

Math 105-201 Tentative Schedule, January - April 2015

This outline is tentative. As this is a multi-section course, the precise time allocated to each topic can only be approximated. Additional changes may also need to be made based on the needs of this section.

Please refer to the Learning Goals on the common webpage at <http://www.math.ubc.ca/~kliu/common105.html> to see a detailed description of material for which you are responsible.

Week	Dates	Topics
1	Jan 5, 7, 9	Planes and surfaces (12.1), Graphs and level curves (12.2)
2	Jan 12, 14 ^{Q1} , 16	Partial derivatives (12.4), Maximum/minimum problems (12.8)
3	Jan 19 ^{D1,W} , 21 ^{Q2} , 23	Maximum/minimum problems (12.8), Lagrange multipliers (12.9)
4	Jan 26 ^{H1} , 28 ^{Q3} , 29 ^{M1} , 30	Approximating areas under curves (5.1), Definite integrals (5.2)
5	Feb 2, 4 ^{Q4} , 6	Fundamental theorem of calculus (5.3), Substitution rule (5.5), Integration by parts (7.2)
6	Feb [9], 11 ^{Q5} , 13	Trigonometric Integrals (7.3), Trigonometric substitutions (7.4)
7	Feb [16], [18], [20]	Reading Week - No class!
8	Feb 23, 25 ^{Q6} , 27	Partial fractions (7.5), Numerical integration (7.7), Improper integrals (7.8)
9	Mar 2 ^{H2} , 4 ^{Q7} , 6	Introduction to differential equations (7.9), Random Variables and Probability Basics (1.1, 1.2 and 1.4 in Probability Appendix)
10	Mar 9 ^{D2} , 11 ^{Q8} , 13	Continuous random variable (2.1 and 2.2 in Probability Appendix), Expected Value, Variance, and Standard Deviation (2.5 and 2.6 in Probability Appendix)
11	Mar 16 ^{H3} , 18 ^{M2,Q9} , 20	Sequences (8.1-8.2), Infinite series (8.3), The divergence and integral tests (8.4)
12	Mar 23, 25 ^{Q10} , 27	The ratio, root and comparison tests (8.5), Approximating functions with polynomials (9.1), Properties of power series (9.2)
13	Mar 30, Apr 1 ^{Q11} , [3]	Taylor series (9.3), Working with Taylor series (9.4)
14	Apr [6], 8 ^{H4,Q12} , 10	Working with Taylor series (9.4), Review

Legend: Q = quiz, D = demonstration, H = homework, M = midterm (at 18:30), W = deadline to withdraw without "W" standing. [*] indicates no class on date *. WebWork will be done online and will be due throughout the term.