Math 555: Advanced Calculus, Section 1, Spring 2016
Syllabus

Course Information
Instructor: Dr. Thái Hoàng Lê.
Office: Hume Hall 337.
Office hours: 1:00 - 2:00 PM on MWF, or by appointment.
Email: leth@olemiss.edu. If you want to contact me by email, make sure to put the name and section of the class on the subject of your email. If not, your email may be skipped.
Text: Methods of Real Analysis by R. Goldberg. The first portion 100 pages of the book can be purchased in binder form at University Printing Services in Gerard Hall.
Time/Place: Monday-Wednesday, 2:30 - 3:45 pm, Hume Hall 331.

Course Description
Math 555 is the first half of the course series on real analysis. As you may have noticed, the content of lower-division calculus courses is application-oriented with an emphasis on computation and intuition, without much attention to the logical foundations of calculus itself. One of the main goals of this real analysis series is to fill in proofs for some of the calculus results that you mostly likely have taken for granted.

Course Learning Objectives
Our course objectives will be to master the rigorous definitions of limit and convergence and become capable of using these definitions in writing complete, rigorous proofs. A major emphasis of this course will be on careful writing of proofs and on related analytical reasoning abilities.

Grading
1. Your final grade is determined by homework (10%), participation (10%), midterms (60%, each worth 20%), final exam (20%). Your lowest midterm score will be replaced by your final exam score, if the latter is higher.

2. Your letter grade is based on the following scheme: F for below 60, D for 60 or above, C- for 70 or above, C for 73 or above, C+ for 77 or above, B- for 80 or above, B for 83 or above, B+ for 87 or above, A- for 90 or above, A for 93 or above.

Exams
1. There are three midterms on February 17, March 23 and April 20 (all Wednesdays). The final exam is on Monday, May 9 at 4:00 pm.
2. There are no make-up exams.

Homework
The homework will be due on a nearly weekly basis. Homework assignments will be collected at the beginning of the lecture. No late homework will be accepted. Each homework assignment will consist of several problems, though only a portion of it is graded. The problems will be posted on Blackboard. While it is possible for you to work on homework problems in groups, you must write the solution on your own. Any student or other resource consulted in the process of solving homework problems should be listed in an acknowledgment section.
**Attendance and participation**

Your participation score will be determined by how actively engaged you are in class, such as asking or answering questions. Each student will have to present a solution to a homework problem in front of blackboard, and this will be an important factor of your participation score. While I do not take attendance, it is extremely important that you attend. Also, remember that you have to participate enough to have your participation score. I won’t reply to questions asking what is announced or covered in classes you miss. It is your responsibility to know these and you must have contacts of some other students in class so that you may inquire them.

**Additional Policies**

1. Each student is responsible for work missed due to absences. If a test is missed, a grade of zero will be given.

2. Any person who must miss a scheduled test or quiz because of an official university function must reschedule with the instructor to take the test at a time before the test is scheduled to be given. No other rescheduling will be allowed. If asked for by the instructor, official documentation must be provided.

3. A student who wishes to discuss the grading policy, testing policy, or wishes to have a conversation regarding the instructor of the course should make an appointment with the course supervisor in the Department of Mathematics.

4. Any student having three or more final exams scheduled for the same day may arrange with the instructor to take either the 12:00 noon or 7:30p.m. exam at another time. This is the only reason that a final exam may be rescheduled. The student is required to take the final exam at the time scheduled.

**Course Withdrawal**

Withdrawal deadline for the 2016 Spring semester is **Friday, March 4th**. After the course withdrawal deadline, courses dropped will be recorded on University records and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise the grade recorded will be F. After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergency as determined by the student’s academic dean. Dropping the course after the deadline will not be permitted because of dissatisfaction over an expected grade or because the student has changed his or her major.

**Academic Needs**

It is the responsibility of any student with a disability who requests a reasonable accommodation to contact the Office of Student Disability Services (915-7128). Any request for extended testing time made through that office must be made prior to the date of the test.

**Academic Honesty**

The following statement is the policy of Department of Mathematics regarding academic honesty: Cheating on any exam, quiz, classwork, or homework, theft of exam questions or possession of exam questions prior to the time for the exam shall all be offenses subject to the appropriate penalties. The penalty for commission of any offense set out above is failure in the course, and subject to the approval of the Chancellor, dismissal or suspension from the university.