COURSE STRUCTURE

COURSE NAME	**CALCULUS II**
CODE	**MTH 1126**
CLASS MEETING TIME	**Tuesday, Thursday 8:00-11:30, room 401 D7**
LOCATION	**HUST**
WORTH	**4 credits**
PREREQUISITE	**MTH 1125**
INSTRUCTOR	**Dr. Vu The Khoi** **Ph.D. in Mathematics** **vtkhoi@gmail.com**

OFFICE HOURS:

COURSE DESCRIPTION

Applications of integration (such as volume, arc length, work, and average value), techniques of integration, indeterminate forms, infinite series, polar coordinates, and parametric equations.

COURSE OBJECTIVES

Upon completion of this course, the student should have a working knowledge of

- Applications of integrals
- Techniques of Integration and their applications
- Improper integrals
- Working with parametric equations
- Sequences, series, and their applications

COURSE FORMAT

Lecture: 6 hrs per week

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STUDENT EVALUATION

Attendance: 10% (if you miss more than one class you will not receive this 10%)

Midterms : 30% , Assignment/Quizzes: 20%, Final exam 40%

EXAMINATION FORMAT

Midterms: 2 hours, Final: 2 hours.

GRADING SCALE

A (90% - 100%)
B (80% - 89%)
C (70% - 79%)
D (60%-69%)
Fail (0%-59%)

TEXT BOOK

James Stewart, "**Calculus, Early Transcendentals**", 7th edition, Cengage Learning 2010.

CLASS SYLLABUS

The course will cover the following topics from the text book:

Week(s)	Topics
1-2	**Techniques of Integration** General techniques of integration, including integration by parts, partial fractions, substitutions, and numerical integration are presented. Improper integrals.
3-4	**Further Applications of Integration** Using integration to compute arc length, surface area of solid of revolution. Applications of integration in other branches of sciences.
4	**MIDTERM**
5	**Differential Equations** Models using differential equations. Solving differential equation by separation of variables.
6	**Parametric Equations** Curves defined by parametric equations. Calculus with parametric curves
7	**Introduction to Sequence and Series** Sequences and infinite series are introduced. Standard tests for convergence and absolute convergence are presented.
8	**Power series and Taylor series** Definition and convergence of power series. Taylor and Maclaurin series. Applications of power series
	Final Examination.

CLASS REGULATION: The students are expected to attend all scheduled classes. *Mobile phone* is not allowed to use in class

ABSENCES: The following is the official policy of Troy University as written in the Undergraduate *Bulletin*.

"In registering for classes at the University, undergraduate students accept responsibility for attending scheduled class meetings, completing assignments on time, and contributing to class discussions and the exploration of ideas.

"A student will be excused if he/she has been absent from a class by reason of circumstances beyond his/her control or if the student has been required to attend an activity sponsored by the University. Faculty members who sponsor activities that require class absences must send a list of student names to each faculty member concerned at least three days before the scheduled absence.

"Faculty members may levy academic penalties upon unexcused absences; however, such penalties for unexcused absences will be a part of each course syllabus and will be distributed to each class at the beginning of each term, a copy filed in the departmental office."

For all sections, each student is to be in class and prepared for class each scheduled class day. A student whose absence is not warranted by an official excuse or by a doctor's written statement will receive a grade of zero for work due in class and for all work done in class on the day of the absence.

Your attendance and participation in class are essential for a complete learning experience. The type of learning that takes place between you, your instructor, and your classmates cannot be acquired on an individual basis. This class meets only one day per week, and much information must be covered to help you maximize your potential for success at TROY and in life after the University. **THEREFORE, IF YOU MISS MORE THAN TWO CLASSES--EXCUSED OR UNEXCUSED—YOU WILL RECEIVE A FAILING GRADE FOR THE COURSE.**

INCOMPLETE GRADE POLICY

• If a student is unable to complete all course grading requirements, the student may be eligible to request the assignment of an incomplete grade. An incomplete grade is not automatically assigned by the instructor, but must be requested by the student and approved by the instructor. The decision to approve or reject a student's request for an incomplete grade is at the discretion of the instructor using the following criteria:

1. Student submits a completed "Petition for an Incomplete Grade" form prior to assignment of a course grade.
2. Student's progress in the course is deemed satisfactory. This includes having completed over 50% of the course materials, meaning all 50% of assignments/exams.
3. Student is passing the course when the request is made.

LATE WORK: Only those students who have been excused from class may hand in work late, and they must hand in all assigned work within on week from the last day of the excused absence.

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ACADEMIC DISHONESTY:

Academic dishonesty is not accepted in this course. Cheating on a map quiz will result in a deduction of 10 points from your overall assessment. Cheating on an exam or handing in plagiarized materials will result in an automatic failing grade for the course. Troy University's definition of misconduct is defined in the student handbook, *The Oracle,* which may be accessed at http://trojan.troy.edu/oracle/assets/documents/2012-2013_Oracle.pdf .

AMERICANS WITH DISABILITIES ACT: Any student whose disabilities fall within ADA must inform the instructor at the beginning of the term of any special needs or equipment necessary to accomplish the requirements for this course.

THIS SYLLABUS IS TENTATIVE AND SUBJECT TO CHANGE. The instructor may make changes if deemed necessary. Changes will be announced in class.