

NS2104: Biophysics, Physiology and Metabolism

View Online



[1]

H. D. Young, College physics, 9th ed. Harlow: Pearson Education, 2011.

[2]

Knight, Randall Dewey, Jones, Brian, and Field, Stuart, College physics: a strategic approach, 2nd ed. Upper Saddle River, N.J.: Pearson Education, 2010.

[3]

T. Everett and C. Kell, Human movement: an introductory text, 6th ed. Edinburgh: Churchill Livingstone, 2010 [Online]. Available:
http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663029840002746&institutionId=2746&customerId=2745

[4]

Reece, Jane B. and Campbell, Neil A., Biology, 9th ed. Boston: Pearson Education, 2011 [Online]. Available:
http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663610340002746&institutionId=2746&customerId=2745

[5]

Brooker, Robert J., Biology, 2nd ed. New York: McGraw-Hill Higher Education, 2010.

[6]

Raven, Peter H., Johnson, George B., Mason, Kenneth A., Losos, Jonathan B., and Singer, Susan R., *Biology*, 10th ed. New York, NY: McGraw-Hill, 2014.

[7]

Berg, Jeremy M., Tymoczko, John L., and Stryer, Lubert, *Biochemistry*, 7th ed. New York: W. H. Freeman, 2011 [Online]. Available:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybcI6liMvdmlldy9ib29rcy85NzgxMzE5MjQ4MDYyL2VwdWlvT0VCUFMveGh0bWwvYmVyXzk3ODEzMTkxMTQ2NzFfY29udGVudHMuaHRtbCJ9>

[8]

Nelson, David L., Cox, Michael M., and Lehninger, Albert L., *Lehninger principles of biochemistry*, 6th ed. New York, N.Y.: W.H. Freeman, 2013 [Online]. Available:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybcI6liMvdmlldy9ib29rcy85NzgxMzE5MTUwODc3L2VwdWlvT0VCUFMveGh0bWwvbmVsXzk3ODE0NjQxODc5NTdfY29udC5odG1sIn0%3D>

[9]

Murray, Robert K. and Harper, Harold A., *Harper's illustrated biochemistry*, 28th ed. New York, N.Y.: McGraw-Hill Medical, 2009 [Online]. Available:
<https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4657718>

[10]

Berne, Robert M., Levy, Matthew N., Koepfen, Bruce M., and Stanton, Bruce A., *Berne and Levy physiology*, 6th ed. Philadelphia, Pa: Mosby/Elsevier, 2008 [Online]. Available:
<https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20110061689>

[11]

E. P. Widmaier, H. Raff, K. T. Strang, and A. J. Vander, *Vander's human physiology: the mechanisms of body function*, Thirteenth edition. New York: McGraw-Hill, 2014 [Online]. Available:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybcI6liMvdmlldy9ib29rcy85NzgxMjYwMjg5MzE5L2VwdWlvT0VCUFMvYnJpZWZfY29udGVudHMuaHRtbCJ9>

[12]

R. M. Berne, M. N. Levy, B. A. Stanton, and B. M. Koeppen, Berne and Levy principles of physiology, 4th ed. Philadelphia, Pa: Elsevier Mosby, 2005.

[13]

B. Alberts, Molecular biology of the cell (Seventh edition), Seventh edition. W. W. Norton, 2022 [Online]. Available:
<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybCl6liMvdmlldy9ib29rcy85NzgwMzkzODg0NjQ3L2VwdWlVRVBVQi9jb250ZW50LzAuMS1jb3Zlci1pc2UuaHRtbCJ9>

[14]

H. F. Lodish, Molecular cell biology, 7th ed. New York: W.H. Freeman, 2013.

[15]

G. M. Cooper and R. E. Hausman, The cell: a molecular approach, 6th ed. Sunderland, Mass: Sinauer Associates, 2013.

[16]

Tipler, Paul A. and Mosca, Gene P., Physics for scientists and engineers: with modern physics, 6th ed. New York, NY: W.H. Freeman, 2008 [Online]. Available:
<https://bibliu.com/app/#/view/books/9781319155988/pdf2htmllex/index.html>

[17]

Alonso, Marcelo and Finn, Edward J., Physics. Wokingham: Addison-Wesley, 1992.

