

## **Reading List for the Midterm**

(referring to Jackson 3<sup>rd</sup> Edition)

### Chapter 1

- all sections from 1.1 to 1.10 (inclusive)
- didn't go over Section 1.6 in class explicitly; but you should look over this material (details you may already know)

### Chapter 2

- Sections 2.1 to 2.6 (inclusive)

### Chapter 5

- Sections 5.1 to 5.4 (inclusive)

### Chapter 6

- take a look at Section 6.2 which we covered with covariant formulation

### Chapter 11

- assume you know Special Relativity motivation well enough, so only skim through Section 11.1 if you want more history (though we did cover Galilean non-invariance of Maxwell EM wave equation)
- don't bother with Section 11.2
- Section 11.3 introduces 4-vectors, Lorentz invariant scalar products; we didn't bother with the light cone though we did discuss proper time; we skipped the relativistic Doppler shift
- we didn't formally cover Section 11.4 (Addition of Velocities, 4-Velocity); but some problems we looked at used the concepts and other topics included needing to understand the 4-velocity
- Sections 11.6 was studied
- Section 11.5, 11.7, 11.8 skip (for now)
- Section 11.9 to 11.10 (inclusive)
- Section 11.11 skip (for now)

### Chapter 12

- will start discussing Section 12.1 in Thursday Week 6 class
- Sections 12.2 to 12.5 (inclusive)