

Comparison between Version 18.1 (2024) and Version 18.2 (2025) of “Fundamentals of Physics” Volume II

Chapter	Comments
Part A – Forces	
1. Mass and gravitational force	Somewhat long (21 pages)
2. Charge and electric force	Long (25 pages)
3. Nucleons and nuclear force	(17 pages)
4. Magnets and magnetic force	Short (12 pages)
Part B – Fields and Energy	
5. Describing Fields	(15 pages)
6. Quantifying Fields	Short (9 pages)
7. Conservation of energy	(19 pages)
8. Chemical reactions	(15 pages)
9. Nuclear reactions	(16 pages)
Part C – Current	
10. The flow of charge	Long (21 pages)
11. Electric Current	Long (21 pages)
12. Electromagnets	(17 pages)
13. Fluids	Modified the illustration (and associated wording) of the split path so that the two paths are not identical. (13 pages)
Part D – Circuits	
14. Voltage	<ul style="list-style-type: none"> - Revised the introduction to the “Why voltage?” section to emphasize that current depends also on the resistance, and not just voltage. - Revised the introduction to the “Voltage across elements” section to clarify the use of voltage vs. electric potential, and how the electric potential decreases across resistive elements (like a toll), from a high value at the battery’s “+ terminal” to a low value at the battery’s “- terminal”. This usage should help them surmise that the voltage sum equals the total voltage in series, and the voltage must be the same for parallel. Long (23 pages)
15. Resistance	Long (22 pages)
16. Describing AC circuits	Short (13 pages)
17. Impedance	Long (22 pages)
18. Induction	(15 pages)
Part E – Waves	
19. Sound	Long (23 pages)
20. Doppler	(11 pages)
21. Interference	Long (21 pages)
22. Standing Waves	Added a footnote explaining how we still tend to associate the fundamental frequency with the tone we hear even

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	if the fundamental wasn't the most dominant. (19 pages)
Part F – Optics	
23. Light as a Wave	(19 pages)
24. Bending of Light	(20 pages)
25. Lenses and Mirrors	Long (21 pages)
26. Objects and Images	(20 pages)