

Fall 2010. Ma116 (Calculus II).

Textbook: J.Stewart. Concepts and Contexts. 4th edition.

Week 1	Monday lecture	Wednesday lecture	Friday lecture
8/30-9/5	Limits. L'Hospital rule.	Sequences. Sec. 8.1	Sequences. Sec. 8.1

Hw1 due on Thursday 9/9:

Appendix A # 2, 8, 12, 18, 28, 29, 42.

Sec. 8.1 # 4, 8, 18, 28, 32, 54(bonus)

Additional problems (recommended but not graded):

Sec. 8.1 # 9, 10, 12, 13, 15, 17, 20, 21, 22, 23, 24, 26, 29, 30, 32, 34, 46, 47, 48, 50, 52, 53, 55, 56, 57, 58, 59, 60.

Week 2	Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
9/6-9/11	Labor day	Series. Sec. 8.2	Sec. 8.2 # 9, 10, 11, 17, 19, 27, 29, 35, 37, 41	Convergence tests. Sec. 8.3

Hw2 due on Thursday 9/16:

Sec. 8.2 # 10, 14, 18, 20, 28, 34, 36, 39, 42.

Sec. 8.3 # 8, 10, 12, 18, 36, 42(bonus).

Additional problems (recommended but not graded):

Sec. 8.2 # 22, 24, 26, 30, 44, 47, 48, 49, 53, 54, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68.

Sec. 8.3 # 3, 4, 5, 6, 7, 9, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 34, 35, 39, 41, 43, 44, 45, 46.

Week 3	Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
9/12-9/18	Convergence tests. Sec. 8.4	Power series. Sec. 8.5	Sec. 8.4 # 2, 5, 15, 23, 31 Sec. 8.5 # 7, 9, 11, 17, 19	Representation of functions. Sec. 8.6

Hw3 due on Thursday 9/23:

Sec. 8.4 # 6, 16, 24, 30, 32, 33, 36, 37.

Sec. 8.5 # 8, 10, 12, 14, 18, 24(bonus).

Additional problems (recommended but not graded):

Sec. 8.4 # 3, 4, 7, 8, 9, 10, 13, 14, 19, 20, 21, 22, 25, 26, 27, 28, 29, 34, 35, 38, 39, 40, 41, 42.

Sec. 8.5 # 3, 4, 5, 6, 13, 15, 16, 20, 21, 22, 23, 25, 26, 27, 29, 35, 36.

Week 4	Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
9/19-9/25	Taylor series. Sec. 8.7	Taylor series. Sec. 8.7-8.8	Sec. 8.6 # 5, 15, 27. Sec. 8.7 # 1, 5, 11, 21, 29, 43, 51. Sec. 8.8 # 11a-b, 23	Taylor series Sec. 8.8

Hw4 due on Thursday 9/30:

Sec. 8.6 # 6, 16, 28, 38(bonus).

Sec. 8.7 # .2, 6, 12, 22, 26, 30, 38, 44, 50, 54, 60

Sec. 8.8 # .12a-b, 24, 28(bonus)

Additional problems (recommended but not graded):

Sec. 8.6 # 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 17, 18, 19, 20, 21, 22, 32, 33, 37.

Sec. 8.7 # .7, 8, 9, 10, 13, 14, 15, 16, 17, 18, 23, 24, 25, 27, 28, 31, 32, 33, 34, 35, 36, 37, 45, 46, 47, 49, 52, 53, 55, 56, 59, 61, 62, 63, 64, 65, 66, 68, 69.

Sec. 8.8 # 3, 4, 5, 6, 7, 8, 13-18, 25, 27, 28, 30, 32.

Week 5	Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
9/27-10/03	Taylor series.	Taylor series	Chapter 8. Review problems	Limits with Taylor series.

No Homework assignment due Thursday 10/07.

Week 6. October 4 – 9, 2010

Week 6	Monday lecture	Tuesday	Wednesday lecture	Thursday recitation	Friday lecture
10/04-10/09	Series - review.	Quiz 1 at 2pm	9.1-9.3 Dot (scalar) product	Sections 9.2-9.3	9.4 Cross (vector) product.

Hw 5 due on Thursday 10/14:

Sec. 9.2 # 18, 20, 22.

Sec. 9.3 # .2, 8, 10, 18, 22, 24, 30, 45(bonus).

