

0701M232

Calculus for the Life Sciences II

Instructor: TBA

Time: December 15, 2025 - January 16, 2026

Office Hours: 2 hours (according to the teaching schedule)

Contact Hours: 60 (50 minutes each)

Credits: 4

E-mail: TBA

Course Description

This course will use examples from the life sciences, it covers topics in calculus II which including integration, areas and volumes, double integrals and differential equations.

Prerequisites

0701M231 Calculus for the Life Sciences I

Required Textbook(s)

Greenwell, Ritchey and Lial, *Calculus for the Life Sciences*, Addison Wesley, 2nd Edition.

Course Schedule

Please note that the schedule is meant to give an overview of the major concepts in this course. Changes may occur in this calendar as needed to aid in the student's development.

Week	Topic
Week 1	7.1 Antiderivatives 7.2 Substitution 7.3 Area and the Definite Integral 7.4 The Fundamental Theorem of Calculus
Week 2	7.5 The Area Between Two Curves 8.1 Numerical Integration 8.2 Integration by Parts 8.3 Volume and Average Value
Week 3	8.4 Improper Integrals 9.1 Functions of Several Variables 9.2 Partial Derivatives 9.3 Maxima and Minima
Week 4	9.4 Total Differentials and Approximations 9.5 Double Integrals 11.1 Solutions of Elementary and Separable Differential Equations 11.2 Linear First-Order Differential Equations
Week 5	11.3 Euler's Method 11.4 Linear Systems of Differential Equations 11.5 Non-Linear Systems of Differential Equations 11.6 Applications of Differential Equations

Grading Policy

Your grade will be based on quizzes, homework, exams, and participation.

Participation	10%
Quizzes	20%
Homework	20%
Midterm Exam	25%
<u>Final Exam</u>	<u>25%</u>
Total	100%

Grading System

The instructor will use the grading system as applied by JNU:

Definition	Letter Grade	Score
Excellent	A	90~100
Good	B	80~89
Satisfactory	C	70~79
Poor	D	60~69
Failed	E	Below 60

Academic Integrity

As members of the Jinan University academic community, students are expected to be honest in all of their academic coursework and activities. Academic dishonesty includes (but is not limited to) cheating on assignments or examinations; plagiarizing, i.e., misrepresenting as one's own work any work done by another; submitting the same paper, or a substantially similar paper, to meet the requirements of more than one course without the approval and consent of the instructors concerned; or sabotaging other students' work within these general definitions. Instructors, however, determine what constitutes academic misconduct in the courses they teach. Students found guilty of academic misconduct in any portion of the academic work face

penalties that range from the lowering of their course grade to awarding a grade of E for the entire course.