

MATH 2402 Calculus II

Fall 2011

INSTRUCTOR: Jeong-Mi Yoon, Ph.D., S712, x 8457, yoony@uhd.edu.

TIME & PLACE: MW 11:30am – 12:45pm in A626 (CRN # 10652).

OFFICE HOURS: MW 1-2pm or by Appointments.

CATALOG DESCRIPTION: This course is a continuation of Math 2401. The topics include differentiation and integration of transcendental functions, techniques of integration, improper integrals and applications of the integral, sequences and infinite series.

PREREQUISITE: Grade of C or better in Math 2401 (Calculus I).

LEARNING OUTCOMES: At the completion of the course, the student should be able to:

1.	Differentiate and integrate transcendental functions.
2.	Evaluate integrals by using the various elementary methods of integration, which include substitution, trigonometric substitutions, integration by parts, and partial fraction decomposition.
3.	Evaluate improper integrals.
4.	Determine convergence or divergence of a sequence, and a series; find the interval of convergence of a power series, and expand a function in Taylor Series form.

TEXTBOOK: Calculus (6th edition) by James Stewart.

METHOD OF EVALUATION:

Three tests, Final (Comprehensive) exam, and Homework Assignments.

Exam Date: Test I – September 22 (Thursday) in class,

Test II – October 25 (Tuesday) in class,

Test III – November 29 (Tuesday) in class,

Final – December 8 (Thursday) in class,

Grading Policy: Test @ 18% each; Final @ 36%; Homework @ 5%; Quiz @5%.

THE FINAL EXAM MUST BE TAKEN BY ALL THE STUDENTS. THERE WILL BE NO OTHER MAKE-UP EXAMS!

The Last Day to Withdraw from a course is October 27 (Thursday).

COURSE CONTENT:

	Topics will be selected from the following:
1.	Transcendental Functions (about 12 hours). Sections 7.1-7.4 and 7.6-7.8.
2.	Techniques of Integration (about 14 hours) Sections 8.1-8.8.
3.	Further Applications of Integration (about 4 hours) Sections 9.1-9.2
4.	Polar Coordinates and Parametric Equations (about 8 hours) Sections 11.1-11.4.
5.	Infinite Sequences and Series (about 15 hours) Sections 12.1-12.11.

HOMEWORK ASSIGNMENTS: Homework will be assigned for each lecture meeting, and it will be collected on every test day. Late homework will not be accepted. The solutions to homework problems will be answered in the next class or office hours by making questions.

STATEMENT ON REASONABLE ACCOMMODATIONS: UHD adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. Students with disabilities should be notified to register with Disabled Student Services (in S409) and contact the instructor in a timely manner to arrange for appropriate accommodations.

Whenever possible, and in accordance with 504/ADA guidelines, UHD will attempt to provide reasonable academic adjustments/auxiliary aids to students who request and require them. Students may call 713-226-5227 for more assistance.

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