

# MA1513 Lesson Plan (AY1819 Sem 2)

Week	Topic (Lecture)	Sections (Video clips)	Tutorial
1 Jan 14-20  (Online quiz due Jan 21)	Chapter 1: Linear System and Matrix Algebra	1.1 Systems of Linear Equations 1.2 Solving System of Linear Equations 1.3 Gaussian Elimination 1.4 Matrices 1.5 Matrix inverses 1	NA
2 Jan 21-27  (Online quiz due Jan 28)	Chapter 1: Linear System and Matrix Algebra (Cont.)  Chapter 2: Vector Spaces	1.6 Matrix inverses 2 1.7 Determinants of matrices 1.8 Ranks of matrices  2.1 Vectors in n-space 2.2 Linear combination and linear span	Tutorial 1
3 Jan 28-Feb 3  (Online quiz due Feb 4)	Chapter 2: Vector Spaces (Cont.)	2.3 Subspaces 2.4 Linear independence 2.5 Basis and Dimension 2.6 Coordinate vectors 2.7 Vector and Matrices with function entries	Tutorial 2
4 Feb 4-10  (Online quiz due Feb 11)	Chapter 2: Vector Spaces (Cont.) Chapter 3: Linear Transformation, Eigenvalues and Eigenvectors	2.8 Projection and Linear approximation  3.1 Linear Transformation 3.2 Eigenvalues and Eigenvectors 3.3 Eigenspaces 3.4 Diagonalizable Matrices	Tutorial 3
5 Feb 11-17  (Online quiz due Feb 18)	Chapter 3: Linear Transformation, Eigenvalues and Eigenvectors (cont.)  Chapter 4: System of Differential Equations	3.5 Diagonalization 3.6 Powers of Matrices  4.1 System of DE 4.2 Solutions to System of DE 4.3 Phase Plane	Tutorial 4
6 Feb 18-24  (Online quiz due Feb 25)	Chapter 4: System of Differential Equations (Cont.)	4.4 Classification of equilibrium points 4.5 Stability of equilibrium points 4.6 Real distinct eigenvalues 4.7 Complex eigenvalues 4.8 Repeated eigenvalues	Tutorial 5
7 Mar 4-10	Revision Lecture (F2F)		Tutorial 6
8 Mar 11-16	Final Exam (Mar 16, 9am)		