Course Guidelines Dr. R. Beezer

**Text**: We will be using *Calculus* ( $2^{nd}$  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. *Hurricane Calculus* and the *Student Survival & Solutions Manual* are available as optional texts.

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 756 – 3564. Making appointments or simple, non-mathematical questions can be handled via electronic mail — my address is **beezer@ups.edu**. Office hours will be 12–12:50 on Monday, Tuesday, Thursday and Friday. I will always be available during these times on a first-come, first-served 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 (afternoons are best). 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-85, 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 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 seven one-hour quizzes — see the attached sheet for tentative dates. The lowest of your seven quiz scores will be dropped. The comprehensive final exam will be given at 8 A.M. on Friday, May 14. The final exam cannot be given at any other time, so be certain that you do not make any travel plans that conflict.

**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.

## Tentative Daily Schedule

| Monday                                | Tuesday               | Thursday                               | Friday                            |
|---------------------------------------|-----------------------|--|-----------------------------------|
| Jan 18<br>MLK Day                     | Jan 19<br>Section 5.1 | Jan 21<br>Section 5.2                  | Jan 22<br>Section 5.3             |
| Jan 25<br>Section 5.4                 | Jan 26<br>Section 5.5 | Jan 28<br>Module:<br>Mercator Maps     | Jan 29<br>Problem Session         |
| Feb 1<br>Quiz #1                      | Feb 2<br>Section 5.6  | Feb 4<br>Section 5.6                   | Feb 5<br>Section 5.7              |
| Feb 8<br>Section 5.8                  | Feb 9<br>Section 5.9  | Feb 11<br>Module:<br>Population Growth | Feb 12<br>Problem Session         |
| Feb 15<br>Quiz #2<br>Last day to drop | Feb 16<br>Section 6.1 | Feb 18<br>Section 6.2                  | Feb 19<br>Section 6.3             |
| Feb 22<br>Problem Session             | Feb 23<br>Section 6.4 | Feb 25<br>Section 6.5                  | Feb 26<br>Section 6.5             |
| Mar 1<br>Problem Session              | Mar 2<br>Quiz #3      | Mar 4<br>Section 7.1                   | Mar 5<br>Section 7.2              |
| Mar 8<br>Section 7.3                  | Mar 9<br>Section 7.3  | Mar 11<br>Section 7.4                  | Mar 12<br>Module:<br>Radio Tuning |

Midterm Break

| Monday                | Tuesday                      | Thursday                         | Friday                    |
|-----------------------|------------------------------|----------------------------------|---------------------------|
| Mar 22                | Mar 23                       | Mar 25                           | Mar 26                    |
| Problem Session       | Quiz #4                      | Section 7.6                      | Section 7.6               |
| Mar 29<br>Section 7.7 | Mar 30<br>Module:<br>Finance | Apr 1<br>Problem Session         | Apr 2<br>Quiz #5          |
| Apr 5                 | Apr 6                        | Apr 8                            | Apr 9                     |
| Section 8.1           | Section 8.1                  | Section 8.2                      | Section 8.2               |
| Apr 12<br>Section 8.3 | Apr 13<br>Section 8.4        | Apr 15<br>Module:<br>Sherry Wine | Apr 16<br>Problem Session |
| Apr 19                | Apr 20                       | Apr 22                           | Apr 23                    |
| Quiz #6               | Section 8.5                  | Section 8.6                      | Section 8.7               |
| Apr 26                | Apr 27                       | Apr 29                           | Apr 30                    |
| Section 8.7           | Section 8.8                  | Section 8.8                      | Problem Session           |
| May 3<br>Quiz #7      | May 4<br>Housekeeping        |                                  |                           |

Final Examinations

## Homework Exercises

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

## Bedtime Readings

| Quiz   | Title |
|--------|-------|
| Q CLLD |       |

- 1 Memorabilia Mathematica
- 2 On the Seashore
- 3 Famous Non-Mathematicians
- 4 Mountains of  $\pi$
- 6 The "Witch" of Agnesi