

Earth and Environmental Sciences

Undergraduate Year 1 Indicative Reading

Below you can find indicative reading of general interest for tutorial discussions, and for modules that comprise the 'common first year' in our Earth and Environmental Sciences degrees: [Understanding the Earth](#); [The Natural Scientist's Toolkit](#) and [Practical and Professional Skills Development](#).

We would like to stress that the Department provides new students with a copy of the core text for Understanding the Earth each year (either as an e-book or a hard copy) and other publications are available through the [University Library](#). We do NOT ask that you purchase titles before your degree programme commences. This list is intended to provide insight into the kind of material you may encounter.

[General Reading](#)

- Cox P.A. (1989) The Elements. Oxford University Press, Oxford.
Diamond J. (2005) Collapse. Allen-Lane, London.
Goldacre B. (2009) Bad Science. Fourth Estate, London.
Gould S.J. (1977) Ever Since Darwin. Norton, N.Y.
Lunine J.I. (1999) Earth, evolution of a habitable world. Cambridge University Press, Cambridge.
Bryson B. (2004) A Short History of Nearly Everything. Black Swan.
Sacks O. (2001) Uncle Tungsten: Memories of a Chemical Boyhood. Picador.

[Understanding the Earth](#)

- *Marshak, S. (2019) Earth: Portrait of a Planet, 6th edition.**
***Grotzinger, JP & Jordan, TH (2020) Understanding Earth, Bedford.**
Sadava, D, Hillis, D & Heller, H (2020) Life: The Science of Biology, 12th edition, Macmillan International Higher Education.
Begon, M, Townsend, CR, & Harper, JL, Ecology: From Individuals to Ecosystems, 4th edition, Blackwell Publishing.
Craig, J, Vaughan, DJ, & Skinner, B, Earth Resources and the Environment: Pearson New International Edition.
Hewitt, C.N. and Jackson A.V. (2009) Atmospheric Sciences for Environmental Scientists, Wiley.
Houghton, J. (2002) The Physics of Atmospheres, 3rd edition Cambridge University Press.

*One of these two texts will be provided in electronic and/or paper form to all students as the first year core text.

[The Natural Scientist's Toolkit](#)

- Foundation Maths, Anthony Croft and Robert Davison, Pearson / Prentice Hall, Fourth Edition.
Engineering Mathematics K.A. Stroud and Dexter J. Booth.
Conceptual Integrated Science, Hewitt, Lyons, Suchocki and Yeh, Pearson / Prentice Hall.
Consider a spherical cow: A course in environmental problem solving, John Harte. University science books, 1988.
Engineering Mathematics Paperback by K. a Stroud, Palgrave Macmillan; 4th ed edition (1995).
Geochemistry. White, W. W. (2013) Wiley-Blackwell, p. 668.
Introduction to geochemistry: principles and application. Misra K. C. (2012) Wiley-Blackwell, p 452.
Geochemistry: Pathways and Processes, McSween H. Y. and Richardson S. M. (2003) Columbia University Press, 2nd Edition, p 432.
Python Crash Course: A Hands-On, Project-Based Introduction to Programming. No Starch Press.

[Practical and Professional Skills](#)

- Strunk W. Jr., White E.B. (1972) The elements of style. Macmillan, New York.
Schultz D. (2009) Eloquent Science. American Meteorological Society.