Course Instructor: Sundar Tamang
Office: CH 479
Phone#: (205) 934-2154
E-mail: sundar11@uab.edu
Office Hours: Tuesday, Thursday 2:30PM-3:30PM (or by appointment)

Meeting times: MTWR 3:35PM-4:25PM
Meeting location: HHB 126
Prerequisite: Grade of C or better in MA 106, MA 107 or equivalent. Any student who has not fulfilled the prerequisite will be dropped from the class.
Credits: 4 semester hours

Important dates:
First day of classes: August 28, 2017
Labor Day Holiday: Monday, September 4, 2017
Last day to drop without paying full tuition: September 5, 2017
Last day to withdraw with a “W”: October 20, 2017
Fall/Thanksgiving Break: November 20–25
Last day of class: December 8, 2017

Major exams (tests):
Test I: near Monday, September 25; Sec. 1.1–1.6, 2.1–2.4;
Test II: near Wednesday, October 18; Sec. 2.5, 2.8, 3.1–3.5;
Test III: near Wednesday, November 8; Sec. 3.7, 4.1–4.5;
Test IV: near Thursday, November 30, Sec. 3.6, 5.1–5.3.

(These dates are approximate and may be slightly shifted due to unforeseen circumstances.)
Final exam: Wednesday, December 13, 2016, 1:30–4PM (Location to be announced.)
NOTE DATE AND TIME OF FINAL EXAM!!

Date: August 9, 2017.
Course policies:

- Please make sure that you are able to receive e-mail through your Blazer-ID account. Official course announcements may be sent to that address.
- If you are contacted by the Early Alert Program, you should consider taking advantage of the services it offers. Various services to assist you are also listed in the Student Resources section of the Blazernet web site.
- If you wish to request a disability accommodation please contact DSS at 934-4205 or at dss@uab.edu.
- If a test is missed due to a serious verifiable circumstance or official university business, the test grade will be replaced with the properly rescaled final exam score. If you miss the final exam you will receive a zero score for this exam. In all cases you must contact your instructor of such circumstances before the exam takes place.
- Calculators (without internet access) will be allowed during any of the tests or quizzes. In addition, students can bring one quick reference card to tests including the final exam (i.e., a standard size 5" × 8"-index card; both sides can be used).

Methods of teaching and learning:

The men who try to do something and fail are infinitely better than those who try to do nothing and succeed. - Martin Lloyd Jones

- Class meetings of 50 minutes consisting of student presentations, lectures and discussions of examples and homework problems. Time also includes quizzes, and four in-class tests.
- Students are expected to undertake at least 10 hours of private study and homework per week.
- The online homework system WebAssign will be used (look for more information below).

Assessment procedures:

- Student achievement will be assessed by the following measures:
  - Regular online homework; Wednesday quizzes. On line homework will be due on most Mondays. Feedback is provided when wrong answers are given. Students are encouraged to retake the homework problems (with randomly changed parameters) until they obtain correct answers. A limited number (at most 3) of takes is allowed during the week in which the set is available. Problems on tests are modeled after homework problems. Staying on top of homework is therefore extremely important. Quiz problems are similar to the homework problem sets. This allows students to gauge whether they are ready to work problems in a test situation. Homework and quizzes together count for 10% of the course average.
Four in class tests including short questions (Part I) as well as problems requiring in depth understanding (including word-problems). Partial credit is awarded where appropriate. Each test contributes 14% to the course average.

A 150-minute comprehensive final examination including Part I and Part II type problems. The final contributes 25% to the course average.

Attendance in the course is crucial for your success and counts for 9% of the grade. The roll will be taken in the beginning of every class. If you are unable to attend class, you must email me BEFORE that class take place and bring me a verifiable excuse later.

- Your course performance is your course average (including the final exam score). This is a number between 0 and 100.
- Your final grade is determined according to the following table:

<table>
<thead>
<tr>
<th>Course performance:</th>
<th>88-100</th>
<th>75-87</th>
<th>62-74</th>
<th>50-61</th>
<th>below 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Grade:</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>F</td>
</tr>
</tbody>
</table>

- In addition your grade maybe raised by a strong performance on the final exam (normally at most one letter grade).

