UAB Department of Mathematics
MA 126-DV Calculus II Spring 2019 CRN# 31924

Course Instructor: Dr. Jeanne S. Hutchison
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E-mail: hutchiso@uab.edu
Office Hours: TuTh 2:30-4:00 PM Other times by appointment and by dropping in.

Meeting Times: MTWR 1:25-2:15 pm Meeting Location: HB 311
Prerequisite: Grade of C or better in MA 125 or equivalent
Credit: 4 semester hours
Topics to be covered can be found in Chapters 5—8 and Chapter 10.

Important Dates:
First day of classes: Monday, January 7, 2019
MLK Holiday: Monday, January 21
Last day to drop without paying full tuition Monday, January 14
Last day to withdraw with a W Friday, March 1, 2019
Spring Break—No Classes Week of March 11-17

Last day of classes: Friday, April 19

Major Exams (approximate dates):
Test I: on or near Tues, Jan 29 (sections 4.5, 5.1-5.3, 5.6, 5.8, 6.1-6.3)
(These dates are approximate and may be shifted slightly.)
Test II: on or near Mon, Feb 25 (sections 6.5-6.6, 7.1-7.3, 7.6)
Test III: on or near Mon., Mar 25 (sections 8.1-8.7)
Test IV: on or near, Mon., Apr 15 (sections 10.1-10.5, 10.7-10.8)
Final Exam: Wednesday, April 24 1:30—4:00 PM (Location to be announced.)

Course Policies
• Please make sure that you are able to receive e-mail through your Blazer-ID account. Your instructor will be communicating important announcements this way.
• Turn off all cell phones during class.
• If you wish to request a disability accommodation please contact Disability Support Services at 934-4205 or at dss@uab.edu.
• Two lowest quiz grades and two lowest homework grades will be dropped to account for any missed assignments due to illness or any other circumstance. 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. You have to advise the instructor of such circumstances before the exam is given. (Exceptions to this rule are rare!)
• No books, notes, or phones will be allowed during any of the tests or quizzes. Calculators which
do not have access to the internet will be allowed during tests and/or quizzes.
• A 5”x 8” Quick Reference Card made by the student will also be allowed on all major exams
(tests and final exam), but not on quizzes.
• The Mathematics Department participates in the Early Alert Program. If you receive an Early
Alert because your instructor is worried about your attendance and/or performance, consider
taking advantage of the suggested services of the program and those suggested by your
instructor.

Methods of Teaching and Learning:
• Class meetings of 100 minutes for MW classes and 50 minutes for MTWR classes consisting of
lectures and discussion of examples and homework problems. Time for quizzes and four in-class
tests is also included.
• Students are expected to undertake at least 10 hours of private study and homework per week.
• The on-line homework system Enhanced WebAssign will be used. More information follows on
this.

Assessment Procedures
Student achievement will be assessed in the following ways:

Regular homework. Regular online and on-paper homework will be regularly assigned.
Feedback is provided online when wrong answers are given. Students are encouraged to
retake the assignments (with randomly changed parameters) until they obtain correct
answers. Three attempts on each problem are allowed before the due date of the assignment.
Online homework contributes 5% to the course averages. Problems on tests are modeled
after homework problems and quizzes. Staying on top of the homework is extremely
important.
In addition to the online homework, some regular (on-paper) homework will also be
assigned to be turned in for grading. Problems on tests are modeled after homework
problems and quizzes. Staying on top of the homework is therefore extremely important.
(Unannounced) quizzes. Quiz problems are modeled after homework problems. This
allows students to gauge whether they are ready to work problems in a test situation.

Class attendance and group work. The roll will be taken at the beginning of each class
meeting. Students may also be required to work in small groups under the course instructor
and course assistant.
Quizzes, on-paper homework, and group work contribute 25% to the class average.

Four in-class tests including short questions (Part I) as well as problems requiring in depth
understanding, including word problems (Part II), for which partial credit is awarded where
appropriate. Each test contributes 10% to the course average.

A 150-minute comprehensive final examination including Part I and Part II type problems.
The final exam contributes 30% 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, a strong performance on the final exam may raise your final grade by one letter grade

TIPS
• Help is available in the Math Learning Lab, HHB 202. The lab is open Monday through Thursday from 9 AM to 8 PM and Fridays 9 AM to 3 PM. Exact times when calculus tutors will be available are posted on the math website www.math.uab.edu under Math Help or Special Tutoring Hours. Help though is always there Mon-Thurs 9-8 and Fri 9-3 at the desk at the MLL entrance
• Past exams given in Calculus II are posted on the math website www.math.uab.edu for student practice. Click on Test Bank under Student Resources.
• Regular class attendance, working steadily and regularly, and seeking help when needed will all increase your chances to succeed in this course.
• Remember that being a full-time student is a full-time job.

ENHANCED WEBASSIGN FOR MA 126-DV

The following document and video link should walk you through the registration process and give you additional information on Enhanced WebAssign: http://tinyurl.com/EWA-student-registration

Also, basic Information on how to get started on Enhanced WebAssign (the on-line homework) follows:

(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 7148 3372 and proceed. (If prompted for your institution, enter uab)

(3) When prompted to purchase an access code, you may select…“trial period”. (Do not need to 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.) If you already have an active WebAssign account Associated with this edition of the textbook, you may simply add this course to your account using the above Course Key.

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

(5) Should you run into technical problems Enhanced WebAssign provides technical support online and/or by phone

https://webassign.com/support/student-support/
1-800-955-8275, option 1
Note: For each assignment, you will be able to submit answers 3 times. On the second submission you only need to work the problems you missed from the first submission. You should be able to save answers without using a submission.

**Sections to be covered:** *Essential Calculus, 2nd Edition* by James Stewart, Thomson-Brooks/Cole, 2013

- Review for Chapter 4: 4.2-4.5
- Review for Chapter 5: 5.1-5.3
- Chapter 5: 5.6, 5.8
- Chapter 6: 6.1-6.3, 6.5-6.6
- Chapter 7: 7.1-7.3, 7.6
- Chapter 8: 8.1-8.7

**ANTIDERIVATIVE AND INTEGRAL FORMULAS**

Indefinite Integral of \( f \) = Most General Antiderivative of \( f \)  

Note. If \( u = u(x) \), \( du = u'(x)dx \)

\[
\int u^n \, du = \frac{u^{n+1}}{n+1} + C \\
\int \cos u \, du = \sin u + C \\
\int \sin u \, du = -\cos u + C \\
\int \sec^2 u \, du = \tan u + C \\
\int \sec u \tan u \, du = \sec u + C \\
\int \csc^2 u \, du = -\cot u + C \\
\int \csc u \cot u \, du = -\csc u + C \\
\int e^u \, du = e^u + C \\
\int \frac{1}{u} \, du = \ln|u| + C \\
\int \frac{1}{\sqrt{1-x^2}} \, dx = \sin^{-1} x + C = \arcsin(x) + C \\
\int \frac{1}{1+x^2} \, dx = \arctan(x) + C \\
\int f(x) \pm g(x) \, dx = \int f(x) \, dx \pm \int g(x) \, dx \\
\int kf(x) \, dx = k \int f(x) \, dx
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