# Syllabus for MA213, Calculus III, Sections 13-16

## University of Kentucky, Fall 2013

#### Course instructor and contact information:

Instructor: Dr. Changyou Wang, Professor of Mathematics Office: POT 771, phone 257-4734 E-mail: cywang@ms.uky.edu Office hours: MWF 1:00-1:50pm, POT 771

#### Recitation instructors and recitation times and places:

Section 13: Ms. Yue Cai (POT 806; 2576817; yue.cai@uky.edu), TR 8:00-8:50 am, CB 213

- Section 14: Ms. Yue Cai (POT 806; 2576817; <u>yue.cai@uky.edu</u>), TR 9:30-10:20 am, BH 306
- Section 15: Mr. Michael Music (POT 718; 2576806; michael.music@uky.edu), TR 12:30-1:20 pm, FPAT 259
- Section 16: Mr. Michael Music (POT 718; 2576806; michael.music@uky.edu), TR 2:00-2:50 pm, EH 307

### Lecture's time and place:

Lecture: MWF 2:00-2:50 p.m., CB106

**Course overview:** This course covers standard material concerning the calculus of functions of several variables. We will generalize many of the concepts developed for one-dimensional problems in Calculus I and Calculus II to several dimensions. Because we live in a multi-dimensional world, vector calculus is an essential tool for describing many natural phenomena that we observe. We will cover most of Chapters 12, 13, 14, 15, and 16 of the textbook. Topics include vectors and the geometry of space (Chapter 12), calculus of vector-valued functions (Chapter 13), differentiation and integration of functions of multiple variables (Chapters 14 and 15), line and surface integrals (Chapter 16), and fundamental theorems of vector analysis (Chapter 17.1-17.3).

Textbook: Calculus, 2th Edition, Early Transcendental, by Jon Rogawski.

**Course website:** The course website will be linked to from <u>http://www.ms.uky.edu/~cywang/</u> (follow "Teaching Schedule" and click fall 2013/MA213). The website will contain a course calendar (which is subject to change and may be updated), homework assignment and other important information, so please bookmark it and check it out frequently.

Homework: Two types of homework will count towards your grade:

1. Online homework using the web homework system WeBWorK will be assigned and due roughly three times per week (on Tuesdays, Wednesdays, and Friday). Online homework will make up **10%** of your course grade. Late online homework **will not be** 

**accepted.** If a documented emergency or illness takes you away from school and you are unable to complete a web assignment on time, you will be given the option of having the assignment excused or completing a makeup assignment. If you have a scheduled absence (travel or authorized university absence), you must still submit the web homework by the deadline. The URL for the WeBWorK system is <u>https://courses1.webwork.maa.org/webwork2/uky-ma213</u>. In order to access your section's site, click on the link and log in with your AD username and password.

2. You will be assigned roughly three written problems per week to be handed in the following Thursday at the beginning of your recitation section. Two of these problems will be graded per week. Late assignments will not be accepted except with a documented excuse (see "Attendance" below). Your lowest two homework scores will be dropped. Written assignments will be worth 10% of your final grade.

**Exams:** There will be two one-hour in-class midterm exams during the course of the semester, each worth **20%** of your course grade. The final exam will be comprehensive, though it may emphasize material not covered on the midterm exams, and it will be worth **30%** of your course grade. The date and time of the final exam follows the standard university schedule and is given below. Below is a tentative exam schedule with an approximate breakdown (subject to change!) of material covered on each.

Midterm 1:	Wednesday, October 9,	Chapters 12, 13, and 14.1-14.3
Midterm 2:	Wednesday, Nov. 13,	Chapters 14.4-14.7, 15.1-15.5, and 16.1-16.2
Final Exam:	Monday, December16, 10:	30 am-12:30 pm, CB 106, Comprehensive

Makeup exams are allowed only for sanctioned university activities or legitimate emergencies and only with written documentation (see "Attendance" below). If you feel that your situation warrants a makeup exam, please check with your instructor as soon as possible to request one.

Accommodations due to disability: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

**Quizzes:** You will have written quizzes most Thursdays in recitation, with a total of roughly 10 during the semester (see the course schedule for precise dates). These will be graded out of 10 points, and the score that is recorded will be the minimum of 10 and 3 more than your raw quiz score. (So, you will automatically receive 3 points just for taking the quiz, and you will receive full credit if you score at least 7/10 on the quiz.) Quizzes will make up **10%** of your final grade.

Grading: Your final grade will be determined as follows:

Written Homework	10%
Online Homework	10%

Quizzes	10%
2 hourly exams (20% each)	40%
Comprehensive final	30%

A standard grading scale will be used (90-100% for A, 80-89% for B, 70-79% for C, 60-69% for D, and below 60% for E). The final course grade may be curved up (but not down) in order to ensure that the overall average for sections 13-16 is at least 75%.

**Calculators:** You are allowed to use computational aids such as calculators on homework assignments, but they will not be allowed during exams.

Attendance: Attendance is required, and you are responsible for all lecture material and announcements made in class. However, lecture and recitation attendance will not be recorded. Legitimate reasons for missing class include serious illness, illness or death of a family member, university-related trips, and major religious holidays. Students asking for makeup exams or quizzes or extensions of written homework due dates should let their instructor know of any conflicts as soon as possible (but in any case no more than a week after the absence) and be prepared to provide written documentation.

Academic integrity: Violations of academic integrity will be taken seriously and dealt with according to university regulations. Instances of cheating on exams and quizzes include (but are not limited to) copying from or communicating with another student, bringing any kind of notes into the exam unless expressly permitted, and using any type of electronic aid. You are encouraged to work together on homework, but you are required to write up and submit your own solutions to all assignments. Students caught cheating will be prosecuted according to university guidelines.

**Classroom Decorum:** Students are expected to be attentive and courteous during class. During class, please put away newspapers, turn off cell phones, and refrain from using laptops or other electronic devices except for note-taking purposes.