

Lecture schedule based on Axler, *Precalculus, 2nd edition*

Section	Lectures	Topic
0.3	0.5	Inequalities, intervals, and absolute value
1.1	1	Functions
1.2	1	The coordinate plane and graphs
1.3	1	Function transformations and graphs
1.4	1	Compositions of functions
1.5	1	Inverse functions
1.6	1	A graphical approach to inverse functions
2.1	1	Linear functions and lines
2.2	1	Quadratic expressions and conic sections (focus on parabolas and circles)
2.3	1	Exponents
2.4	1	Polynomials
2.5	1	Rational functions
3.1	1	Logarithms as inverses of exponential functions
3.2	1	Applications of the power rule for logarithms
3.3	1	Applications of the product and quotient rules for logarithms
3.4	1	Exponential growth
3.5	1	e and the natural logarithm
3.7	1	Exponential growth revisited
4.1	1	The unit circle
4.2	1	Radians
4.3	1	Cosine and sine
4.4	1	More trigonometric functions
4.5	1	Trigonometry in right triangles
4.6	1	Trigonometric identities
5.1	1	Inverse trigonometric functions
5.2	1	Inverse trigonometric identities
5.5	1	Double-angle and half-angle formulas
6.1	1	Transformations of trigonometric functions
6.2	1	Polar coordinates
6.4	1	Complex numbers
6.5	1	The complex plane
7.1	1	Sequences
7.2	1	Series
7.3	1	Limits

Optional (if time allows): 3.6 (Approximations and area with e and \ln), 5.3 (Using trigonometry to compute area), 5.4 (Law of sines and cosines), 6.3 (Vectors), 8.1 (Solving systems of linear equations)