

# Table of Contents

<b>1. Chapter 1. Introduction to Physiology</b> Dee Unglaub Silverthorn	<b>1</b>
<b>2. Chapter 2. Molecular Interactions</b> Dee Unglaub Silverthorn	<b>33</b>
<b>3. Chapter 3. Compartmentation: Cells and Tissues</b> Dee Unglaub Silverthorn	<b>65</b>
<b>4. Chapter 4. Energy and Cellular Metabolism</b> Dee Unglaub Silverthorn	<b>103</b>
<b>5. Chapter 5. Membrane Dynamics</b> Dee Unglaub Silverthorn	<b>137</b>
<b>6. Chapter 6. Communication, Integration, and Homeostasis</b> Dee Unglaub Silverthorn	<b>183</b>
<b>7. Chapter 7. Introduction to the Endocrine System</b> Dee Unglaub Silverthorn	<b>217</b>
<b>8. Chapter 8. Neurons: Cellular and Network Properties</b> Dee Unglaub Silverthorn	<b>251</b>
<b>9. Chapter 9. The Central Nervous System</b> Dee Unglaub Silverthorn	<b>303</b>
<b>10. Chapter 10. Sensory Physiology</b> Dee Unglaub Silverthorn	<b>343</b>
<b>11. Chapter 11. Efferent Division: Autonomic and Somatic Motor Control</b> Dee Unglaub Silverthorn	<b>397</b>
<b>12. Chapter 12. Muscles</b> Dee Unglaub Silverthorn	<b>419</b>
<b>13. Chapter 13. Integrative Physiology I: Control of Body Movement</b> Dee Unglaub Silverthorn	<b>465</b>

<b>14. Chapter 14. Cardiovascular Physiology</b> Dee Unglaub Silverthorn	<b>487</b>
<b>15. Chapter 16. Blood</b> Dee Unglaub Silverthorn	<b>535</b>
<b>16. Chapter 15. Blood Flow and the Control of Blood Pressure</b> Dee Unglaub Silverthorn	<b>561</b>
<b>17. Chapter 17. Mechanics of Breathing</b> Dee Unglaub Silverthorn	<b>599</b>
<b>18. Chapter 18. Gas Exchange and Transport</b> Dee Unglaub Silverthorn	<b>633</b>
<b>19. Chapter 19. The Kidneys</b> Dee Unglaub Silverthorn	<b>661</b>
<b>20. Chapter 20. Integrative Physiology II: Fluid and Electrolyte Balance</b> Dee Unglaub Silverthorn	<b>695</b>
<b>21. Chapter 21. The Digestive System</b> Dee Unglaub Silverthorn	<b>735</b>
<b>22. Chapter 22. Metabolism and Energy Balance</b> Dee Unglaub Silverthorn	<b>777</b>
<b>23. Chapter 23. Endocrine Control of Growth and Metabolism</b> Dee Unglaub Silverthorn	<b>819</b>
<b>24. Chapter 24. The Immune System</b> Dee Unglaub Silverthorn	<b>847</b>
<b>25. Chapter 25. Integrative Physiology III: Exercise</b> Dee Unglaub Silverthorn	<b>883</b>
<b>26. Chapter 26. Reproduction and Development</b> Dee Unglaub Silverthorn	<b>899</b>
<b>Appendix B. Physics and Math</b> Dee Unglaub Silverthorn	<b>943</b>
<b>Appendix C. Genetics</b> Dee Unglaub Silverthorn	<b>947</b>
<b>Top Ten Ways to Succeed in Classes that Use Active Learning; Word Roots for Physiology</b> Dee Unglaub Silverthorn	<b>951</b>
<b>Anatomical Positions of the Body; Measurements and Conversions</b> Dee Unglaub Silverthorn	<b>953</b>
<b>Periodic Table of the Elements</b> Dee Unglaub Silverthorn	<b>955</b>

Glossary  
Dee Unglaub Silverthorn  
Index

# Introduction to Physiology

957  
1001