



Calculus II

MAT 206 – Wesleyan College

Syllabus

Summer 2024, July 1 - August 2

Professor Contact Information

Professor: TBA

Office Hours: by appointment

Contact Information: TBA

Text/ISBN: M. Weir and J. Hass, Thomas *Calculus: Early Transcendentals*, 12th edition, Addison-Wesley, (Pearson,)Reading, MA. ISBN: 978-0-321-58876-0

Policies and Procedures

Course Goals

Techniques of integration, applications of integration, sequences and series, power series and Taylor series, parametric equations and polar coordinates.

Prerequisites

MAT 205 Calculus I or equivalent

Credit Hours

3

Participation and Grading

Your grade in this course will be determined by your performance in the following categories:

Assignments	Percentage
Quizzes	25 %
Homework	15 %
Midterm Exam	30 %
Final Exam	30%
Total	100%



Grading Scale:

The grading scale in the class will be as follows:

A=90-100%

B=80-89%

C=70-79%

D=60-69%

F=59% And Below

Academic Integrity

Wesleyan's College expects student to show integrity in all of their work. Cheating, plagiarism, unauthorized collaboration, inventing or falsifying information, turning in work for more than one class without authorization, or helping someone else are all violations of the Honor Code and are not tolerated. Any of these forms of cheating will not be tolerated and will be grounds for a grade of zero on the exam or assignment and a grade of F for the course, in addition to any penalties imposed by the Provost.

Potential Changes to Course Schedule

The following week-to-week schedule is a general plan for the course. Deviations may be necessary and will be announced in advance via announcement and/or e-mail. Students should check their course site announcements and emails at least once every twenty-four hours throughout the term to watch for updates regarding this course.

Course Schedule

Week 1

Indeterminate forms and L'Hospital Rule

Review of Basic Integration

Review of substitution

Inverse Trigonometric Functions: derivatives

Inverse Trigonometric Functions: integration

Integration by parts

Trigonometric Integrals

Trigonometric Substitution

Week 2

Partial Fractions

Numerical Integration

Improper Integrals

Area Between Curves

Volumes of Rotation: Disk Method and Shell Method



Arc Length
Work

Week 3

Center of Mass
Sequences
Series and Convergence
Integral Test and p-Series
Comparison Test of Series
Midterm

Week 4

Alternating Series
Ratio Test
Power Series
Representation of Functions by Power Series
Taylor and Maclaurin Series
Plane Curves and Parametric Equations

Week 5

Parametric Equations and Calculus
Polar Coordinates and Graphs
Area and Arc Length in Polar Coordinates
Final Exam

Civility in the Academic Community

Students, faculty, and staff are expected to treat one another with respect in all interactions. In the classroom, rude, disruptive and/or disrespectful behaviors as determined by a faculty member interfere with other students' rights and with the instructor's ability to teach. Therefore, any student exhibiting unacceptable behaviors during a class will be asked to leave and will be counted absent for that class period. Failure to cooperate with this process will result in disciplinary action that may include withdrawal from the class or dismissal from the College. Violations will be reported to the Provost's Office.

Disabilities Statement

Wesleyan College is committed to equal education, full participation and access to facilities for all students. Any student who requires reasonable academic accommodations, use of auxiliary aids or facility access for a class must first register with Disability Resources by contacting Jill Amos, Director of Disability and Advocacy Services, jamos@wesleyancollege.edu or (478) 757-5219. If reasonable accommodations are established, students should request Accommodation Letters from Disability Resources then schedule an appointment to meet with the professor to determine how the accommodations will be implemented for each class as early in the semester as possible. Accommodations require advance notice to implement and will not be retroactively administered for the semester. Accommodations that decrease the integrity of a course will not be approved.