Calculus II *Calendar*
MA114 *Spring 2002*

Text *Calculus* third edition, by James Stewart, ISBN 0-534-21801-6.
Calendar The calendar below gives the dates of exams and other important dates for the course. The list of problems below provide a guide to students and instructors as to the material to be covered. The problems marked by *'s are particularly interesting.

Wed, 9 Jan	Review. §4.5 *Subsitution rule* §4.5 #39, 41, 43, 45, 47, 49, 51, 53, 55, 65.
Fri, 11 Jan	§6.1 *Inverse functions,* §6.1 #1, 3, 7–25, 28, 37, 38.
Mon, 14 Jan	§6.2 *Exponential functions and their derivatives* §6.2 #5–12, 17–20, 27–42, 43, 45, 49, 50, 56, 59, 67–76, 83, 84*, 85*.
Wed, 16 Jan	§6.3 *Logarithmic functions* §6.3 #1-20, 25, 27, 29, 35, 37, 49, 59, 61, 81, 82.
Fri, 18 Jan	§6.4 *Derivatives of logarithmic functions* #11-32, 55, 58, 67–77, 91–93, 95, 96.
Mon, 21 Jan	Martin Luther King, Jr. holiday
Wed, 23 Jan	§6.5 *Exponential growth and decay* §6.5 #1, 3, 5, 7, 9, 11, 17.
Fri, 25 Jan	§6.6 *Inverse trigonometric functions* #1, 3, 5, 7, 13, 15, 17, 20, 22, 27–29, 30–34, 65, 66, 79–90, 93*, 94*, 95*.
Mon, 28 Jan	§6.8 *Indeterminate forms and L'Hopital's rule* §6.8 #1, 3, 5, 7, 9, 11, 13, 19, 21, 23, 25, 27, 29, 31, 88, 89, 91, 93, 95, 96, 99.
Wed, 30 Jan	§6.8 Continued.
	Last day to drop
Fri, 1 Feb	*Review*
Mon, 4 Feb	*Review*
Tue, 5 Feb	*First exam,* 7:30pm-9:30pm, room TBA
Wed, 6 Feb	§7.1 *Integration by parts,* §7.1 #1, 3, 5, 7, 9, 11, 13, 19, 21, 33, 37, 38*, 39*, 40*, 41, 42, 57, 62.
Fri, 8 Feb	§7.2 *Trigonometric integrals,* §7.2 #1–44, 48, 51, 52.
Mon, 11 Feb	§7.3 *Trigonometric substition,* #1–28, 31, 35, 38*
Wed, 13 Feb	§7.4 *Integration of rational functions by partial fractions,* §7.4 #1–16, 17–54, 58–61.
Fri, 15 Feb	§7.5 *Rationalizing substitutions,* §7.5 #1, 3, 5, 7, 9, 11, 18, 31*, 32*.
Mon, 18 Feb	§7.6 *Strategy for integration,* #1–80.
Wed, 20 Feb	§7.8 *Approximate integration,* §7.8 #1, 3, 5, 9, 11, 17, 19, 21, 27.
Fri, 22 Feb	§7.9 *Improper integrals,* §7.9 # 1–25, 43, 45, 49, 51, 60*, 63, 81, 83.
Mon, 25 Feb	§8.1 *Differential equations,* §8.1 #1, 3, 5, 11, 13, 15, 17, 29, 30, 31, 32.
Wed, 27 Feb	§8.2 *Arc length,* 1, 3, 5, 6, 7, 29, 30, 31.
Fri, 1 Mar	*Review*
Mon, 4 Mar	*Review*
Tue, 5 Mar	*Second exam,* 7:30pm-9:30pm, room TBA

Wed, 6 Mar	§10.1 *Sequences,* §10.1 #1–11, 13–40, 47, 48, 51, 53, 55, 60*, 61*, 62*, 70*.
Fri, 8 Mar	§10.2 *Series,* §10.2 #1–34, 37, 39, 41, 43, 45, 47, 53, 55, 54, 57*.
	Last day to withdraw
11–15 Mar	Spring break. Study hard!
Mon, 18 Mar	§10.3 *Integral test,* §10.3 #1–17, 19, 23, 25, 29.
Wed, 20 Mar	§10.4 *Comparison tests,* §10.4 #1, 3, 5, 7, 9, 11, 33, 35, 37, 39, 42*, 43*.
Fri, 22 Mar	§10.5 *Alternating series,* §10.5 #1, 3, 5, 7, 9, 11, 17, 19, 21, 23, 33, 41, 43, 53, 55, 61, 65, 66
Mon, 25 Mar	§10.6 *Absolute convergence and the ratio test,* §10.6 #1, 3, 5, 7, 9, 11, 13, 27, 29, 33, 35.
Wed, 27 Mar	§10.8 *Power series,* §10.8 #1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 29*, 33.
Fri, 29 Mar	§10.9 *Representation of functions as power series,* §10.9 1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25, 27, 30*, 31*, 35*, 36*.
Sun, 31 Mar	Sir Isaac Newton died, 31 March 1727
Mon, 1 Apr	§10.10 *Taylor and MacLaurin series,* §10.10 #1, 3, 7, 9, 11, 17, 19, 21, 25, 26, 29, 31, 32, 33, 34, 37, 38, 45, 47, 49.
Wed, 3 Apr	§10.12 *Applications of Taylor polynomials,* §10.12 #1, 3, 5, 9, 13, 18, 21, 23, 25, 26, 31*, 35*, 36.
Fri, 5 Apr	*Review*
Mon, 8 Apr	*Review*
Tue, 9 Apr	*Third exam,* 7:30pm-9:30pm, room TBA
Wed, 10 Apr	§9.1 *Curves defined by parametric equations,* §9.1 #1, 3, 5, 7, 9, 17, 19, 23, 25, 27, 28, 31*, 33*, 34*.
Fri, 12 Apr	§9.2 *Tangents and areas,* #1, 3, 5, 15, 17, 23, 37*, 38*.
Mon, 15 Apr	§9.3 *Arc length,* #1, 3, 5, 7, 9, 13, 15, 16*.
Wed, 17 Apr	§9.4 *Polar coordinates,* §9.4 #1, 3, 5, 7, 9, 11, 13, 37, 39, 41, 51, 53, 78*.
Fri, 19 Apr	§9.5 *Areas in polar coordinates,* #1, 3, 7, 15, 17, 19, 21, 23.
Mon, 22 Apr	*Review.*
Wed, 24 Apr	*Review.*
Fri, 26 Apr	*Review.*
Mon, 29 Apr	*Final exam*, 8:30–10:30pm, room TBA