

Tentative Daily Schedule for MATH 4340-241 Summer II (online) 2020

June

Monday	Tuesday	Wednesday	Thursday	Friday
		(79:22) 24 Lectures 1.1&2 Vector spaces. Linear independence. <i>Classes Begin</i>	(88:54) 25 Lectures 1.3&4 Linear maps. Inner products & orthogonality <i>Last Day to Add</i> HW 1 due	(84:42) 26 Lectures 2.1&2 Fundamental theorem of ODEs. The Wronskian. HW 2 due

July

Monday	Tuesday	Wednesday	Thursday	Friday
(83:44) 29 Lectures 2.3&4 Affine spaces & inhomogeneous ODEs. <i>Last drop: No W</i>	(44:24) 30 Lectures 2.5 Power series solutions to ODEs HW 3 due	(79:55) 1 Lecture 2.6&7 Frobenius method & Bessel's equation	(79:38) 2 Lecture 3.1&2 Fourier series: theory and computation. HW 4 due	3 Holiday No Classes
(66:55) 6 Lectures 3.3&4 Fourier sine & cosine series; solving ODEs. HW 5 due	(88:17) 7 Lectures 3.5&6 Complex inner products & Fourier series	8 MIDTERM 1	(81:09) 9 Lectures 3.7&8 Fourier transforms and Parseval's theorem.	(56:59) 10 Lecture 4.1 Boundary value problems HW 6 due
(79:30) 13 Lectures 4.2&3 Hermitian matrices & self-adjoint operators. HW 7 due	(42:30) 14 Lecture 4.4 Sturm-Liouville theory.	(61:55) 15 Lectures 4.5&6 Generalized Fourier theory and orthogonal expansions. HW 8 due	(95:51) 16 Lecture 5.1&2 Fourier law & the diffusion & heat equations.	(71:36) 17 Lecture 5.3&4 Transport, wave, & Schrödinger equations. <i>Last day to drop</i> HW 9 due
(90:44) 20 Lecture 6.1&2 PDEs on infinite & semi-infinite domains. HW 10 due	(86:31) 21 Lectures 6.3&4 Solving PDEs with Laplace & Fourier transforms.	22 MIDTERM 2	(53:53) 23 Lecture 7.1 Harmonic functions and the Laplacian operator.	(29:06) 24 Lecture 7.2 The Helmholtz equation. HW 11 due
(54:04) 27 Lecture 7.3 Higher-dimensional heat & wave equations. HW 12 due	(51:53) 28 Lecture 7.4 The Laplacian operator in polar coordinates.	(48:02) 29 Lecture 7.5 The heat, wave, & Laplace's equation in polar coords. <i>Last Day of Class</i>	30 <i>Study Day</i> HW 13 due	31 FINAL EXAM