MA 432G 001 Methods of Applied Mathematics (Fall 2015)

1. MEETING TIMES AND PLACE: MWF 1:00–1:50 p.m.; CB 343.

2. INSTRUCTOR: Chi-Sing Man.   PHONE: 257-3849.
   OFFICE: Patterson Office Tower, Room 757.   E-MAIL: cman@uky.edu.
   OFFICE HOURS: MW 3:00–4:00 p.m., and by appointment.

3. TEXT: L. Brand, *Advanced Calculus: An Introduction to Classical Analysis*, Dover, 2006. Supplementary lecture notes on some topics will be handed out in class in due course.

4. SYLLABUS: This course will cover topics in multivariable calculus and vector analysis. The topics covered will include those presented in the following Chapters of the text by Brand:

   - Chapter 5, Vectors;
   - Chapter 8, Line integrals;
   - Chapter 9, Multiple integrals.

   Some topics (e.g., vector analysis, orthogonal curvilinear coordinates) will be given fuller treatment than that given by Brand. In addition, some topics in Chapter 4 (Jacobians, implicit function theorem, Lagrange multipliers) will also be covered. Topics already covered in MA 213 will either be skipped or be reviewed quickly.

5. E-MAIL COMMUNICATIONS: You should send a blank e-mail to the instructor by September 2 (Wednesday) to provide him with your *preferred* e-mail address. All homework assignments and course announcements will be sent to the e-mail addresses of the class he has on file.

6. POLICY ON IN-CLASS USE OF LAPTOP, TABLET, OR SMART-PHONE: Using the laptop, tablet, or smart-phone in class for internet surfing, etc., is highly distractive to fellow students and to the instructor. **No student may use the laptop, tablet, or smart-phone in class unless he/she has secured special permission from the instructor**.

7. ATTENDANCE POLICY: You are responsible for all lecture material and announcements made in class. Attendance will not be recorded, however.

8. HOMEWORK ASSIGNMENTS: Students must hand in each homework assignment at the beginning of the lecture on the day the assignment in question is due. Late returns, including homework turned in at the end of class, will not be accepted except in the case of a valid excuse. Students may work together when completing assignments, but each person must write up one's own homework assignments.

9. ACADEMIC ACCOMODATIONS DUE TO DISABILITY: Students who have a documented disability that requires academic accommodations should see the instructor as soon as possible during scheduled office hours. In order to receive accommodations in this course, students must provide a Letter of Accommodation from the Disability Resource Center (725 Rose Street, Multidisciplinary Science Building, Suite 407; phone: 257-2754; e-mail address: jkarnes@uky.edu).

10. ACADEMIC INTEGRITY: All violations of academic integrity will be taken seriously and dealt with according to university regulations.

11. EXAMINATIONS AND MAKEUPS: Individuals who miss an examination will be given a zero unless they have an official excuse. Make-up examinations will be permitted only for "excused absences". All makeups will be given during the final week of classes.

12. GRADES will be determined on the following basis:

    - homework assignments, total = 200 points;
    - two in-class examinations (see below for schedule), each of which carries 100 points;
    - final examination, 200 points.

    The letter equivalents of the numerical grades for graduate students are as follows:

Numerical Grade	Letter Equivalent
$520 - 600$	A
$440 - 519$	B
$360 - 439$	C
$0 - 359$	E

    The letter equivalents of the numerical grades for undergraduates are as follows:

Numerical Grade	Letter Equivalent
$500 - 600$	A
$420 - 499$	B
$360 - 419$	C
$300 - 359$	D
$0 - 299$	E

    If the overall class average on any examination is too low to ensure a fair distribution of grades, the grades for that examination will be curved to raise the class average.

13. SCHEDULE FOR IN-CLASS EXAMINATIONS:

    Exam 1 : Monday, October 5, 2015
    Exam 2 : Wednesday, November 18, 2015

14. FINAL EXAMINATION:
    Date: Wednesday, December 16, 2015.
    Time: 1:00 p.m.–3:00 p.m.   Place: CB 343.