[18]

Nelson, Philip Charles, Biological physics: energy, information, life, Updated ed. New York: W.H. Freeman, 2008.

[19]

'Skeletal muscle'. [Online]. Available: <https://www.youtube.com/watch?v=H4mFWxaeMQo>

[20]

'Blood Flow Through the Human Heart'. [Online]. Available:
<http://www.sumanasinc.com/webcontent/animations/content/humanheart.html>

[21]

'Muscle'. [Online]. Available:
<http://www.sumanasinc.com/webcontent/animations/content/muscle.html>

[22]

'The Introduction to Muscle Physiology and Design (Contents page)'. [Online]. Available:
<http://muscle.ucsd.edu/musintro/jump.shtml>

[23]

Khan Academy, 'Oxygen Movement from Alveoli to Capillaries'. [Online]. Available:
<https://www.youtube.com/watch?v=nRpwdwm06lc>

[24]

'Cellular respiration'. [Online]. Available:
<http://sumanasinc.com/webcontent/animations/content/cellularrespiration.html>

[25]

'Electron Transport: Aerobic and Anaerobic Conditions'. [Online]. Available:
<http://www.sumanasinc.com/webcontent/animations/content/electrontransport.html>

[26]

'ATP Synthase Mechanism'. [Online]. Available:
<http://www.sumanasinc.com/webcontent/animations/content/atpsynthase.html>

[27]

'Newton's Law of Cooling'. [Online]. Available:
<http://www.ugrad.math.ubc.ca/coursedoc/math100/notes/diffeqs/cool.html>

[28]

'Newton's Law of Cooling'. [Online]. Available:
<http://www.biology.arizona.edu/biomath/tutorials/applications/cooling.html>

[29]

Khan Academy, 'Fick's Law of Diffusion'. [Online]. Available:
https://www.youtube.com/watch?v=Cg4Klml_acs

[30]

Engineer Clearly, 'Fick's First Law of Diffusion'. [Online]. Available:
<https://www.youtube.com/watch?v=Hmfnolr47Zw>

[31]

Zinke-Allmang, Martin, Physics for the life sciences. Toronto, Ont: Nelson Education, 2009.

[32]

Keener, James and Sneyd, James, Mathematical Physiology: II: Systems Physiology, vol. Interdisciplinary Applied Mathematics. New York, NY: Springer New York, 2009 [Online]. Available:
<http://ezproxy.lib.le.ac.uk/login?url=http://dx.doi.org/10.1007/978-0-387-79388-7>

[33]

Anonymous, 'Prandtl's Essentials of Fluid Mechanics', Mechanical Engineering, vol. 126, no. 9, Sep. 2004 [Online]. Available:
http://gl9sn3dh2u.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%253Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:o

fi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=Prandtl%2527s+Essentials+of+Fluid+Mechanics&rft.jtitle=Mechanical+Engineering&rft.au=Anonymous&rft.date=2004-09-01&rft.pub=American+Society+of+Mechanical+Engineers&rft.issn=0025-6501&rft.eissn=1943-5649&rft.volume=126&rft.issue=9&rft.spage=66&rft.externalDocID=690835581¶mdic t=en-US

[34]

J. Mazumdar, Biofluid mechanics. Singapore: World Scientific, 1992 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4420825>

[35]

K. B. Chandran, A. P. Yoganathan, and S. E. Rittgers, Biofluid mechanics: the human circulation, 2nd ed. Boca Raton, Fla: CRC, 2012 [Online]. Available: <http://ebookcentral.proquest.com/lib/leicester/detail.action?docID=1449488>

[36]

Abu-Faraj, Ziad O., Handbook of research on biomedical engineering education and advanced bioengineering learning: interdisciplinary concepts. Hershey, Pa: Medical Information Science Reference, 2012 [Online]. Available: <https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=3311611>