

Textbook Equivalent Sections

The section equivalents are approximate. Occasionally there is general application information that may not directly compare. It is recommended that you skim the required text occasionally to pick up a few things that do not easily correlate.

College Physics (Cutnell & Johnson, 9 th ed.)		Covered in Physics 114/115/116	Physics (Knight, Jones, & Field, 2 nd ed.)
Chapter 1	Introduction & mathematical concepts	114	Chapter 1, 3
1.1	The Nature of Physics	114	1.1
1.2	Units	114	1.4
1.3	The Role of Units in Problem Solving	114	1.4
1.4	Trigonometry	114	1.5
1.5	Scalars and Vectors	114	1.5
1.6	Vector Addition and Subtraction	114	1.5, 3.1
1.7	The Components of a Vector	114	3.3
1.8	Addition of Vectors by Means of Components	114	3.3
1.9	Concepts & Calculations	114	1.6
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2.2	Speed and Velocity	114	1.3, 2.1, 2.2, 2.3
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2.4	Equations of Kinematics for Constant Acceleration	114	2.2, 2.6
2.5	Applications of the Equations of Kinematics	114	2.6
2.6	Freely Falling Bodies	114	2.7
2.7	Graphical Analysis of Velocity and Acceleration	114	2.1-2.7
2.8	Concepts & Calculations	114	
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3.3	Projectile Motion	114	3.6, 3.7
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4.4	The vector Nature of Newton's Second Law of Motion	114	4.2, 4.4, 4.5, 4.7
4.5	Newton's Third Law of Motion	114	4.8
4.6	Types of Forces: An Overview	114	4.3

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4.8	The Normal Force	114	5.4
4.9	Static and Kinetic Frictional Forces	114	5.5
4.10	The Tension Force	114	5.8
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4.12	Nonequilibrium Applications of Newton's Laws of Motion	114	5.2, 5.7
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5.3	Centripetal Force	114	6.3
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5.5	Satellites in Circular Orbits	114	6.4, 6.6, 6.7
5.6	Apparent Weightlessness and Artificial Gravity	114	6.4, 6.5
5.7	Vertical Circular Motion	114	6.4
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6.2	The Work-Energy Theorem and Kinetic Energy	114	10.1, 10.3, 10.3-6
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6.7	Power	114	10.8
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