

Calculus, 6th Edition by James R. Stewart

- (1) Please check that students in your Calculus II classes are properly placed. Students who have not placed out of Calculus I must have a grade of “C” or better in MA 1713.
- (2) Attendance should be kept on a regular basis, and excessive absences should be reported to the Freshman Retention Program at <http://www.ssrc.msstate.edu/fresh/>, Also, please record absences along with final grades on Banner. You may wish to reward regular attendance with a small bonus on the final average.
- (3) Students are now required to buy access to Thomson/Brooks-Cole Enhanced WebAssign, and the use of on-line homework assignments is now a required component of both Ma 1713 and Ma 1723. Sample on-line assignments have been prepared that each instructor can modify for use in his/her sections. Many instructors give homework and quizzes together the same weight as one in-class test in students’ final average. Please see Patricia Shaw to set up your course.
- (4) Graphing calculators are no longer required in Calculus I and II. Most instructors feel that over dependence on graphing calculators undermines basic skills. A scientific calculator is sufficient. Instructors may wish to use on-line videos and applets to substitute for graphing calculators.

In the syllabus below, 1 hour equals 50 minutes.

Chapter

- 5.** The Definite Integral Sections 5.1–5.5 7 hours
Introduce area under a curve in section 5.1. Emphasis in section 5.2 should be on developing an intuitive understanding of the definite integral as a limit of Riemann sums rather than technicalities of manipulating such sums.
- 6.** Applications of the Definite Integral Sections 6.1, 6.2 and 6.5 4 hours
- 7.** Transcendental Functions Sections 7.1–7.4, 7.6 and 7.8 8 hours
Section 7.5 is omitted because of time constraints. In section 7.6, emphasize arcsin and arctan. Also discuss to a lesser extent arcsec, needed in section 8.3.
- 8.** Techniques of Integration Sections 8.1–8.4, 8.8 10 hours
Cover integration by parts in section 8.1 thoroughly. Computer algebra systems have made facility handling complicated integrals less important. Limit discussion of trig integrals in section 8.2 to basics: $\int \sin^n(t) \cos^m(t) dt$, $\int \tan^n(t) \sec^m(t) dt$, for n and m small. Similarly limit coverage of trigonometric substitution. Partial fraction decomposition remains important in theory and appears in problems in differential equations. But limit problems to basic forms.
- 9.** More Applications 4 hours
Do one of sections 9.1–9.3 or return to section 6.4 (work). Engineering has asked that we include section 9.5 on the syllabus.

The remaining nine hours, should be spent on tests and review and additional topics at the discretion of the instructor.