Autumn

L1 Definition of functions - inputs/outputs , inequalities, inverses
L2 What is a limit? - Introduction / Limits from graphs / limits from table of values
L3 Polynomial functions - factoring / zeroes / basic graphing / inequalities
L4 Rational functions - Combining fractions / simplifying / basic graphing / asymptotes / inequalities
L5 Limit Laws
L6 Limit Laws + Squeeze Theorem
L7 (In)determinate forms
L8 Limits to detect asymptotes - Vertical Asymptotes
L9 Limits to detect asymptotes - Horizontal/Slant Asymptotes
L10 Continuity + IVT - Include Cont. of piecewise functions
L11 Review - Midterm 1
L12 Application of Limits - Velocity / slopes
L13 Definition of Derivative - through slopes
L14 Derivatives as functions
L15 Rules of Differentiation - Power Rule / Sum Rule / Const multiple Rule
L16 Product Rule + Quotient Rule
L17 Chain Rule
L18 Review - Midterm 2
L19 Exponential / Logarithmic functions
L20 Rules of Differentiation - e^x / ln(x)
L21 Higher order derivatives + graphs
L22 Trig functions + Identities
L23 Rules of Differentiation - Trig functions
L24 Maximums + Minimums
L25 Review - Midterm 3
L26 Mean Value Theorem - Allows good algebraic/interpretation questions
L27 Optimization (no trig)
L28 Optimization (with trig)
L29 Review

Spring

L1 Limits
L2 Derivatives
L3 Linear Approximation
L4 Graphing functions
L5 Graphing functions
L6 Implicit Differentiation
L7 Logarithmic differentiation
L8 Review - Midterm 1
L9 Inverse trig functions
L10 Rules of Differentiation - Inverse trig functions / Inverse functions
L11 Related Rates (no trig)
L12 Related Rates (trig)
L13 L'Hopital's Rule - 0/0 and \infty/\infty forms
L14 L'Hopital's Rule - other forms
L15 Anti-derivatives + Basic Diff Eqns
L16 Review - Midterm 2
L17 Approx Area under curves
L18 Definite Integral - Define + approximate with small number of subintervals
L19 Definite Integral - Sigma notation + approximate with large number of subintervals
L20 Definite integral - setup and take limit as n \to \infty
L21 First Fundamental Theorem of Calculus
L22 Second Fundamental Theorem of Calculus
L23 Applications of Integrals
L24 Review- Midterm 3
L25 Substitution
L26 Substitution
L27 Review
L28 Review