

## Summer Session 2 2018 - Math 2A suggested syllabus

**Text:** Calculus: Early Transcendentals, Stewart, 8<sup>th</sup> Edition

LECTURE	DATE	SECTION	TOPIC(S)
1	8/6	1.1, 1.2, 1.3	Course Introduction, Function Representations Mathematical Models: Catalog of Functions Transformations of Functions (Have TAs finish these sections in discussion)
2	8/8	1.4, 1.5	Exponential Functions Inverse Functions and Logarithms Inverse Trigonometric Functions
3	8/10	2.1, 2.2, 2.3	Tangent and Velocity Problems Limit of a Function Calculating Limits from Limit Laws
4	8/13	2.5, 2.6	Continuity Limits at Infinity Horizontal Asymptotes
5	8/15	2.7, 2.8	Derivative and Rate of Change Derivative as a function
6	8/17	3.1, 3.2	Derivative of a Polynomial and Exponential Function Product and Quotient Rules
7	8/20	3.3, 3.4	Derivative of Trigonometric Functions Chain Rule
8	8/22	3.5, 3.6	Implicit Differentiation Derivative of Logarithm Functions
9	8/24	3.8	<b>Midterm Exam</b> Exponential Growth and Decay
10	8/27	3.9, 3.10	Related Rates Linear Approximation and Differentials, Review
11	8/29	4.1, 4.2	Maximum and Minimum Values Mean Value Theorem
12	8/31	4.3, 4.4	How derivatives affect the shape of a graph Intermediate Forms and L'Hospital's rule
13	9/5	4.5	Curve Sketching
14	9/7	4.7	Optimization
15	9/10	4.9	Antiderivatives <b>Review for the Final on 9/12</b>