# Math 182 Calculus II Fall 2002


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**Office Hours:** MTR 2-3pm, others by appointment
**Learning Center:** Wednesday, 2-3pm
**Text**: *Calculus, Early Transcendentals, Fourth Edition,* James Stewart
**Course Supervisor:** Richard Gillette

The course web page includes a copy of this syllabus, daily lecture worksheets, daily homework assignments, and other course information. I will also post corrections and other important news at this site:
*http://www.math.montana.edu/~hasenban/m182fa02/index.html*

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## FORMAT OF COURSE:

This course is taught in unison with several other sections, so it is important for us to keep on track with the syllabus. All sections will take a common exam, which will be based on the daily homework assignments. The homework assignments can be found online at the above web site.

Most of the lectures in this course are organized around a series of daily "Lecture Worksheets". These worksheets are designed to help you take notes efficiently and to serve as a reference for studying for exams and quizzes. *I will assume all students have a copy of the daily lecture worksheet for each class period.* I encourage you to organize these lecture guides in a three-ring binder for future reference.

## READ YOUR TEXT and DO THE HOMEWORK!

I cannot hope to cover every element of the text during class. Instead, I will try to discuss the most important and potentially troublesome topics. However, for a full understanding, you must read your text. For your benefit, I strongly recommend that you at least skim each lesson before class. Look at the examples and try to figure out the big picture. I guarantee it will make my lectures much more interesting and much more useful.

## QUIZZES, HOMEWORK, and EXAMS:

We will typically have one 10-point quiz in class each week, and I will also occasionally give out a one-week take-home quiz. We will discuss my expectations for the takehome quizzes as they are assigned. **I do not give quiz retakes nor accept late take-home quizzes.** However, I will drop your lowest two or three quiz scores (depending on how many quizzes I give). Also, you will be free to use your homework and class notes on most quizzes.

There will be two midterm exams and a cumulative final exam. These will be closed notes and closed book exams, and calculators will not be allowed. The two common-hour examinations are scheduled for 6:00-7:00 PM Tuesday, October 15th and Tuesday, November 19th at a location to be announced. The final examination is scheduled for Wednesday, December 18th, 2:00-3:50 P.M. at a location to be announced later. **Quizzes, assignments and tests missed due to unexcused absence cannot be made up,** as per university policy.

## GRADING:

| | |
|---|---|
| Midterm Exam 1: | 100 points |
| Midterm Exam 2: | 100 points |
| Quizzes: | 150 points |
| Final Exam: | 150 points |
| **Total:** | **500 points** |

| Total Score (%) | 0-49 | 50-56 | 57-59 | 60-63 | 64-71 | 72-75 | 76-78 | 79-84 | 85-87 | 88-89 | 90-100 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Letter Grade | F | D | D+ | C- | C | C+ | B- | B | B+ | A- | A |

## Math 182 Calculus II

| MONDAY | TUESDAY | THURSDAY | FRIDAY |
|---|---|---|---|
| **September 2**<br>Labor Day<br>No Classes | **3**<br>5.5 Introductions and Substitution Rule | **5**<br>5.5 More Substitution Rule | **6**<br>7.1 Integration by Parts |
| **9**<br>7.1 Integration by Parts | **10**<br>7.1 Integration by Parts | **12**<br>7.2 Trigonometric Integrals | **13**<br>7.2 Trigonometric Integrals |
| **16**<br>7.3 Trigonometric Substitution<br>(*Last day to Add*) | **17**<br>7.3 Trigonometric Substitution | **19**<br>7.3 Trigonometric Substitution | **20**<br>7.4 Integration by Partial Fractions |
| **23**<br>7.4 Integration by Partial Fractions<br>(*Last no-grade drops*) | **24**<br>7.5 Strategy for Integration | **26**<br>7.5 Strategy for Integration | **27**<br>7.6 Integration Using Tables and CAS |
| **30**<br>7.8 Improper Integrals | **October 1**<br>7.8 Improper Integrals | **3**<br>6.2 Volumes by Washers<br>6.3 Volumes by Shells | **4**<br>6.4 Work |
| **7**<br>6.4 Work<br>6.5 Average Value | **8**<br>8.1 Arc Length | **10**<br>8.2 Area of a Surface of Revolution | **11**<br>8.3-8.4 Applications to the Sciences |
| **14**<br>8.3-8.4 Applications<br>8.5 Probability | **15**<br>**EXAM I**<br>**6:00 - 7:00pm** | **17**<br>10.1 Parametric Curves | **18**<br>10.1 Parametric Curves |
| **21**<br>10.2 Tangents and Areas | **22**<br>10.3 Arc Length and Surface Area | **24**<br>10.4 Polar Coordinates | **25**<br>10.4 Polar Coordinates |
| **28**<br>10.5 Lengths and Areas in Polar Coordinates | **29**<br>10.5 Lengths and Areas in Polar Coordinates | **31**<br>10.6 Conic Sections | **November 1**<br>10.6 Conic Sections |
| **4**<br>10.7 Conic Sections in Polar Coordinates | **5**<br>Election Day<br>No Classes | **7**<br>10.7 Conic Sections in Polar Coordinates | **8**<br>11.1 Sequences |
| **11**<br>Veteran's Day<br>No Classes | **12**<br>11.1 Sequences | **14**<br>11.2 Series | **15**<br>11.3 The Integral Test and Estimates of Sums |
| **18**<br>11.3 The Integral Test and Estimates of Sums | **19**<br>**EXAM II**<br>(*Last day to Drop*) | **21**<br>11.4 Comparison Tests | **22**<br>11.4 Comparison Tests |
| **25**<br>11.4 The Comparison Tests | **26**<br>11.5 Alternating Series | **28**<br>Thanksgiving Holiday<br>No Classes | **29**<br>Thanksgiving Holiday<br>No Classes |
| **December 2**<br>11.6 Absolute Convergence and Ratio / Root Tests | **3**<br>11.6 Absolute Convergence<br>11.7 Strategy for Testing Series | **5**<br>11.8 Power Series | **6**<br>11.8 Power Series |
| **9**<br>11.10 Taylor and MacLauren Series | **10**<br>11.10 Taylor and MacLauren Series | **12**<br>Open | **13**<br>Open |

**FINAL EXAM** is Wednesday, December 18, 2:00 - 3:50pm