Sec 9.4 # 2, 8, 18, 20, 28, 30, 32, 36 (bonus), 42(bonus)

Additional problems (recommended but not graded):

Sec. 9.2 # 21, 32, 38, 40.

Sec. 9.3 # .36, 39, 40, 41, 43, 48, 49, 50, 51, 52.

Sec. 9.4 # 33, 34, 35, 37, 38, 39, 40, 41.

Week 7. October 12 – 16, 2010

Week 7	Monday (Tuesday) lecture	Wednesday lecture	Thursday recitation	Friday lecture
10/12-10/16	9.5	9.5	Sections 9.4, 9.5	9.6, 9.7

Hw 6 due on Thursday 10/21:

9.5 # 12, 18, 24, 28, 38, 44, 54.

9.6 # 2, 18, 20, 22, 28(bonus)

9.7 # 4, 6, 8, 10, 22, 26.

Week 8. October 18 – 24, 2010

Week 8	Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
10/18-10/24	9.6, 9.7 – Quadric surfaces, cylindrical and spherical coordinates	10.1, 10.2 - curves	Sections 9.7, 10.1, 10.2	10.4 – motion

Hw 7 due on Thursday 10/28:

10.1 # 2, 4, 14, 26, 38, 44

10.2 # 4, 12, 18, 24, 26, 32, 36, 40, 50(bonus), 52

10.4 # 10, 14, 18, 24, 38

Week 9. October 25 – 30, 2010

Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
10.5 – parametric surfaces	11.1, 11.3 partial derivatives	Sections 10.4, 10.5	11.4 tangent planes

Hw 8 due on Thursday 11/04 (recommended fulfillment: before Quiz 2 on 11/2):

10.5 # 2, 13-18, 20, 22, 26, 34a (bonus)

Week 10. November 1 – 6, 2010

Monday lecture	Tuesday	Wednesday lecture	Thursday recitation	Friday lecture
Review	Quiz 2 9.1-9.7, 10.1, 10.2, 10.4, 10.5	11.4 Approximations	Sections 11.1, 11.3, 11.4	11.5 Chain rule

Hw 9 due on Thursday 11/11

11.1 # 6, 12, 14, 22, 42

11.3 # 2, 9, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 40

11.4 2, 16, 24, 32, 42, 46, 48(bonus)

Week 11. November 8 – 13, 2010

Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
11.4, 11.5	11.6 Directional derivative.	Sections 11.5, 11.6	11.7 Max&Min

WebAssign due Monday 11/15 8pm.

Hw 10 due on Thursday 11/18:

11.5 # 22, 30, 32, 46

11.6 # 8, 12, 20, 22, 40, 42, 52(bonus)

11.7 # 4, 6, 8, 10, 28.

Week 12. November 15 – 20, 2010

Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
11.8 Lagrange multipliers	12.1, 12.2 Double integrals.	Sections 11.7, 11.8, 12.2	12.3 General regions

WebAssign due Monday 11/22 8pm.

No Hw due Thursday 11/25

Week 13. November 22 – 27, 2010

Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
12.3 General regions	Holiday.	Holiday	Holiday

WebAssign due Monday 11/29 8pm.

Hw 11 due on Thursday 12/2 (recommended fulfillment: before Quiz 3 on 11/30)

11.8 # 4, 6, 8, 12, 14, 16, 24(bonus), 46(bonus)

12.1 # 12, 18.

12.2 # 4, 6, 8, 12, 14, 16, 18, 20, 22, 26, 28, 30, 36, 38.

Week 14. November 29 – December 4, 2010

Monday lecture	Tuesday 11/30	Wednesday lecture	Thursday recitation	Friday lecture
Review	Quiz 3: Ch. 11, 12.1-12.2	12.4.	12.3, 12.4	12.5

WebAssign due Monday 12/6 8pm.

Hw 12 due on Thursday 12/9

12.3 # 2, 4, 6, 8, 14, 16, 18, 20, 24, 26

12.4 # 2, 4, 8, 10, 16, 18, 28, 30

12.5 # 2, 4, 16, 24.

Week 15. December 6 – December 10, 2010

Monday lecture	Wednesday lecture	Thursday recitation	Friday lecture
Review	Review	12.5	Review

December 20, 8am-12pm - Final exam

Ma116A – B118

Ma116B – K228