Middlebury College

Math 122B, Calculus II
Spring 2018
Prof. George Melvin

(Tentative) Timetable

	Monday	Tuesday	Wednesday	Thursday	Friday
2/12–2/16	introduction, Kock snowflake		the natural numbers, "n tends to infinity"	sequences: limits & convergence	evaluation of limits, limit laws
2/19 – 2/23	Squeeze Theorem, Monotonic+Bounded Theorem		series: partial sums, limits, properties	Geometric Series Theorem	**!! NO CLASS !!**
2/26 – 3/2	telescoping series, test for divergence		Harmonic Series, Direct Comparison Test	Limit Comparison Test	Alternating Series Test, absolute & conditional convergence
3/5 – 3/9	Ratio Test		Root test	in-class review session !! Exam I !!	Mathematical Induction **PFDD**
3/12 – 3/16	An exp-traordinary function I		An exp-traordinary function II	inverse functions	the natural logarithm **DD**
3/19 – 3/23	inverse trigonometric functions		power series	convergence of power series	power series representations of functions
4/2 – 4/6	Taylor series I		Taylor series II	examples	approximations of real numbers
4/9 – 4/13	integration by parts		integration by substitution I	in-class review session !! Exam II !!	trigonometric integrals
4/16 – 4/20	inverse trigonometric substitution I		inverse trigonometric substitution II	partial fractions I	Spring Symp. **!! NO CLASS !!**
4/23 – 4/27	partial fractions II		partial fractions III	definite integration, arc length	surface area of surfaces of revolution
4/30 – 5/4	improper integrals		Improper Integral Comparison Tests	differential equations, growth & decay equations	separable equations
5/7 – 5/11	linear first-order equations		Euler's method **NE**	examples **NE**	polar coordinates/complex numbers(?) **NE**
5/14	review				

Notes:

1. Topics may not be covered precisely as timetabled.
2. This schedule is subject to change.
3. PFDD = Pass/Fail/D Deadline, DD = Drop Deadline, NE = non-examinable