## (Tentative) week-by-week schedule (APMA0340)

Week	Dates	Sections	Materials
1	Jan 26-28	7.1-7.2	Matrices
2	Jan 31-Feb 4	7.3 & 7.5	Eigenvalues, Eigenvectors, Linear systems
3	Feb 7-11	7.6 & 7.8	Complex eigenvalues, repeated real eigenvalues;
4	Feb 14-18	7.9	Nonhomogenous linear systems
5	Feb 23-25 (no class on Monday)	1 <sup>st</sup> mid-term	Review week & 1 <sup>st</sup> mid-term
6	Feb 28 – Mar 4	9.1& 9.2	Autonomous systems and stability
7	Mar 7-11	9.3 & 9.4	Competing species; Predator-Prey equations
8	Mar 14-18	9.5 & 9.6 & 9.8	Lyapunov's second method & Lorenz equations
9	Mar 21-25	2 <sup>nd</sup> mid-term	Review week & 2nd mid-term
10	Spring break		
11	April 4-8	10.2 & 10.3	Fourier series and the convergence theorem
12	April 11-15	10.5 – 10.6	Separation of variables; heat conduction problems
13	April 18-22	10.7 & 10.8	Wave equation: vibrations of an elastic string; Laplace's equation
14	April 25-27	11.2; review	Sturm-Liouville problems
15	April 29 – May 10		Reading period
	May 11-20		Final examination period