

Fundamental Topics in Biology 2

Year 2 Semester 1 Life Sciences course

View Online



1

Campbell NA, Urry LA, Cain ML, et al. Biology: a global approach. Eleventh edition. Harlow, Essex: : Pearson Education Limited 2018.

2

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

3

Our Changing Climate: Introduction to Climate Science -
<https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/undergraduate-faculty/climate-studies/course-components/textbook/climate-chap1/>.
<https://www.ametsoc.org/ams/index.cfm/education-careers/education-program/undergraduate-faculty/climate-studies/course-components/textbook/climate-chap1/>

4

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

5

Singer F. Ecology in action. Cambridge: : Cambridge University Press 2016.
<https://ezproxy.lib.gla.ac.uk/login?url=https://doi.org/10.1017/9781316335802>

6

BiomeViewer | HHMI BioInteractive. <http://www.hhmi.org/biointeractive/biomeviewer>

7

J. P. Grime. Evidence for the Existence of Three Primary Strategies in Plants and Its Relevance to Ecological and Evolutionary Theory. *The American Naturalist* 1977;**111**:1169–94.http://ezproxy.lib.gla.ac.uk/login?url=https://www.jstor.org/stable/2460262?seq=1#page_scan_tab_contents

8

Kleiber M. BODY SIZE AND METABOLIC RATE. *Physiological Reviews* 1947;**27**:511–41. doi:10.1152/physrev.1947.27.4.511

9

magicicada.org. http://www.magicicada.org/magicicada_2015.php

10

An Introduction to Cell Metabolism | Protocol.
<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5652/an-introduction-to-cell-metabolism>

11

Hou JC, Min L, Pessin JE. Chapter 16 Insulin Granule Biogenesis, Trafficking and Exocytosis. In: *Insulin and IGFs*. [Place of publication not identified]: Academic Press 2009. 473–506.<http://ezproxy.lib.gla.ac.uk/login?url=http://ebookcentral.proquest.com/lib/gla/detail.action?docID=535194>

12

How Insulin and Glucagon Work. 11AD.<https://www.youtube.com/watch?v=-cL1TOeXv6k>

13

Reciprocal Regulation of Gluconeogenesis and Glycolysis. 20AD.<https://www.youtube.com/watch?v=ardjd4h2Seo>

14

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

15

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

16

Insulin and Glucose Regulation of Glycogenesis.
24AD. <https://www.youtube.com/watch?v=t12pXyMg7NQ>

17

Colberg SR, Sigal RJ, Fernhall B, et al. Exercise and Type 2 Diabetes: The American College of Sports Medicine and the American Diabetes Association: joint position statement. Diabetes Care 2010;**33**:e147–67. doi:10.2337/dc10-9990

18

Nutrition Recommendations and Interventions for Diabetes: A position statement of the American Diabetes Association. Diabetes Care 2008;**31**:S61–78. doi:10.2337/dc08-S061

19

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

20

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

21

Willey JM, Sherwood L, Woolverton CJ, et al. Prescott's microbiology. Tenth edition, McGraw-Hill international edition. New York, NY: : McGraw-Hill Education 2017.

22

Male DK. Immunology: an illustrated outline. Sixth edition. Boca Raton, FL: : CRC Press 2021.
<https://ezproxy.lib.gla.ac.uk/login?url=https://www.taylorfrancis.com/books/9781003137658>

23

Slonczewski JL, Foster JW, Gillen KM. Microbiology: an evolving science. Third edition, International student edition. New York: : W.W. Norton 2014.

24

Murphy K, Weaver C, Mowat A, et al. Janeway's immunobiology. 9th edition. New York, NY: : Garland Science, Taylor & Francis Group, LLC 2017.

25

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

26

McInnes IB, Schett G. Pathogenetic insights from the treatment of rheumatoid arthritis. The Lancet 2017;**389**:2328–37. doi:10.1016/S0140-6736(17)31472-1

27

Smolen JS, Aletaha D, McInnes IB. Rheumatoid arthritis. The Lancet 2016;**388**:2023–38. doi:10.1016/S0140-6736(16)30173-8

28

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>

29

Introduction to the Hallmarks of Cancer - Scientific American Blog Network.

<https://blogs.scientificamerican.com/guest-blog/introduction-to-the-hallmarks-of-cancer/>

30

Molecular Causes of Cancer | BioOncology.

