 Integrals: 4.1 - 4.3		

11/9	Integrals: 4.3 - 4.4
11/16	Integrals: 4.4 Applications of Integration: 5.1
11/23	Applications of Integration: 5.2 - 5.3
11/30	Applications of Integration: 5.3 - 5.5
12/7	Final Exam Week

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.