

Table 1: Tentative Schedule of Class Meetings

Class #	Date	Lecture Topic	Lab Topic (tentative)
1	21 Aug	R1 – principle of relativity	<i>open/no meeting</i>
2	23 Aug	R2 – coordinate time	
3	28 Aug	R3 – the space-time interval	Lab: Speed of Light
4	30 Aug	R4 – proper time	
5	4 Sep	R5 – coordinate transformations	Lab: Computational Intro.
6	6 Sep	R6 – Lorentz contraction	
7	11 Sep	R7 – the cosmic speed limit	Mini-Assessment on R1-R6
8	13 Sep	R8 – four-momentum	
9	18 Sep	R9 – conservation of four-momentum	Lab: Waves
10	20 Sep	Q1– wave models	
11	25 Sep	<b>1<sup>st</sup> ASSESSMENT</b>	Extra Time on 1 <sup>st</sup> Assessment
12	27 Sep	Q2 – standing waves and resonance	
13	2 Oct	Q3 – interference and diffraction	Lab: Double Slit / Photoelectric
14	4 Oct	Q4 – the particle nature of light	
15	9 Oct	Q5 – the wave nature of particles	Lab: Double Slit / Photoelectric
16	11 Oct	Q6 – spin	
	15-19 Oct	— <i>Fall Break</i> —	
17	23 Oct	Q7 –the rules of quantum mechanics	<i>open/no meeting</i>
18	25 Oct	Q8 – quantum weirdness	
19	30 Oct	<b>2<sup>nd</sup> ASSESSMENT</b>	Extra Time on 2 <sup>nd</sup> Assessment
20	1 Nov	Q9 – the wavefunction	
21	6 Nov	QA – complex numbers	<i>open/no meeting</i>
22	8 Nov	Q10 – simple quantum models	
23	13 Nov	Q11 – spectra	Lab: Spectroscopy
24	15 Nov	Q12 – the Schrödinger equation	
25	20 Nov	<b>3<sup>rd</sup> ASSESSMENT</b>	Extra Time on 3 <sup>rd</sup> Assessment
	21-23 Nov	— <i>Thanksgiving Break</i> —	
26	27 Nov	nuclear <i>or</i> astrophysics (TBD)	Lab: Numerical Schrödinger
27	29 Nov	nuclear <i>or</i> astrophysics (TBD)	
28	4 Dec	nuclear <i>or</i> astrophysics (TBD)	Lab: Microwave Bragg/Interferometry
–	8 Dec	<b>Project Presentations</b> (9:00am)	
–	10 Dec	<b>Final ASSESSMENT</b> (3:00pm)	

R = “Six Ideas That Shaped Physics Unit R”

Q = “Six Ideas That Shaped Physics Unit Q”