MATH 2644, CALCULUS II, Section 01, Fall 2016

COURSE INFORMATION

Class Hours: Tue Thu 2 pm - 3:15 pm; Fri 2:30 pm - 3:20 pm

Classroom: Boyd 304

Instructor: Dr. Jeong-Hyun Kang

Course webpage: www.westga.edu/~jkang/2644.html

E-mail Address: jkang@westga.edu

Office: Boyd 328

Office Hours: tentative Tue Thur 12:30-2 & 4:45-5:30; Fri 12:30-2:30 & 4:30-5


Course Description: The second course in calculus sequence. The definite integrals and applications, calculus of transcendental functions, standard techniques of integration, sequences and series.

Learning outcomes: The student will be able to

- Compute the areas between curves
- Compute the volumes of solids of revolution by cross-sections and cylindrical shells
- Find the antiderivatives using techniques of integration by parts, trigonometric integrals, trigonometric substitution, partial fractions
- Find improper integrals
- Compute the arc length of a curve and the surface area of a surface of revolution
- Solve applied problems in physics and engineering
- Understand polar coordinates
- Compute the areas and arc lengths of curves in polar coordinates
- Understand conic sections and conic sections in polar coordinates
- Determine whether a sequence converges or diverges
- Determine whether a series converges conditionally, converges absolutely, or diverges using geometric series, p-series, the comparison test, the limit comparison test, the integral test, the ratio test, the root test, and alternating test
- Determine the radius of convergence and the interval of convergence of a power series
- Compute the Taylor series and Maclaurin series of a function

Homework: Homework will be assigned almost every class. Although it will not be collected and graded, you are strongly encouraged to do all of the problems in order to completely master the materials studied in class, and to prepare for quizzes and exams.

Quiz: Quiz 1 on 8/19 Fri. and the rest on Tuesdays from September, we will have 15-minute quizzes in the beginning of the classes.

It usually covers the materials from the previous week. The questions on the quizzes will be mostly of the “quickie” variety which can be answered on the spot, without much calculations. If you attend the lectures and are diligent in doing the homework assignments, you should have no problems with the quizzes. Missed quizzes cannot be made up for any reason, and instead, two lowest scores will be dropped at the end of the semester: These two lowest grades include all the missed quizzes due to your being sick or going out for official university trips. If you have to miss more than two quizzes due to official university field trips, I can drop one more missed quiz but not more than that.
**Hour Exam:** There will be 4 one-hour exams. If the student has a provable excuse (such as an official university field trip or doctor’s note) and notify me well in advance (at least one week earlier), then missed hour exams may be made up prior to the actual test date. Somebody’s wedding or gathering with a boy/girl friend after several months are NOT appropriate excuses.

In case an unforeseen case occurs (such as sudden illness the day before the exam) and you cannot take an hour exam, notify me before the exam starts. You will not take a make-exam in this case. Instead, an appropriate part of the final exam will substitute the missing exam. This method can be applied only one time; you cannot fall sick whenever take hour exams.

- Exam #1 on 8/26 Fri: Ch 6 (Check the detailed sections before the exam)
- Exam #2 on 9/20 Tue: Ch 7 (Check the detailed sections before the exam)
- Exam #3 on 10/18 Tue: Ch 8, Ch 10 (Check the detailed sections before the exam)
- Exam #4 on 11/15 Tue: Ch 11 (Check the detailed sections before the exam)

**Final Exam:** The final exam is scheduled for Thur Dec 1. during regular class hours; Fri. Dec 2 during regular class hours; Tuesday, Dec. 6, 2:00-4:00 pm

  If you have a conflict, let me know within the first week of the semester.

  **No make-up final!!!**

**Grading Policy:**

- Quiz 100 points (The quiz total may be scaled to 100 points if necessary at the end of the semester.)
- The 1st hour exam 50 points; The 2nd–4th hour exams 100 points each (Four hour exams 350 points total).
- Final will count for 200 points of the grade
- 650 points total

**Letter Grades:** \( \geq 90\% \) A; \( \geq 80\% \) B; \( \geq 70\% \) C; \( \geq 60\% \) D; below 60% F

**Other Class Policies:**

- **COMMUNICATIONS:**
  * Homework problems will not be specified during class but will be posted only on the class-log of the course webpage at www.westga.edu/~jkang/2644.html. Hence, it is essential for you to check the course webpage almost everyday.
  * Email communications regarding the course should be done only in the domain of westga.edu.

- **EXAMS/GRADERS:**
  * A final answer without showing procedure won’t earn any credit in quizzes or exams. **Showing appropriate steps of your work matters!**
  * No calculator during the quizzes and the exams.
  * No curve!
  * No extra credit!

- **ATTENDANCE:** I don’t count attendance in each class. However, if you miss weekly quizzes in a row in the beginning of the semester, your attendance will be recorded as “never attended” on BanWeb.

- **CLASSROOM BEHAVIOR:** You are expected not to disturb your classmate’s learning.