<https://www.biooncology.com/resources/molecular-causes-of-cancer.html>

31

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

32

Hanahan D, Weinberg RA. The Hallmarks of Cancer. Cell 2000;**100**:57–70.
doi:10.1016/S0092-8674(00)81683-9

33

Hanahan D, Weinberg RA. Hallmarks of Cancer: The Next Generation. Cell 2011;**144**:646–74. doi:10.1016/j.cell.2011.02.013

34

NIH: Unraveling the Mystery of Alzheimer's Disease.

12AD.<https://www.youtube.com/watch?v=wzkQyWpu10E>

35

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

3AD.<https://www.youtube.com/watch?v=yjXTXN4xrl8>

36

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

37

Sleegers K, Lambert J-C, Bertram L, et al. The pursuit of susceptibility genes for Alzheimer's disease: progress and prospects. *Trends in Genetics* 2010;**26**:84-93. doi:10.1016/j.tig.2009.12.004

38

Holtzman DM, Morris JC, Goate AM. Alzheimer's Disease: The Challenge of the Second Century. *Science Translational Medicine* 2011;**3**:77sr1-77sr1. doi:10.1126/scitranslmed.3002369

39

Beckerman AP, Petchey OL. *Getting started with R: an introduction for biologists*. Oxford: : Oxford University Press 2012. <https://ezproxy.lib.gla.ac.uk/login?url=https://dx.doi.org/10.1093/acprof:oso/9780199601615.001.0001>

40

Hardy-Weinberg principle.
http://www.phschool.com/science/biology_place/labbench/lab8/hardwein.html

41

Hardy-Weinberg: sample problems and solutions.
https://www.germannu.edu/documents/Hardy-WeinbergEquilibriumSept2012_002.pdf

42

An Introduction to the Micropipettor | Protocol.
<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5033/an-introduction-to-the-micropipettor>

43

Making Solutions in the Laboratory | Protocol.

<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5030/making-solutions-in-the-laboratory>

44

Learning Concentration, Measuring Volumes, and Serial Dilutions | Protocol.

<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5026/understanding-concentration-and-measuring-volumes>

45

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

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

46

Wooding S. Phenylthiocarbamide: A 75-Year Adventure in Genetics and Natural Selection. *Genetics* 2006;**172**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1456409/?tool=pmcentrez>

47

Genetics of Bitter Taste Perception | HHMI BioInteractive.

<https://www.hhmi.org/biointeractive/genetics-bitter-taste-perception>

48

Risso DS, Kozlitina J, Sainz E, et al. Genetic Variation in the TAS2R38 Bitter Taste Receptor and Smoking Behaviors. *PLOS ONE* 2016;**11**. doi:10.1371/journal.pone.0164157

49

Risso DS, Mezzavilla M, Pagani L, et al. Global diversity in the TAS2R38 bitter taste receptor: revisiting a classic evolutionary PROPosal. *Scientific Reports* 2016;**6**.

doi:10.1038/srep25506

50

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

51

PCR: The Polymerase Chain Reaction Video Protocol.
<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5056/pcr-the-polymerase-chain-reaction>

52

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

53

Polymerase chain reaction (PCR) | HHMI BioInteractive.
<https://www.hhmi.org/biointeractive/polymerase-chain-reaction-pcr>

54

Prime It DNA Game on the App Store.
<https://itunes.apple.com/us/app/university-of-glasgow-prime-it/id1250174174?mt=8>

55

Restriction Enzyme Digests | Protocol.
<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5070/restriction-enzyme-digests>

56

Restriction Endonucleases review.
<https://www.idtdna.com/pages/docs/educational-resources/restriction-endonucleases.pdf?sfvrsn=4>

57

Restriction Endonucleases.

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

58

DNA Gel Electrophoresis Video.

<http://ezproxy.lib.gla.ac.uk/login?url=https://www.jove.com/science-education/5057/dna-gel-electrophoresis>

59

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

60

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

61

10 LinkedIn Tips for Students & New Grads | Omar Garriott | Pulse | LinkedIn.

<https://www.linkedin.com/pulse/10-tips-students-new-grads-linkedin-omar-garriott>

62

Higher Flyers. Networking at a Huge Conference.

<https://www.nature.com/naturejobs/2017/170629/pdf/nj7660-691a.pdf>

63

Levine AG. Networking for nerds: find, access and land hidden game-changing career opportunities everywhere. Hoboken, New Jersey: : Wiley Blackwell 2015.

<https://www.vlebooks.com/vleweb/product/openreader?id=GlasgowUni&isbn=9781118663554>