Tentative Schedule for MATH 131B:

Monday (Lecture)	Tuesday (Section)	Wednesday (Lecture)	Friday (Lecture)
Sep 19th	20th	21st	23rd **1** Metric spaces Section 1.1
26th **2** Point-set topology of metric spaces Section 1.2	27th **3** First section meets Homework 1 available on ccle	28th **4** Relative topology, Cauchy sequences and completeness Sections 1.3 and 1.4	30th **5** Compact metric spaces Section 1.5
Oct 3rd **6** Compact metric spaces (continued) Section 1.5	4th **7** Homework 1 due (in section) Homework 2 available on ccle	5th **8** Continuous functions on metric spaces & product spaces Sections 2.1 and 2.2	7th **9** Continuity and compactness Section 2.3
10th **10** Connectedness Section 2.4	11th **11** Homework 2 due (in section) Homework 3 available on ccle	12th **12** Sequences of functions: Pointwise and uniform convergence Sections 3.1 and 3.2	14th **13** Uniform convergence and continuity Sections 3.2 and 3.3
17th **14** The metric of uniform convergence and series of functions Sections 3.4 and 3.5	18th **15** Homework 3 due (in section) Homework 4 available on ccle	19th **16** Uniform convergence and integration Section 3.6	21st **17** Uniform convergence and differentiation Section 3.7
24th **18** Uniform approximation by polynomials Section 3.8	25th **19** Homework 4 due (in section)	26th **20** Power series Section 4.1	28th **Midterm**
31st **21** Real analytic functions Section 4.2	Nov 1st **22** Homework 5 available on ccle	2nd **23** Abel's theorem & multiplication of power series Section 4.3 & 4.4	4th **24** Exponential and logarithm functions Section 4.6 (and supplement)
7th **25** Trigonometric functions Section 4.7 (and supplement)	8th **26** Homework 5 due (in section) Homework 6 available on ccle	9th **27** Periodic functions Section 5.1	11th Veteran's Day, No class

Monday (Lecture)	Tuesday (Section)	Wednesday (Lecture)	Friday (Lecture)
14th **28** Inner products on periodic functions Section 5.2	15th **29** Homework 6 due Homework 7 available on ccle	16th **30** Trigonometric polynomials Section 5.3	18th **31** Periodic convolution Section 5.4
21st **32** Fourier and Plancherel theorems Section 5.5	22nd **33** Homework 6 due Homework 7 available on ccle	23rd **34** Differentiability in several variables Sectiona 6.2 & 6.3 (and supplement)	25th Thanksgiving Holiday, No class
28th **35**	29th **36** Chain rule Section 6.4 (and supplement)	30th **37** Clairaut's theorem Section 6.5 (and supplement)	Dec 2nd **38** Leeway, review Section ∞