COURSE DESCRIPTION
CALCULUS I
MA 125–8C, 31922
SPRING 2018

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF ALABAMA AT BIRMINGHAM

Course Instructor: Mohammed Darras
Office: CH 472
Phone#: (205) 934-2154
E-mail: darras@uab.edu
Office Hours: Tuesday, Thursday 3:45–4:45 (or by appointment)

Meeting times: TTh, 5:00–6:50
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: January 8, 2018
Martin Luther King Jr Holiday: Monday, January 15, 2018
Last day to drop without paying full tuition: January 16, 2018
Last day to withdraw with a “W”: Friday, March 2, 2018
Spring Break: March 12–18
Last day of classes: April 20, 2018

Test I: near Tuesday, February 6; Sec. 1.1–1.6, 2.1–2.4;
Test II: near Thursday, March 1; Sec. 2.5, 2.8, 3.1–3.5;
Test III: near Thursday, March 29; Sec. 3.7, 4.1–4.5;
Test IV: near Thursday, April 12; Sec. 3.6, 5.1–5.3.

(These dates are approximate and may be slightly shifted.)

Final exam: Wednesday, April 25, 2018, 1:30–4 PM (Location to be announced.)

NOTE DATE AND TIME OF FINAL EXAM!!!
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 final exam score. Otherwise, if you miss an exam you will receive a zero score for this exam. In all cases you must inform 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).

Assessment procedures:
- Student achievement will be assessed by the following measures:
  - **Regular online homework.** 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. Staying on top of homework is extremely important as problems on tests and quizzes are modeled after homework problems. This allows students to gauge whether they are ready to work problems. Homework counts for 5% of the course average.
  - **Quizzes will be administered on most Wednesdays.** The role of quizzes is similar to that of homework except that quizzes will be given in class and students will have limited amount of time to take them. Quizzes count for 5% 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 15% to the course average.
  - **Attendance** Attendance in the course is crucial for your success. The roll will be taken close to the beginning of every class. If you are unable to attend class, you must bring me a verifiable written excuse; in that case your absence will not be counted. Attendance will contribute 5% of the final grade.
  - **A 150-minute comprehensive final examination** including Part I and Part II type problems. The final contributes 25% to the course average.
• 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/test bank.
• 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 1674 0961

   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.
Suggested Problems

Section 1.1: p. 8, Problems 1, 2, 4, 14, 22, 25, 48, 52
Section 1.2: p. 21, Problems 2, 14, 38, 48, 58
Section 1.3: p. 33, Problems 2, 4, 8, 12, 16
Section 1.4: p. 43, Problems 2, 10, 14, 22, 38, 50, 56
Section 1.5: p. 54, Problems 2, 4, 10, 20, 34, 38, 40, 44
Section 1.6: p. 67, Problems 2, 10, 14, 20, 32, 36, 42
Section 2.1: p. 80, Problems 4, 9, 16, 20, 28, 36
Section 2.2: p. 92, Problems 2, 6, 10, 14, 20, 34
Section 2.3: p. 105, Problems 2, 8, 10, 16, 22, 39
Section 2.4: p. 112, Problems 2, 4, 10, 14, 16, 42, 48, 57
Section 2.5: p. 120, Problems 2, 6, 12, 20, 22, 56, 58, 70
Section 2.8: p. 138, Problems 2, 6, 12
Section 3.1: p. 150, Problems 2, 4, 30, 36, 42, 50
Section 3.2: p. 157, Problems 2, 8, 14, 16, 18, 24
Section 3.3: p. 164, Problems 2, 6, 12, 22, 28
Section 3.4: p. 172, Problems 2, 8, 14, 22, 26, 34
Section 3.5: p. 180, Problems 2, 6, 8, 10, 12, 16, 27
Section 3.6: p. 187, Problems 1, 7, 9, 14
Section 3.7: p. 194, Problems 2, 10, 13, 16, 25
Section 4.1: p. 208, Problems 2, 6, 11, 13
Section 4.2: p. 221, Problems 2, 4, 12, 30
Section 4.3: p. 231, Problems 2, 8, 14, 24, 28
Section 4.4: p. 240, Problems 2, 6, 16, 22
Section 4.5: p. 247, Problems 8, 12, 14, 34, 46
Section 5.1: p. 259, Problems 3, 13, 17, 33, 35, 37, 41
Section 5.2: p. 268, Problems 1, 3, 13, 15, 23, 51, 59, 61
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