

MATH 2670 - Applied Calculus 2

Fall 2026 Syllabus, Section 01, CRN 42382,

Credit hours: 5

Instructor

Paul Nachim

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Public Instructor Information

Instructor Title: Lecturer

Instructor Professional Qualifications: M.S., Mathematics, 1990

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Course Description

2670. Applied Calculus 2. The elements of differential and integral calculus, with emphasis on applications. Analytical geometry, differentiation and integration techniques and series representations. Introduction to differential equations, transform calculus, and Fourier analysis. This is a basic methods course particularly adapted for those who require applied topics in mathematics. Not applicable toward the Mathematics major. Prereq.: Grade of "C" or better in MATH 1570 or MATH 1571. 5 s.h.

Course Readings

Group	Title	Author	ISBN
Optional	Technical Calculus with Analytic Geometry (5th edition)	Peter Kuhfittig	1-133-94519-8

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

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	4.6, 5.1, 5.2	Applications of the Integral	
8/31	5.3 - 5.6	Applications of the Integral	
9/7	7.1 - 7.3	Integration Techniques	
9/14	7.4 - 7.6	Integration Techniques	
9/21	7.7 - 7.8	Integration Techniques	
9/28	Chapter 7	Integration Techniques and Applications	
10/5	9.1 - 9.3	Surfaces and Partial Derivatives	
10/12	9.4 - 9.5	Double Integration and Applications	
10/19	10.1 - 10.2	Infinite Series and Convergence	
10/26	10.3 - 10.6	Maclaurin and Fourier Series	
11/2	11.1 - 11.2	First-Order Differential Equations	
11/9	11.3 - 11.4	Applications of First-Order Differential Equations	
11/16	12.1 - 12.2	Second-Order Differential Equations	
11/23	12.3 - 12.4	Applications of Second-Order Differential Equations	

11/30	13.1 - 13.4	Laplace Transforms and Applications
12/7		Catchup and Review

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.