|        |          | Calculus II   |  |
|--------|----------|---|--|
|        |          | Outline of Class Sessions                                       |  |
| Date   | Section  | Topics  | Comments                               |
|        |          | Introductions, Syllabus activity                                | Setting preferred e-address in Course  |
| Week 1 |          | Class activity to review derivatives                            | Management System                      |
| Day 1  |          | Summary list of Differentiation Formulas; Section 5.6 Exercises | Information re: Maple Adoption Program |
| Day 2  | 6.1      | Finding Antiderivatives   |  |
|        |          |   |  |
| Week 2 |          |   |  |
| Day 3  | 6.2      | Separation of Variables   |  |
| Day 4  |          |   |  |
| Day 5  | 6.3      | Logistic Growth   | Project 1 available (Sky Diving)       |
|        |          |   |  |
| Week 3 |          |   |  |
| Day 6  |          |   |  |
| Day 7  | 7.1      | Averaging Continuous Functions: The Definite Integral           |  |
| Day 8  | 7.2      | The Fundamental Theorem of Calculus                             | Project 1 DUE                          |
| _      |          |   |  |
| Week 4 |          |   |  |
| Day 9  |          |   | Project 2 available (Crater Lake)      |
| Day 10 | 8.1      | Moments and Centers of Mass                                     |  |
| Day 11 | More 8.1 |   |  |
|        |          |   |  |
| Week 5 |          |   |  |
| Day 12 |          | Review for Test   | Project 2 DUE                          |
| Day 13 |          |   | Test 1, includes Benchmark             |
| Week 6 |          | Go over Test  |  |
| Day 14 |          | Partial Fractions Selected problems from Web Work assignment    |  |
| Day 15 | 83       | Numerical approximations of integrals                           |  |
| Day 16 | 0.5      |   |  |
|        |          |   |  |
| Week 7 |          |   |  |
| Day 17 | 8.4      | Applying differentiation rules to integrals                     |  |

| Day 18                                |      | Review of Trigonometry  |                                   |
|---------------------------------------|------|---|-----------------------------------|
|                                       |      | Evaluating antiderivatives and definite integrals                 |                                   |
| Day 19                                |      | Lots of work on the board + small group work on Web Work problems |                                   |
|                                       |      |   |                                   |
| Week 8                                |      |   |                                   |
| Day 20                                |      | Review for Test   |                                   |
| Day 21                                |      |   | Test 2, includes Benchmark        |
|                                       |      |   | Project 3 available (Drug Dosage) |
| Day 22                                |      | Introduce Project 3: Drug Dosage                                  | Midterm                           |
|                                       |      |   |                                   |
| Week 9                                |      |   |                                   |
| Day 23                                |      |   |                                   |
| Day 24                                | 9.1  | Reliability Theory: How long do things last?                      |                                   |
| Day 25                                | 9.2  | Improper Integrals  |                                   |
| Week 10                               |      |   |                                   |
| Day 26                                |      | Discussion of Limits, formal notation and calculating limits      | Project 3 DUE                     |
| Day 27                                |      |   |                                   |
|                                       |      |   | Test 3 (no benchmark questions)   |
| Day 28                                |      |   | Last day to withdraw              |
|                                       |      |   | Spring Break: March 27 - April 6  |
| Wook 11                               | 10.1 | Sume and Limite   |                                   |
| Week II                               | 10.1 | Juins and Linnis  |                                   |
| Day 29                                | 10.2 | Approximation of Eurotional Taylor Debyoamiele                    |                                   |
| Day 30                                | 10.2 |   |                                   |
| Week 12                               |      |   |                                   |
| Day 31                                |      | Group work on Activities and Checkpoints of 10.1 and 10.2         |                                   |
|                                       | 10.3 | Taylor Series   |                                   |
| Day 32                                |      | Lecture and whole class discussion                                |                                   |
| · · · · · · · · · · · · · · · · · · · | 10.4 | More Taylor Polynomials and Series                                |                                   |
| Day 33                                |      | Lecture and whole class discussion                                |                                   |

| Week 13 |           |  |   |
|---------|-----------|--|---|
| Day 34  |           | Group work on Activities and Checkpoints of 10.3 and 10.4        |   |
|         |           | Lecture on themes of Chatper 10                                  | Short class because of Honors Convocation   |
| Day 35  | 10.3/10.4 | Sequences, Series, Taylor Polynomials                            | HWK assignment due on Friday                |
|         | 10 5      | Series of Constants lots of examples of series                   | Project 4 available (Drug Dosage Reprise)   |
| Dav 36  | 10.5      | Note that certain geometric series converge                      | Look for geometric series in this situation |
|         | 10.6      | Convergence of Series  |   |
| Week 14 |           | Build on the connections between Sections 10.5 and 10.6          | HWK assignment due on Friday                |
| Day 37  |           | What does any of this have to do with the Project?               | Benchmark Study Guide available             |
|         | 10.7      | Convergence to the Right Function                                |   |
| Day 38  |           | Lecture over this material to bring these topics together        |   |
| Day 39  |           | Review for the Benchmark lots of problems on the board           |   |
| Week 15 |           | Discussion of geometric series and the Project                   | Window of opportunity for Benchmark:        |
| Day 40  |           | Benchmark (in class)   | May 3 - 10                                  |
| Day 41  |           | Review for Exam: Samples of possible exam questions              | Project 4 DUE                               |
|         |           | Review for Exam:   |   |
| Day 42  |           | Student presentation of solutions to possible exam questions     |   |
|         |           | Review for Exam:   |   |
| Day 43  |           | More student solutions to possible exam questions                |   |
| Exam    |           | Scheduled date and time for final exam: Insert Date, Time, Place | Final Exam                                  |