

Mathematic Curriculum Map Overview

Module	Topic	Skills	Approximate Weeks of Study
1	Limits	Graphical Limits, Left and Righthand Limits, Algebraic Limits, Limits of Infinity	2 Weeks (End PC)
1	Derivative - Defined and Rules	Tangent Lines, Slope of Secant vs Instantaneous, Def of Derivative with Limits, Derivative Rules - Power, Producr, Quotient, Trig, Chain Rule.	6 Weeks (End PC)
1	Derivative Rev/Cont, Functions and Graphs	Implicit Differentiation, Continuity and Differentiability, IVT	4 Weeks
2	Graphing with the Derivative	Extreme Value Theorem, Rolle's Theorem, Mean Value Theorem, Function Analysis, Local Linear Approximations, Derivative Tests	4 Weeks
2	Applications of Derivative	Related Rates, Motion, Optimazation, Econ Optimazation	5 Weeks
3	Methods and Theorems of Integration	Indefinite Integral, Integral u-sub, Area Under Curve, LMRT -Reimann Sums, Definite Integral, Mean Value Theorem for Integrals, Fundamental Theorem of Calculus. Average Value of Function	6 Weeks
4	Applications of Integration	Use FTC to Find "Impossible" Values, Area and Volumes, Accumulation of Real World Apps.	4 Weeks
5	Inverse Functions	Review Logs and Exponentials, Derivatives and Integrals of Logs and Exponentials, Derivative of Inverse Functions. Derivative and Integral of Inverse Trig Functions	3 Weeks
5	Differential Equations	Solve Differential Equations by Separation of Variables, Slope Fields	2 Weeks
	AP Exam Review	Practice Exams, Mock Exam Week before.	4 Weeks