Tentative Daily Schedule for MATH 4340-241

Summer II (online) 2023

June

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

July

Monday	Tuesday	Wednesday	Thursday	Friday
(83:44) **3** **Lectures 2.3, 2.4** Affine spaces & inhomogeneous ODEs. *Last day to drop: No W*	**4** **Holiday** *No Classes*	(44:24) **5** **Lectures 2.5** Power series solutions to ODEs HW 3 due	(79:55) **6** **Lecture 2.6, 2.7** Frobenius method & Bessel's equation	(79:38) **7** **Lecture 3.1, 3.2** Fourier series: theory and computation. HW 4 due
(66:55) **10** **Lectures 3.3, 3.4** Fourier sine & cosine series; solving ODEs. HW 5 due	(88:17) **11** **Lectures 3.5, 3.6** Complex inner products & Fourier series	**12** **MIDTERM 1**	(81:09) **13** **Lectures 3.7, 3.8** Fourier transforms and Parsevel's theorem.	(56:59) **14** **Lecture 4.1** Boundary value problems HW 6 due
(79:30) **17** **Lectures 4.2, 4.3** Hermitian matrices & self-adjoint operators. HW 7 due	(42:30) **18** **Lecture 4.4** Sturm-Liouville theory.	(61:55) **19** **Lectures 4.5, 4.6** Generalized Fourier theory and orthogonal expansions. HW 8 due	(95:51) **20** **Lecture 5.1, 5.2** Fourier law & the diffusion & heat equations.	(71:36) **21** **Lecture 5.3, 5.4** Transport, wave, & Schrödinger equations. *Last day to drop* HW 9 due
(90:44) **24** **Lecture 6.1, 6.2** PDEs on infinite & semi-infinite domains. HW 10 due	(86:31) **25** **Lectures 6.3, 6.4** Solving PDEs with Laplace & Fourier transforms.	**26** **MIDTERM 2**	(53:53) **27** **Lecture 7.1** Harmonic functions and the Laplacian operator.	(29:06) **28** **Lecture 7.2** The Helmholtz equation. HW 11 due

August

Monday	Tuesday	Wednesday	Thursday	Friday
(54:04) **31** **Lecture 7.3** Higher-dimensional heat & wave equations. HW 12 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. *Last Day of Class*	**3** **Study Day** HW 13 due	**4** **FINAL EXAM**

Comments to: **macaule@clemson.edu**
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