Dr. R. Beezer

Text We will be using Calculus (2 $2^{\text {nd }}$ edition) by G.L. Bradley and K.J. Smith. We will cover material from Chapters 5 through 8 - see the attached tentative schedule for the exact sections covered. There is also a packet of modules and reading assignments to purchase from the Bookstore. The Student Survival \& Solutions Manual is available as an optional text.

Home Page Start at http://buzzard.ups.edu/courses.html to locate the WWW page for this course.

Office Hours My office is Thompson 321G; the telephone number is 879-3564. Making appointments or simple, non-mathematical questions can be handled via electronic mail - my address is beezer@ups.edu. Office hours will be 9:30-10:30 on Monday, Tuesday, Thursday and Friday. I will always be available during these times on a first-come, firstserved basis. If these times are not convenient, please do not hesitate to make an appointment with me for another time. You are also welcome to drop by my office without an appointment at any time that I am in (2 P.M. - 4 P.M. is a good time to try). Office hours are your opportunity to receive extra help or clarification on material from class, or to discuss any other aspect of the course.

Calculators This course requires the use of a graphing calculator. It should be capable of displaying the graphs of functions, solving equations and differentiating and integrating numerically. I highly recommend the Texas Instruments TI-86, which is what I will be using. These are available at the bookstore, though you must ask for them at the checkout counter. It is not required that you use this exact model, but whatever you use should have the capabilities listed above.

Homework Homework will be assigned at the conclusion of each section, it will be due at the start of the next class session and will not be accepted late. Of course, you are not limited to working just these assigned problems. On the day homework is handed up there will be some time at the start of class for discussion. It is your responsibility to be certain that you are learning from the homework exercises. The best ways to do this are to work the problems diligently when assigned and to participate in the classroom discussion. If at this point you are still unsure about a problem, then a visit to my office is in order. Making a consistent effort outside of the classroom is the easiest way to do well in this course.

Mathematics not only demands straight thinking, it grants the student the satisfaction of knowing when he [or she] is thinking straight. - D. Jackson

Mathematics is not a spectator sport. - Anonymous
I hear, I forget.
I see, I remember.
I do, I understand.

- Chinese Proverb

Quizzes There will be six one-hour quizzes - see the attached sheet for tentative dates. The lowest of your six quiz scores will be dropped. The comprehensive final exam will be given at 8 A.M. on Wednesday, December 13. The final exam cannot be given at any other time, so be certain that you do not make any travel plans that conflict, and also be aware that I will allow you to work longer on the final exam than just the two-hour scheduled block of time.

Grades Grades will be based on the following breakdown: Quizzes - 75\%; Final - $25 \%$. Homework, attendance and improvement will be considered for borderline grades. Scores will be posted on the World Wide Web at http://buzzard.ups.edu/courses.html. A reminder about withdrawals - a Withdrawal Passing grade (W) can only be given during the third or fourth weeks of the semester, after that time (barring unusual circumstances), the appropriate grade is a Withdrawal Failing (WF), even if your work has been of passing quality. See the attached schedule for the last day to drop with an automatic ' $W$ ' and please read The Logger about these often misunderstood grades.

Attendance Daily attendance is required and expected.

Purpose One of the goals of your college education is to progress to becoming an independent scholar. To this end, you will be given a great deal of freedom in how you choose to learn calculus. Of course, with freedom comes responsibility. Read the book before the lectures, work the exercises diligently, tidy up your class notes each evening, and ask questions. Arriving late to class, or having conversations with others during class, not only disrupts your peers, but tells me you are not serious about your education. I will not routinely check attendance, but our class is small enough that I will notice when you are not here, and again this will be another way that you signal me about your commitment to the endeavor.

Calculus is one of the most amazing intellectual developments of the past several hundred years and is responsible in large part for many of the advances in science and engineering that we take for granted today. Your commitment to this course will be rewarded, and your inattention will be a waste of your tuition and your time.

