# Fundamental Topics in Biology 2

Year 2 Semester 1 Life Sciences course



[1]

10 LinkedIn Tips for Students & New Grads | Omar Garriott | Pulse | LinkedIn: https://www.linkedin.com/pulse/10-tips-students-new-grads-linkedin-omar-garriott.

[2]

Beckerman, A.P. and Petchey, O.L. 2012. Getting started with R: an introduction for biologists. Oxford University Press.

[3]

BiteSized Immunology | British Society for Immunology: https://www.immunology.org/public-information/bitesized-immunology.

[4]

Campbell, N.A. et al. 2018. Biology: a global approach. Pearson Education Limited.

[5]

Cancer Research UK: https://www.cancerresearchuk.org/.

[6]

Cell division, tumor growth and metastasis, 3D animation with basic narration :: DNA Learning Center:

https://www.dnalc.org/view/15536-Cell-division-tumor-growth-and-metastasis-3D-animation-with-basic-narration.html.

[7]

Climate Time Machine: https://climate.nasa.gov/interactives/climate-time-machine.

[8]

Colberg, S.R. et al. 2010. Exercise and Type 2 Diabetes: The American College of Sports Medicine and the American Diabetes Association: joint position statement. Diabetes Care. 33, 12 (Dec. 2010), e147–e167. DOI:https://doi.org/10.2337/dc10-9990.

[9]

DNA Extraction: http://learn.genetics.utah.edu/content/labs/extraction/.

[10]

Fundamental Topics in Biology: https://www.mvls.gla.ac.uk/Teaching/SLS-FTB/.

[11]

Gel Electrophoresis: http://learn.genetics.utah.edu/content/labs/gel/.

[12]

Glossary of Immunology terms | Immunopaedia: https://www.immunopaedia.org.za/glossary/.

[13]

Glossary of Terms from Roitt's Essential Immunology: http://www.roitt.com/glossary.asp.

[14]

Hanahan, D. and Weinberg, R.A. 2011. Hallmarks of Cancer: The Next Generation. Cell. 144, 5 (Mar. 2011), 646–674. DOI:https://doi.org/10.1016/j.cell.2011.02.013.

# [15]

Hanahan, D. and Weinberg, R.A. 2000. The Hallmarks of Cancer. Cell. 100, 1 (Jan. 2000), 57–70. DOI:https://doi.org/10.1016/S0092-8674(00)81683-9.

#### [16]

Hardy-Weinberg principle:

http://www.phschool.com/science/biology\_place/labbench/lab8/hardwein.html.

### [17]

Holtzman, D.M. et al. 2011. Alzheimer's Disease: The Challenge of the Second Century. Science Translational Medicine. 3, 77 (Apr. 2011), 77sr1-77sr1. DOI:https://doi.org/10.1126/scitranslmed.3002369.

# [18]

Hou, J.C. et al. 2009. Chapter 16 Insulin Granule Biogenesis, Trafficking and Exocytosis. Insulin and IGFs. Academic Press. 473–506.

### [19]

Introduction to the Hallmarks of Cancer - Scientific American Blog Network: https://blogs.scientificamerican.com/guest-blog/introduction-to-the-hallmarks-of-cancer/.

#### [20]

J. P. Grime 1977. Evidence for the Existence of Three Primary Strategies in Plants and Its Relevance to Ecological and Evolutionary Theory. The American Naturalist. 111, 982 (1977), 1169–1194.

# [21]

Kleiber, M. 1947. BODY SIZE AND METABOLIC RATE. Physiological Reviews. 27, 4 (Oct. 1947), 511–541. DOI:https://doi.org/10.1152/physrev.1947.27.4.511.

[22]

Levine, A.G. 2015. Networking for nerds: find, access and land hidden game-changing career opportunities everywhere. Wiley Blackwell.

[23]

Linkedn Tips For Students: https://university.linkedin.com/linkedin-for-students.

[24]

magicicada.org: http://www.magicicada.org/magicicada 2015.php.

[25]

Male, D.K. 2021. Immunology: an illustrated outline. CRC Press.

[26]

McInnes, I.B. and Schett, G. 2017. Pathogenetic insights from the treatment of rheumatoid arthritis. The Lancet. 389, 10086 (Jun. 2017), 2328–2337. DOI:https://doi.org/10.1016/S0140-6736(17)31472-1.

[27]

Molecular Causes of Cancer | BioOncology: https://www.biooncology.com/resources/molecular-causes-of-cancer.html.

[28]

Murphy, K. et al. 2017. Janeway's immunobiology. Garland Science, Taylor & Francis Group, LLC.

