

# 2019 AP Calculus AB Review Session Schedule

<u>DATE:</u>	<u>AP Calculus Review Sessions</u>	<u>Time</u>
*Friday, March 22 <sup>nd</sup>	Theorems and Theory	4:00 pm – 5:30 pm
Monday, March 25 <sup>th</sup>	Area and Volume	4:00 pm – 5:30 pm
Tuesday, March 26 <sup>th</sup>	FTC II problems	2:45 pm – 3:30 pm 3:45 pm – 5:00 pm
*Friday, March 29 <sup>th</sup>	Differential Equations	3:40 pm – 5:00 pm
Monday, April 1 <sup>st</sup>	Derivative Applications	2:45 pm – 3:30 pm 3:45 pm – 5:00 pm
Tuesday, April 2 <sup>nd</sup>	Integral Applications	2:45 pm – 3:30 pm 3:45 pm – 5:00 pm
Wednesday, April 3 <sup>rd</sup>	2 <sup>nd</sup> MOCK Counts as Test grade	8:25 am – 12:30 pm
*Saturday, April 6 <sup>th</sup>	New Related Rates	11am – 12:30 pm
*Saturday, April 13 <sup>th</sup>	Particle Motion Problems	10am – 11am 1pm - 2pm
*Saturday, April 20	Riemann Sum and Numerical Approx	11am – 12pm 2pm – 3pm
*Saturday, April 27 <sup>th</sup>	F, f' and f'' and FTCII problems	11 am – 12:30 pm
*Saturday, May 4 <sup>th</sup>	Implicit Differentiation	11:00 am – 12:30 pm
Tuesday, May 14 <sup>th</sup>	AP Calculus Exam	8:00 am – 12:00 pm

\* sessions were already scheduled

## Session Descriptions:

**f, f', f'' and FTC II:** Given the graph of f', analyze f,  $\int_a^b f(x)dx$  and f'', and Given a function, g, defined as

$$g(x) = \int_a^x f(t)dt, \text{ analyze } g, \text{ and } g' \text{ and } g''.$$

**Area and Volume:** Students will review how to find the area between graphs of functions and how to find volumes of revolutions and volumes of solids with known base.

**Theorems and Theory:** This session will review the precise definitions of mathematical terms and the hypotheses of each theorem.

**Diff Eq:** Find the particular solution of a differential equation, draw a particular solution given a slope field, or a slope field.

**Riemann Sum:** Given a table with numerical data in which they need to estimate an integral with a Riemann or Trapezoidal Sum. Numerical interpretations of integrals, limits and derivatives will also be reviewed.

**Particle Motion:** Students will review how to determine when a particle is moving away or towards the origin, moving faster or slower, and distance traveled.

**Applications of Derivatives:** Students will review derivatives as instantaneous rates of change, approximating them with average rates of change, optimization, and interpreting the meaning of derivatives in the context of the problem.

**Applications of Integration:** Students will review integrals as accumulation of values, integrals as area, integrals to find values if the derivative is given.

**Implicit Differentiation:** Students will review taking derivatives when y is not a function of x, tangent line approximations, and taking second derivatives implicitly.