

AUGUST 2016

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|---|--|--|---|---|
| | | | 4 Rules, Syllabus, Books and Introductions Summer Assignment | 5 Review 18 functions: domain, range, asymptotes, continuity, end behavior written as limits; Limit Existence Theorem; Limits - graphically |
| 8 Limits – graphically, one-sided limits, two-sided limits,; limits that don't exist HW – Graphical approach to limits worksheet | 9 Limits – algebraically Polynomials, radicals, rationals, trigonometric, piecewise, exponential, logarithmic; limits that don't exist; properties of limits; sandwich theorem HW - | 10 Continue finding limits algebraically using tables | 11 Definition of continuity – building a bridge; discontinuities; using limits to find asymptotes of functions; Continue finding limits algebraically | 12 QUIZ – limits graphically and algebraically Continue finding limits algebraically; |
| 15 Continue finding limits algebraically Using limits to find asymptotes, inc/dec of functions | 16 Continue finding limits of more complicated functions algebraically Sandwich theorem | 17 Review for test | 18 TEST 1 – Limits and continuity | 19 Rates of change, tangent lines; Definition of the derivative |
| 22 Using the definition of the derivative worksheet. HW – finish worksheet | 23 Techniques of differentiation: power, sum, product, quotient rules. Equations of the tangent and normal worksheet. HW – finish worksheet | 24 Techniques of differentiation: power, sum, product, quotient rules. Equations of the tangent and normal worksheet. HW – finish worksheet | 25 Equations of tangent lines, normal lines and horizontal lines; non-differentiability HW – study for quiz | 26 QUIZ – finding derivatives using the definition as well as the rules Finding derivatives using tables worksheet. HW – finish worksheet |
| 29 Determining differentiability of functions. HW – AP type Multiple choice problems Problem Book p. 42 and 45 | 30 Functions that are not differentiable; local linearity; horizontal and vertical tangents HW – Review of derivatives | 31 Review | | |

SEPTEMBER 2016

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|---|---|--|--|--|
| | | | 1 TEST 2 - Derivatives | 2 EARLY RELEASE 1,2,3,5 PLD |
| 5 LABOR DAY holiday | 6 Finding horizontal tangents: graphically & algebraically; increase/decrease of functions worksheet; limits review HW – finish worksheet | 7 LA Essay Review derivative tables; Using derivatives to sketch functions: inc/dec and min/max HW: finish worksheet | 8 Using derivatives to sketch functions: continue working with inc/dec and min/max; horizontal tangents and non-differentiability | 9 Using derivatives to sketch functions: second derivatives and concavity HW: finish worksheet |
| 12 Curve sketching and particle motion graphs HW – finish worksheet | 13 Particle motion functions and graphs | 14 Review of function sketching, particle motion HW – review sheet | 15 Review of limits, continuity, differentiability for benchmark 1 | 16 MATH BENCHMARK 1 |
| 19 Determining position, velocity and speed using first and second derivatives. Comparing function analysis to particle motion problems. HW – finish worksheet | 20 Finding distance and displacement using derivatives. HW – finish worksheet | 21 Instantaneous rate of change, motion along a line, speed, acceleration, free-fall constants HW – study for quiz | 22 QUIZ Intermediate Value Theorem and Extreme Value Theorem HW – finish worksheet | 23 EARLY RELEASE 7,6,4,5 HOMECOMING Intermediate Value Theorem, Extreme Value Theorem, Mean Value Theorem for Derivatives worksheet HW – finish worksheet |
| 26 AP type FRQs covering function analysis and particle motion HW – finish FRQs | 27 AP type FRQs covering function analysis and particle motion HW – review sheet | 28 SS Essay Review of function analysis and particle motion, derivatives from tables, IVT, EVT | 29 TEST – Function Analysis/Particle Motion | 30 Derivatives of transcendental functions |

OCTOBER 2016

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|----------------------|---------|---------------------------------|---------------------------------------|---|
| 3 | 4 | 5 Sci Essay | 6 | 7 STUDENT HOLIDAY PLD |
| 10 HOLIDAY | 11 | 12 | 13 EARLY RELEASE 1,2,3,5 | 14 EARLY RELEASE 7,6,4,5 |
| 17 | 18 | 19 PSAT/COLLEGE & | 20 TEST – Exp/Logs/Abs | 21 |

| | | | | |
|----|----|--------------------|--|----|
| | | CAREER FAIR | Val/Inverse ; EVT, MVT, Derivatives and Limits, L'Hospital | |
| 24 | 25 | 26 ESSAY – MATH | 27 | 28 |
| 31 | | | | |

