

Advanced Math I

Course Syllabus

First Quarter Topics

Units	Specific Topics
Chapter 1 – Trigonometry	1.1 Radian and degree measure. Gle 11,12 1.2 Unit circle 1.3 Right angle Trigonometry. Gle 3,4,8,10,18 1.4 Trig functions of any angle 1.5 Graphs of sine and cosine functions. Gle 4,8,12,24,25 1.6 Graphs of other trig functions 1.7 Inverse Trig Functions. Gle 4,6,8,12,13,24,25 1.8 Applications and Models. Gle 3,4,8,18

Second Quarter Topics

Units	Specific Topics
Chapter 2 – Analytic Trigonometry	2.1 Using Fundamental Identities 2.2 Verifying Trig Identities 2.3 Solving Trig Equations 2.4 Sum & Difference Formulas 2.5 Multiple Angle & Product to Sum Formulas 3.1 Law of Sines. Gle 14 3.2 Law of Cosines. Gle 14

Third Quarter Topics

Units	Specific Topics
Chapter 3 – Additional Topics in Trigonometry	3.2 Vectors in a Plane. Gle 1,3,8,12,16 3.3 Vectors and Dot Product. Gle 1,3,8,12,16 4.1 Complex Numbers. Gle 1 4.2 Complex Solutions of Equations 4.3 Trigonometric Form of Complex Numbers 4.4 DeMoivre's Theorem

Fourth Quarter Topics

Units	Specific Topics
Chapter 4 – Complex Numbers and Exponential and Logarithmic Functions	5.1 Exponential Functions and Their Graphs 4,6,7,8,10,19,24,25,27,28,29 5.2 Logarithmic Functions and Their Graphs. Gle 3,4,7,19,25,27 5.3 Properties of Logarithms 5.4 Exponential & Logarithmic Equations. Gle 3,8,10,19,24 5.5 Exponential & Logarithmic Models. Gle 3,8,10,19,24