

Tentative Daily Schedule for MATH 4340-241 Summer II (online) 2017

June

Monday	Tuesday	Wednesday	Thursday	Friday
		(79:22) 28 Lectures 1.1&2 Vector spaces. Linear independence. <i>Classes Begin</i>	(88:54) 29 Lectures 1.3&4 Linear maps. Inner products & orthogonality <i>Last Day to Add</i>	(84:42) 30 Lectures 2.1&2 Fundamental theorem of ODEs. The Wronskian. HW 1 due

July

Monday	Tuesday	Wednesday	Thursday	Friday
(83:44) 3 Lectures 2.3&4 Affine spaces & inhomogeneous ODEs. <i>Last drop: No W</i> HW 2 due	4 Holiday No Classes	(44:24) 5 Lectures 2.5 Power series solutions to ODEs	(79:55) 6 Lecture 2.6&7 Frobenius method & Bessel's equation HW 3 due	(79:38) 7 Lecture 3.1&2 Fourier series: theory and computation.
(66:55) 10 Lectures 3.3&4 Fourier sine & cosine series; solving ODEs. HW 4 due	(88:17) 11 Lectures 3.5&6 Complex inner products & Fourier series	12 MIDTERM 1	(81:09) 13 Lectures 3.7&8 Fourier transforms and Parseval's theorem. HW 5 due	(56:59) 14 Lecture 4.1 Boundary value problems
(79:30) 17 Lectures 4.2&3 Hermitian matrices & self-adjoint operators. HW 6 due	(42:30) 18 Lecture 4.4 Sturm-Liouville theory.	(61:55) 19 Lectures 4.5&6 Generalized Fourier theory and orthogonal expansions. HW 7 due	(44:28) 20 Lecture 5.1 Fourier law & the diffusion & heat equations.	(51:23) 21 Lecture 5.2 Different boundary conditions. <i>Last day to drop</i> HW 8 due
(40:32) 24 Lecture 5.3 The transport and wave, equations HW 9 due	(??:??) 25 Lecture 5.4 The Schrödinger equation.	26 MIDTERM 2	(53:53) 27 Lecture 7.1 Harmonic functions and the Laplacian operator. HW 10 due	(29:06) 28 Lecture 7.2 The Helmholtz equation.

August

Monday	Tuesday	Wednesday	Thursday	Friday
(54:04) 31 Lecture 7.3 Higher-dimensional heat & wave equations. HW 11 due	(51:53) 1 Lecture 7.4 The Laplacian operator in polar coordinates.	(48:02) 2 Lecture 7.5 The heat, wave, & Laplace's equation in polar coords. <i>Last Day of Class</i>	3 <i>Study Day</i> HW 12 due	4 FINAL EXAM