# Tentative Daily Schedule 

Monday Tuesday Thursday Friday

Aug 28
Section 5.1

Sep 4
Labor Day
Holiday

Aug 29
Section 5.2

## Sep 5

Section 5.5
ep 12
Section 5.6

Aug 31
Section 5.3

Sep 7
Problem Session

Sep 14
Section 5.7

Sep 19
Module:
Mercator Maps

Sep 25
Section 6.1
Last day to drop

Oct 2
Section 6.4

Sep 26
Section 6.2

Oct 3
Section 6.5

Sep 28
Section 6.2

Oct 5
Module:
Coughing

Oct 12
Section 7.2

Oct 9
Quiz \#3

Oct 10
Section 7.1

Sep 29
Section 6.3

Sep 21
Problem Session
Sep 22
Quiz \#2
Monday Tuesday Thursday Friday

Oct 16
Fall Break
Oct 17
Section 7.3
Oct 19
Section 7.4
Oct 20
Problem Session

Oct 23
Section 7.6
Oct 24
Section 7.6/7.7

Oct 31
Quiz \#4
Problem Session

Nov 7
Section 8.2
Section 8.2

Nov 13
Problem Session

Nov 20
Section 8.7

Nov 14
Quiz \#5

Nov 16
Section 8.5

Nov 21
Section 8.7

Nov 17
Section 8.6

Nov 27
Section 8.8

Nov 28
Section 8.8

Nov 23
Thanksgiving

Nov 30
Module:
Sherry Wine
Stor

Oct 26
Section 7.7

Nov 2
Section 8.1

Nov 9
Section 8.3

Dec 4
Quiz \#6

Dec 5
Housekeeping

## Homework Exercises

| Section | Page | Exercises |
| :--- | ---: | :--- |
| 5.1 | 327 | $3,11,17,21,25,28,30,32,36,38,45$ |
| 5.2 | 335 | $13,15,18,20,24,28-33$ |
| 5.3 | 348 | $3,6,11,14,19,22,26,35,39$ |
| 5.4 | 355 | $6,11,17,21,29,34,37,46,53,57$ |
| 5.5 | 362 | $9,18,23,28,35,41,48,57,59$ |
| 5.6 | 374 | $3,6,9,12,15,17,23,27,52,60$ |
| 5.7 | 381 | $1,5,20,27,34,37$ |
| 5.8 | 388 | $1,4,7,14,19,28,34$ |
| 5.9 | 395 | $2,3,5$ |
| 6.1 | 413 | $3,4,6,10,18,32,39$ |
| 6.2 | 423 | $3,9,14,21,27,32,33,40,41$ |
| 6.3 | 431 | $3,11,16,19,24,29,33,35$ |
| 6.4 | 439 | $3,9,13,16,18,23,25,28$ |
| 6.5 | 451 | $5,7,11,45 ; 26,29,31,32,53$ |
| 7.1 | 473 | $6,12,13,15,21,32,33,40,43,55$ |
| 7.2 | 480 | $3,4,8,10,13,15,21,27,35$ |
| 7.3 | 487 | $7,13,18,26,31 ; 34,38,42,45,47$ |
| 7.4 | 497 | $2,7,15,21,33,60$ |
| 7.6 | 512 | $1,5,8,23$ |
| 7.7 | 524 | $5,10,15,20,25,30,35,40,50$ |
| 8.1 | 550 | $3,7,11,16,23,26,27,37,41,44,49$ |
| 8.2 | 558 | $24,29,37 ; 5,7,11,19,21,49,56$ |
| 8.3 | 567 | $5,7,12,17,23,29,33,34,39,40,41$ |
| 8.4 | 573 | $1,2,4,5,8,14,20,26,32,38,49,50,53$ |
| 8.5 | 581 | $3,11,14,17,27,33,36,37,45,48,54$ |
| 8.6 | 590 | $4,6,10,20,22,30,39,40,51$ |
| 8.7 | 600 | $3,6,9,16,22,27,35,39$ |
| 8.8 | 616 | $5,8,12,20,25,35,39,40,50,53$ |
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## Bedtime Readings

Quiz Title
1 Memorabilia Mathematica
2 Anecdotes
3 The Creation of the Calculus
4 On the Seashore
5 Transition to the Twentieth Century
6 Beauty in Mathematics