NOVEMBER 2016

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|-----------------------------|---------|------------------------|---|--------|
| | 1 | 2 | 3 MATH BENCHMARK 2 | 4 |
| 7 | 8 | 9 ESSAY – ELECTIVES | 10 TEST – Trig limits and derivatives | 11 |
| 14 | 15 | 16 | 17 | 18 |
| 21 THANKSGIVING BREAK | 22 | 23 | 24 | 25 |
| 28 | 29 | 30 | | |

DECEMBER 2016

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--------|--|--|--|--|
| | | | 1 | 2 |
| 5 | 6 TEST – Optimization, Related Rates | 7 | 8 | 9 |
| 12 | 13 7 TH EXAM | 14 1 ST , 2 ND EXAM | 15 3 RD , 4 TH EXAM | 16 5 TH , 6 TH EXAM |

END OF FIRST SEMESTER

JANUARY 2017

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|-------------------|----------|-----------------------|----------|--|
| | 3 PLD | 4 – First day back | 5 | 6 |
| 9 | 10 | 11 | 12 | 13 |
| 16 MLK Holiday | 17 | 18 | 19 | 20 TEST – Indefinite Integrals, Sums |
| 23 | 24 | 25 ESSAY – ENGLISH | 26 | 27 |
| 30 | 31 | | | |

FEBRUARY 2017

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--------|---------|-----------|----------|--------|
|--------|---------|-----------|----------|--------|

| | | | | |
|------------------------|--|-----------------------------|-----------|-----------|
| | | 1 ESSAY – SOCIAL STUDIES | 2 | 3 |
| 6 | 7 TEST – Definite Integrals, Area, Accumulation | 8 | 9 | 10 |
| 13 MATH BENCHMARK 2 | 14 | 15 | 16 | 17 |
| 20 WINTER BREAK | 21 | 22 | 23 PLD | 24 PLD |
| 27 | 28 | | | |

MARCH 2017

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|------------------------------|--------------------|---|---|--------------------------------|
| | | 1 ESSAY – SCIENCE | 2 | 3 |
| 6 | 7 TEST - Volume | 8 | 9 | 10 |
| 13 STUDENT HOLIDAY PLD | 14 | 15 | 16 EARLY RELEASE 1,2,3,5 | 17 EARLY RELEASE 7,6,4,5 |
| 20 | 21 | 22 ESSAY – MATH | 23 | 24 |
| 27 | 28 | 29 TEST – Part 1: MVT, Average Value, DEQs, Slope Fields, Exponential Growth/Decay | 30 TEST – Part 2: MVT, Average Value, DEQs, Slope Fields | 31 |

APRIL 2017

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|-------------------|------------------------|-------------------------|---------------------------------------|---|
| 3 SPRING BREAK | 4 | 5 | 6 | 7 |
| 10 | 11 | 12 | 13 | 14 |
| 17 | 18 MATH BENCHMARK 2 | 19 | 20 | 21 |
| 24 | 25 | 26 ESSAY – ELECTIVES | 27 Practice Exam – Multiple Choice | 28 Practice Exam – Free Response Questions |

MAY 2017

| MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|--|-----------------|----------------------------|--------------------|-----------------------------------|
| 1 AP Chemistry, AP Environmental, AP Psychology | 2 AP Spanish | 3 AP English Literature | 4 AP Government | 5 AP US History, AP Studio Art |

| | | | | |
|------------------------|-----------------------------------|--|---|---|
| 8 AP Biology | 9 AP Calculus | 10 AP English Language, AP Macroeconomics | 11 AP World History, AP Statistics | 12 AP Human Geography |
| 15 | 16 | 17 | 18 | 19 |
| 22 | 23 7 TH EXAM | 24 1 ST , 2 ND EXAM | 25 3 RD , 4 TH EXAM | 26 5 TH , 6 TH EXAM |

END OF SEMESTER