Tips:
- Past tests are available at www.math.uab.edu under Student Resources/Calculus Testbank.
- Help is available in the Math Learning Lab (HH 202); M–Th 9–8, F 9–5.
- By working steadily and regularly, you will increase your chances to succeed in this course.
- Remember, being a full-time student is a full-time job.

How to get started on Enhanced WebAssign:
(1) Go to www.webassign.net and click on I HAVE A CLASS KEY in the signin link.
(2) Enter the following course key:

uab 2919 0043

and proceed. (If prompted for your institution, enter uab)

(3) When prompted to purchase an access code, select “…trial period” (Do not purchase an access code at this time. However, you must purchase an access code within two weeks for you to continue using the system beyond the two-week trial period. The system will prompt you to enter your access code when the deadline approaches. Your book may have an access code bundled with it. You must use it.)

(4) After your first registration, you can sign in as returning user.

(5) Should you run into technical problems Enhanced WebAssign provides technical support online and/or by phone.
Sections to be covered:


- Chapter 1: 1.1 – 1.6.
- Chapter 2: 2.1 – 2.5 and 2.8.
- Chapter 3: 3.1 – 3.7.
- Chapter 4: 4.1 – 4.5.
- Chapter 5: 5.1–5.3.

**HOW THIS CLASS WORKS**

This class will be taught in a way that is likely to be different from mathematics classes you have encountered in the past. Much of the class will be devoted to students working problems at the board and much of your grade will be determined by the amount of mathematics that you produce in this class.

I use the word produce because the best way to learn mathematics is by doing mathematics. Therefore, just as I learned to ride a bike by getting on and falling off, I expect that you will learn mathematics by attempting it and occasionally falling off!

You will be expected to work assigned problems from the book and present some of them on the board. I urge you to seriously consider the value of becoming an independent thinker who tackles doing mathematics, and everything else in life, on your own rather than waiting for someone else to show you how to do things.

**A Common Pitfall**

There are two ways in which students can approach this class. The first is to say, I will wait and see how this works and then see if I like it and put some problems up later in the semester after I catch on.

Think of the course as a forty-yard dash. Do you really want to wait and see how fast the other runners are? If you try every night to do the problems then you may get a problem (Yay!) and be able to put it on the board with pride and satisfaction. Alternatively, you will struggle with the problem, learn a lot in your struggle, and then watch someone else put it on the board. When this person puts it up you will be able to ask questions and help yourself and others understand it. And then you can say to yourself, “Ahhhh, now I see where I went wrong and now I can do this one and a few more for next class.”

If you do not try problems each night, then you will watch another student put the problem on the board. Most likely you will not quite catch all the details. Then, when you study for the tests or try the next problems, you will have only a loose idea of how to tackle such problems. Basically, you have seen it only once in this case. The first student saw it once when s/he tackled it on her/his own, again when either s/he put it on the board or another student presented it, and then a third time when s/he studies for the next test or quiz.

---

1 We are indebted to Professor Ted Mahavier, a pioneer of the problem-based approach to learning calculus, for the description of how this class works (for additional information go to www.jiblm.org).
Hence the difference between these two approaches is the difference between participating and watching a movie. I hope you all will choose to participate and, as a consequence, will benefit the most from the class!

**How to Study Each Day**

1. Read over your notes from class that day and the relevant section(s) of the textbook.
2. Make a list of questions to ask me at the beginning of the next class. (I love these!)
3. Review the recent problems.
4. Work on several new problems and read the appropriate new section of the textbook.
5. Write up as many solutions as you can so that you can copy these onto the board the next day.

**Common Courtesies for Any Class:**

- Putting your head on your desk resting or sleeping during class is rude. If you need sleep, please go to your room or home - not to class.
- If you need to leave class early, it is polite to tell the instructor before the class starts. Class attendance is expected.
- Please arrive for class a few minutes early so that class can begin without interruption. If there is a problem, let the instructor know.