[29]

PCR: http://learn.genetics.utah.edu/content/labs/pcr/.

[30]

PDB-101: cAMP-dependent Protein Kinase (PKA): http://pdb101.rcsb.org/motm/152.

[31]

PDB-101: Insulin Receptor: http://pdb101.rcsb.org/motm/182.

[32]

Prime It DNA Game on the App Store:

https://itunes.apple.com/us/app/university-of-glasgow-prime-it/id1250174174?mt=8.

[33]

PTC The Genetics of Bitter Taste (University of Utah):

http://learn.genetics.utah.edu/content/basics/ptc/.

[34]

Restriction Endonucleases:

http://highered.mheducation.com/olcweb/cgi/pluginpop.cgi?it=swf::535::535::/sites/dl/free/0072437316/120078/bio37.swf::Restriction%20Endonucleases.

[35]

Restriction Endonucleases review:

https://www.idtdna.com/pages/docs/educational-resources/restriction-endonucleases.pdf?s fvrsn=4.

[36]

Risso, D.S. et al. 2016. Genetic Variation in the TAS2R38 Bitter Taste Receptor and Smoking Behaviors. PLOS ONE. 11, 10 (Oct. 2016). DOI:https://doi.org/10.1371/journal.pone.0164157.

[37]

Risso, D.S. et al. 2016. Global diversity in the TAS2R38 bitter taste receptor: revisiting a classic evolutionary PROPosal. Scientific Reports. 6, 1 (Jul. 2016). DOI:https://doi.org/10.1038/srep25506.

[38]

Singer, F. 2016. Ecology in action. Cambridge University Press.

[39]

Sleegers, K. et al. 2010. The pursuit of susceptibility genes for Alzheimer's disease: progress and prospects. Trends in Genetics. 26, 2 (Feb. 2010), 84–93. DOI:https://doi.org/10.1016/j.tig.2009.12.004.

[40]

Slonczewski, J.L. et al. 2014. Microbiology: an evolving science. W.W. Norton.

[41]

Smolen, J.S. et al. 2016. Rheumatoid arthritis. The Lancet. 388, 10055 (Oct. 2016), 2023–2038. DOI:https://doi.org/10.1016/S0140-6736(16)30173-8.

[42]

What Is Alzheimer's Disease? https://www.nia.nih.gov/health/what-alzheimers-disease.

[43]

Willey, J.M. et al. 2017. Prescott's microbiology. McGraw-Hill Education.

[44]

Wooding, S. 2006. Phenylthiocarbamide: A 75-Year Adventure in Genetics and Natural Selection. Genetics. 172, 4 (2006).

[45]
An Introduction to Cell Metabolism   Protocol.
[46]
An Introduction to the Micropipettor   Protocol.
[47]
BiomeViewer   HHMI BioInteractive.
[48]
DNA Gel Electrophoresis Video.
[49]
Genetics of Bitter Taste Perception   HHMI BioInteractive.
[50]
Hardy-Weinberg: sample problems and solutions.
[51]
[51] Higher Elvers Networking at a Huge Conference
[51] Higher Flyers. Networking at a Huge Conference.
Higher Flyers. Networking at a Huge Conference.
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Higher Flyers. Networking at a Huge Conference.  [52]
Higher Flyers. Networking at a Huge Conference.  [52]

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-/2	randamental ropies in Biology 2   oniversity of Glasgo.
	24AD. Insulin and Glucose Regulation of Glycogenesis.
	[54]
	Learning Concentration, Measuring Volumes, and Serial Dilutions   Protocol.
	[55]
	Making Solutions in the Laboratory   Protocol.
	[56]
	12AD. NIH: Unraveling the Mystery of Alzheimer's Disease.
	[57]
	2008. Nutrition Recommendations and Interventions for Diabetes: A position statement of the American Diabetes Association. Diabetes Care. 31, Supplement 1 (Jan. 2008), S61-S78. DOI:https://doi.org/10.2337/dc08-S061.
	[58]
	Our Changing Climate: Introduction to Climate Science - https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/undergradu ate-faculty/climate-studies/course-components/textbook/climate-chap1/.
	[59]
	PCR: The Polymerase Chain Reaction Video Protocol.
	[60]
	Polymerase chain reaction (PCR)   HHMI BioInteractive.

20AD. Reciprocal Regulation of Gluconeogenesis and Glycolysis.

[62]

Restriction Enzyme Digests | Protocol.

[63]

3AD. What is Alzheimer's disease? - Ivan Seah Yu Jun.