**AP Calculus AB – 18 Week Plan – Fall 2021**

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| **August** | | | | |
| **3 – 14 COVID Delay – Work on Prerequisite Packet and Notes** | | | | |
| **2 Prerequisite Review: Piecewise, Transformations, and Domain** | **3 Prerequisite Review: e, ln, and Solving trig equations** | **4 Prerequisite Review: Inequalities and Absolute Value** | **5 Review** | **6 Test 1 – Pre-Calculus**  **Summer Packet Due** |
| **9 Limits from a graph and Graphs from a Limit** | **10 Algebraic Limits and Limit Laws** | **11 More practice on Algebraic Limits and Limit Laws** | **12 Continuity and Intermediate Value Theorem** | **13 One sided Limits** |
| **16 Limits Involving Infinity** | **17 Review** | **18 Test 2 – Limits** | **19 The Average Rate of Change and the Derivative at a Point** | **20 The Definition of the Derivative** |
| **23 Interpreting the Derivative** | **24 Curve Sketching f to f’** | **Curve Sketching f from f’** | **26 Review** | **27 Test 3 – The Meaning of the Derivative** |
| **September** | | | | |
| **30 Power Rule** | **31 Product and Quotient Rules** | **1 Particle Motion** | **2 Trig Rules and Chain Rule** | **3 Trig Rules and Chain Rule** |
| **6 No School** | **7 Derivatives of Logs and Exponentials** | **8 Derivative Inverse** | **9 Implicit and Logarithmic Differentiation** | **10 Implicit and Logarithmic Differentiation** |
| **13 L’Hopitals Rule and Review** | **14 Test 4 – Derivative Rules** | **15 Linear Approximation** | **16 Related Rates** | **17 Related Rates** |
| **20 Related Rates** | **21 Extreme Theorem and max/min values and Mean Value Theorem** | **22 Optimization** | **23 Optimization** | **24 More on Curve Sketching** |
| **Fall Break Sept 27 – October 1** | | | | |
| **October** | | | | |
| **4 Graph Sketching and Asymptotes** | **5 Review** | **6 Test 5 – Derivative Applications** | **7 Midterm Review** | **8 Midterm** |
| **11 Antiderivatives** | **12 Area – Distance – Riemann Sums** | **13 Area – Distance – Riemann Sums** | **14 Riemann Sum to an Integral** | **15 Definite Integrals** |
| **18 Fundamental Theorem of Calculus Part 2** | **19 Fundamental Theorem of Calculus Part 1** | **20 Net/Total Change** | **21 Review Unit 6 Test** | **22 Test 6 – The Meaning of Integration** |
| **25 U Substitution** | **26 U Substitution** | **27 Integration of inverse trig and exponentials** | **28 Integration of inverse trig and exponentials** | **29 Trig Integrals** |
| **November** | | | | |
| **1 Trig Integrals** | **2 No School** | **3 Integration by parts** | **4 Integration by parts** | **5 Partial Fraction Decomposition Integration** |
| **8 Partial Fraction Decomposition Integration** | **9 Review Integration Rules** | **10 Test 7 – Integration Rules** | **11 Area Between Curves** | **12 Area Between Curves** |
| **15 Play Doh Lab and Average Value Theorem** | **16 Volumes of Cross Sections** | **17 Volumes of Cross Sections** | **18 Disk/Washer Method of Volume** | **19 Disk/Washer Method of Volume** |
| **Thanksgiving Break Nov. 22 - 26** | | | | |
| **December** | | | | |
| **29 Slope Fields and Separable Differential Equations** | **30 Slope Fields and Separable Differential Equations** | **1 Exponential Growth and Decay** | **2 Exponential Growth and Decay** | **3 Review** |
| **6 Review** | **7 Test 8 – Applications of Integration** | **8 Final Exam Review** | **9 Final Exam Review** | **10 Final Exam Review** |
| **13 Final Exam Review** | **14 Final Exam Review** | **15 Final Exam Review** | **16 Early Release - Final Exams** | **17 Early Release – Final Exams** |