Week	Date	Topic	Textbook	Date	Topic	Textbook
1	27Aug	Introduction; Dirac Notation	Sakurai 1.1,1.2 *(Merzbacher 9.4)*	30 Aug	Bras, Kets, and Measurements	Sakurai 1.3,1.4 *(Merzbacher Chap 10)*
2	3 Sep	**No classes**		6 Sep	Observables and Uncertainties	Sakurai 1.4 *(Merzbacher Chap 10)*
3	10 Sep	Unitary Transformations	Sakurai 1.5,1.6 *(Merzbacher 9.5, 9.6)*	13 Sep	Wave functions	Sakurai 1.6,1.7 *(Merzbacher Chap 2)*
4	17 Sep	Time evolution	Sakurai 2.1 *(Merzbacher Chap 14)*	20 Sep	Pictures	Sakurai 2.2 *(Merzbacher Chap 14)*
5	24 Sep	The Simple Harmonic Oscillator	Sakurai 2.3 *(Merzbacher 10.6)*	27 Sep	Schrödinger's Equation	Sakurai 2.4 *(Merzbacher Chap 3)*
6	1 Oct	Gauge Transformations	Merzbacher 4.6,4.7 *(Sakurai 2.6)*	4 Oct	The WKB Approximation	Merzbacher 7.1, 7.2 (with Chapter 6)
7	*9 Oct* ***(Tues)***	Applications of the WKB Method	Merzbacher 7.3-7.5	11 Oct	The Variational Method; Rayleigh-Ritz Function	Merzbacher 8.1, 8.2, and 8.4
8	15 Oct	The Double Oscillator	Merzbacher 8.5 (with Chapter 5)	18 Oct	Molecular and Periodic Systems	Merzbacher 8.6, 8.7
9	22 Oct	Rotations; Angular Momentum	Merzbacher 11.1,11.2	25 Oct	Orbital Angular Momentum	Merzbacher 11.3-11.5
10	29 Oct	Spherically Symmetric Potentials	Merzbacher 12.1-12.3	1 Nov	One-Electron Atoms	Merzbacher 12.4-12.6
11	5 Nov	Scattering and Green's Functions	Merzbacher 13.1-13.3	8 Nov	Born Approximation; Rutherford Scattering	Merzbacher 13.4
12	12 Nov	Partial Wave Analysis Formalism	Merzbacher 13.5	15 Nov	Phase shifts and Resonances	Merzbacher 13.6 *(Sakurai 7.7,7.8)*
13	19 Nov	Eikonal Approximation (WKB for Scattering)	Sakurai 7.4,7.6 *(Merzbacher 7.4)*	22 Nov	**No Classes**	
14	26 Nov	Particles; The Forced Harmonic Oscillator	Merzbacher 14.3;14.6	29 Nov	Representations (*review*) and Propagators	Merzbacher 15.1, 15.2
15	3 Dec	Feynman Path Integrals	Merzbacher 15.3 *(Sakurai 2.5)*	6 Dec	Mutliplarticle Systems, and The Density Matrix	Merzbacher 15.4,15.5