Math. 312 Schedule

(Except for test days, this is only approximate.)

Block 1:

Topic	Days	Haberman sections	Fulling notes pages
Introductory examples*	5	1.1–1.4, 2.1–2.4	1–14
Fourier series	4	3.1–3.3, 3.6	15–28
Linearity and homogeneity	1	2.2	29–35
Catchup or review	1		
Test A		**Friday, Sept. 22**	

* wave equation in lecture, heat equation in textbook

Block 2:

Topic	Days	Haberman sections	Fulling notes pages
Rectangle problems	1	2.5.1, 7.1–7.4	36–42
Fourier transforms	4	10.1–10.6	43–54
Green functions	5	9.1–9.3, (11.3)*	55–71
Catchup or review	1		
Test B		**Friday, Oct. 20**	

* Parts of Sec. 11.3 assume that you've studied all of Chapters 8 and 9.

Block 3:

Topic	Days	Haberman sections	Fulling notes pages
Sturm–Liouville problems	4	5.1–5.5, 5.8–5.10, 7.5	72–81
Polar coords., Bessel fns.	5	1.5, 2.5.2, 7.7–7.9	82–101
Catchup or review	2		
Test A		**Friday, Nov. 17**	

Block 4:

Topic	Days	Haberman sections	Fulling notes pages
Spherical harmonics	3	7.10	102–109
Classification	2	2.5.4, 6.1	110–113
Catchup or review for final	1		

Advanced reading:

Topic	Haberman sections	Fulling notes pages
More on the wave equation	Ch. 4, 11.2, Ch. 12	
Green fns. for nonhom. problems	Ch. 8, 9.5	
Convergence thms. for Fourier series	3.4–3.5	App. B