LECTURE: MTH 421, 1:50–2:40 MWF, C-113 Wells Hall

INSTRUCTOR: BAISHENG YAN
- Office: A-215 Wells Hall
- Phone: 353-4650
- Email: yan@math.msu.edu (best way to contact me outside my office hours)
- Class Page: http://mathdata.msu.edu/CP/RW/S421_001.html
- Office Hours: 9:30-11:00 Wednesday and Friday or by appointment

The course will cover most of Chapters 5, 8, 9, 11 and 12 of the text. Topics will include
integrability on $\mathbb{R}$, Euclidean spaces, topology of Euclidean spaces, differentiability on $\mathbb{R}^n$, and integration on $\mathbb{R}^n$ (time permitting). The objectives will be to obtain a deep under-
standing of the theory that underlies the calculus courses you have already studied and, in
the process, to learn how to do rigorous mathematics, including proofs.

PREREQUISITES: MTH 320.

ATTENDANCE: You are expected to attend all class meetings. Any changes in this
syllabus or in the schedule of homework, exams, etc, will be announced during the class
meetings. To do well in this course you should spend six to nine hours of study per week
outside of class (2-3 hours for each scheduled class hour).

EXAMS: There will be three midterm exams and a final exam. Midterm exams will be
held on September 26 (Friday), October 31 (Friday) and December 3 (Wednesday).
The final exam is scheduled on Thursday, December 11, 12:45-2:45 at C-113 WH.
Make-up Midterm Exams: Make-up midterm exams will be given only in case of an
excused absence (e.g., a documented medical excuse or a conflicting University activity that
cannot be rescheduled). Student athletes should inform me ahead of time of any team travel
schedules that conflict with a scheduled exam or a homework due date. Missing a midterm
exam without a valid excuse will result in a score of 0 for the exam.

HOMEWORK: This will be the most important part of your learning experience in the
course! Homework problems will be assigned in class and collected before the due date to
be announced also in class. You should try all the assigned problems. Only a selective set of
assigned problems will be graded and counted toward the total points of your course grade.
No late homework will be accepted.

Guidelines for Homework: Solutions to homework problems must be written up in
accordance with the following guidelines:

• Start early to work on all assignment problems!

• Write up the problems in order and neatly, using only one side of the paper and
leaving lots of space after each problem for me to write comments. Staple your sheets
together in the correct order.

• Proofs should be written in complete sentences, with appropriate use of mathematical
notation and diagrams (your textbook serves as a guide for this). Proofread what
you have done to be sure that it is complete and makes sense. Work on making your
arguments clear and concise.
• If you are not able to fill in a proof or solution, leave a gap on your paper and note this down. I will indicate my comments in the gap.

• You may work with others on the homework problems, but you must acknowledge their contributions. Your final writeup must be your own. Flagrant copying will be penalized.

GRADING POLICY: In most cases, your final course grade will be primarily determined by the total point out of 600 points you accumulate from homework (100 points), midterm exams (300 points) and the final exam (200 points). Approximate grade-lines for the course grade are as follows:

- 90% – 100% is 4.0; 85% – 89% is 3.5; 80% – 84% is 3.0; 70% – 79% is 2.5;
- 65% – 69% is 2.0; 60% – 64% is 1.5; 50% – 59% is 1.0; below 50% is 0.0.

Borderline Cases: If your percentage is near a border line, it will be handled individually, with consideration of other factors such as attendance, study effort, classroom contributions, performance over time, clarity of homework, etc. Note that your grade could be either up or down by these considerations.

ACADEMIC HONESTY: The University’s policy concerning academic integrity is covered in the Spartan Life booklet, General Student Regulations. According to the handbook, “no student shall claim or submit the work of another as one’s own”. This applies to homework, midterm exams and the final exam. You are on your honor to abide by these regulations. However, you are encouraged to work on the homework problems in group with other students.

IMPORTANT DATES:
(See http://www.reg.msu.edu/ROInfo/Calendar/WWWDates.asp?Semester=FS08 for details)

Monday - 08/25/08 – Classes begin
Friday - 08/29/08 – Online open add period for Fall ends at 8pm.
Monday - 09/01/08 – Labor Day University closed
Tuesday - 09/02/08 to Friday 09/05/08 – Students go to Undergraduate office, A212 Wells Hall for Mathematics enrollment changes. (late adds, drop to lower course, section changes)
Friday - 09/05/08 – Last day to late add a course or change sections within a course. Last day to drop to a lower level course.
Thursday - 09/18/08 – End of tuition refund
Tuesday - 10/14/08 – Middle of semester; last day to drop a course without a grade being reported.
Thursday - 11/27/08 to Friday 11/28/08 – Thanksgiving break
Friday - 12/05/08 – Last day of classes.
Thursday - 12/11/08 – Final Exam, 12:45-2:45 at C-113 Wells Hall.