math 340

M	1/13	vector spaces		§1B	
W	1/15	subspaces, direct sums		1C	
W	1/22	spans, linear dependence	§5–6	2A	PS1
F	1/24	bases, dimension	7–8	2B–2C	
M	1/27	linear maps, kernels, images		3A–3B	
W	1/29	matrices	37–38	3C	PS2
M	2/3	invertibility	36	3D	
W	2/5	change of coordinates	38		PS3
M	2/10	eigenvectors	54–55	5A–5B	
W	2/12	triangularity	56	5C	PS4
M	2/17	nilpotence	57	8A	
W	2/19	generalized eigenspaces	58	8A	~~PS5~~
M	2/24	Jordan decomposition	58	8B–8C	
W	2/26				Midterm
M	3/3	dual vector spaces, quotients	13–15, 21–22	3E–3F	
W	3/5	bilinear forms	23	9A	PS5
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M	3/24	tensors, multilinear forms	24, 29	9A, 9D	
W	3/26	alternating forms	30	9B	PS6
M	*3/31*	*determinants (volumes)*	*31*	*9C*	
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W	4/9	inner products	59–62, 65–66	6A	PS7
M	4/14	self-adjoint operators	70, 72	7A, 7C	
W	4/16	projections, spectral theorem	75–76, 78–79	7B	PS8
M	4/21	orthogonal / unitary transformations	73–74, 81	7D	
W	4/23	operator algebras			PS9