Math 8 Suggested Syllabus

Text: None. Lecture notes and handouts from UTeach program.

Lecture	Section	Topic
1		Course orientation, Basics of problem solving
2		Definition of function, function sorting activity
3		Parabola roots exploration, comparing definitions of function
4		Qualitative graphing lab
5		Finding roots, conic sections, quadratic formula derivation
6		Sequences introduction, difference columns
7		Finding sequences and series limits
8		Functions as sequences
9		Exploration on function patterns
10		Modeling functions and linear regression
11		Higher-order regressions, residuals, Lollipop lab
12		Exploration on linear regression
13		Terminal speed lab
14		Review
15		**Midterm # 1**
16		Modeling functions with matrices I
17		Modeling functions with matrices II
18		Parametric models
19		Trigonometric functions, unit circle
20		Exploration on parametric model
21		Polar coordinate systems
22		Exponential and logistic models
23		Multiple topic synthesis
24		Review

25		**Midterm # 2**
26		Roller Coaster lab
27		Geometry of complex numbers
28		Polar complex numbers
29		Review
30		**Final Exam**