

Biology Extended reading list

Books

Research these on Amazon and select a few to read:

Richard Dawkins:

The Selfish Gene

The Blind Watchmaker.

Unweaving the Rainbow

Climbing Mount Improbable

The Ancestor's Tale

Steve Jones:

Y: The Descent of Men

In the Blood: God, Genes and Destiny

Almost Like a Whale: The 'Origin of Species' Updated

The Language of the genes

Coral: A pessimist in paradise

Darwin's Island: The Galapagos in the garden of England

Matt Ridley

Genome: The Autobiography of a Species in 23 Chapters

The Red Queen: Sex and the Evolution of Human Nature

The Language of Genes

Francis Crick: Discoverer of the Genetic Code

Nature Via Nurture: Genes, Experience and What Makes Us Human

James Watson:

DNA: The Secret of Life

The Double Helix: Personal Account of the Discovery of the Structure of DNA

Lewis Thomas:

The Lives of a Cell: Notes of a Biology Watcher.

The Medusa and the Snail: More Notes of a Biology Watcher Barry Gibb: *The Rough Guide to the Brain* (Rough Guides Reference Titles)

Charles Darwin: *The origin of species*

Armand Marie Leroi: *Mutants: On the Form, Varieties and Errors of the Human Body*

David S. Goodsell: *The Machinery of Life*

Ernst Mayr: *This Is Biology: The Science of the Living World*

George C. Williams: *Plan and Purpose in Nature*

Steve Pinker: *The Language Instinct*

Edward O Wilson: *The Diversity of Life*

Primo Levi: *The Periodic Table*

Richard Leaky: *The Origin of Humankind*

Bill Bryson: *A Short History of Nearly Everything*

The Newscientist books are good to dip into:

Will we ever speak dolphin

Why can't elephants jump?

Why are Orangutans orange?

Does anything eat wasps?

How to fossilise your hamster

Why don't penguins feet freeze?

Do Polar bears get lonely?

Ben Goldacre: *Bad Pharma: How drug companies mislead doctors and harm patients*
Bad Science

Subject specific recommendations

Medicine

In addition to these, all the books on Physiology, Psychology and Biochemistry will be directly relevant to a Medical course and are strongly recommended for prospective medics.

- *Ion Channels and Disease: Channelopathies*. F.M. Ashcroft.
- *Medicine*. J.S. Axford & C. O'Callaghan.
- *Clinical Sports Medicine*. P. Brukner & K. Khan.
- *Snake Oil*. J. Diamond.
- *C: Because Cowards get Cancer too...* J. Diamond.
- *In Stiches: The Highs and Lows of Life as an A and E Doctor*. N. Edwards.
- *Placebo: Mind over matter in Modern Medicine*. D. Evans.
- *Complications: A Surgeon's Notes on an Imperfect Science*. A. Gawande.
- *Better: A Surgeon's notes on Performance*. A. Gawande.
- *Becoming a Doctor: Is Medicine really the Career for you?* M. Green & T. Nolan.
- *Harvey's Heart: the Discovery of Blood Circulation (Revolutions in Science)*. A. Gregory.
- *Medical Ethics: A very short Introduction*. T. Hope.
- *Medical Ethics and Law: The Core Curriculum*. T. Hope, J. Savulescu & J. Hendrick.
- *Toxin - the cunning of bacterial poisons*. A. Lax.
- *The Rise & Fall of Modern Medicine*. J. Le Fanu.
- *Mutants: On the Form, Varieties and Errors of the Human Body*. A.M. Leroi.
- *Evolution and Healing*. R.M. Nesse & G.C. Williams.
- *Blood and Guts: A Short History of Medicine*. R. Porter.
- *The Cambridge Illustrated History of Medicine*. R. Porter.
- *Virovolution*. F. Ryan.
- *Virus X: Understanding the Real Threat of New Pandemic Plagues*. F. Ryan.
- *Diagnosis: Dispatches from the Frontlines of Medical Mysteries*. L. Sanders.
- *Every Patient Tells a Story: Medical Mysteries and the Art of Diagnosis*. L. Sanders & L. Saunders.
- *A career in Medicine: Do you have what it takes?* R. Shakur.
- *Suckers: How Alternative Medicine makes Fools of Us All*. R. Shapiro.
- *Trick or Treatment? Alternative Medicine on Trial*. S. Singh & E. Ernst.

- *The Human Mind and How to Make the Most of it.* R. Winston.
- *Human: The Definitive Guide to Our Species.* R. Winston.
- *Body: An Amazing Tour of Human Anatomy.* R. Winston.
- *Superhuman: The Awesome Power Within.* R. Winston & L. Oliwenstein.
- *Bad Medicine: Doctor's doing harm since Hippocrates.* D. Wootton.
- *The Book of the Heart.* L. Young.
- *The Immortal Life of Henrietta Lacks.* Rebecca Skloot.
- *Cancer: A Beginner's Guide.* Paul Scotting.

Biological Ethics

- *The Meaning of Things / The Reason of Things.* A.C. Grayling.

Genetics

- *The language of the genes.* S. Jones.
- *In the blood.* S. Jones.
- *Y: the Descent of Men.* S. Jones.
- *Genome.* M. Ridley.
- *Nature vs Nurture.* M. Ridley.
- *The Blooding: A true story of the Narborough Village murders.* J. Wambaugh.
- *Endless forms most beautiful.* S.B. Carroll.
- *\$1,000 Genome: The Revolution in DNA Sequencing and the New Era of Personalized Medicine.* Kevin Davies.
- *Here is a Human Being: At the Dawn of Personal Genomics.* Misha Angrist.
- *My life decoded.* Craig Venter
- *The common thread.* John Sulston and Gergina Ferry (about the Human Genome Project, UK perspective)

Conservation Biology / Ecology

- *Song of the Dodo: Island Biogeography in an Age of Extinctions.* D. Quammen.
- *The Future of Life.* E.O. Wilson.
- *The Diversity of Life.* E.O. Wilson.
- *Silent Spring.* R. Carson. *Biodiversity.* John Spicer.
- *The Way of the Panda: The Curious History of China's Political Animal.* Henry Nicholls.

Behaviour and Behavioural Ecology

- *How Monkeys See the World.* D.L. Cheney & R.M. Seyfarth.
- *Promiscuity.* T. Birkhead.
- *Primate's Memoir.* R. Sapolsky.
- *Monkeyluv.* R. Sapolsky.
- *How Many Friends Does One Person Need?: Dunbar's Number and Other Evolutionary Quirks.* Robin Dunbar.

Evolution

- *The Beak of the Finch*. J. Weiner.
- *Almost Like a Whale*. S. Jones.
- *A Devil's Chaplain*. R. Dawkins.
- *The Selfish Gene*. R. Dawkins.
- *The Blind Watchmaker*. R. Dawkins.
- *Wonderful Life*. S.J. Gould.
- *Dinosaur in a Haystack*. S.J. Gould.
- *Trilobite*. R.A. Fortey.
- *The Rise and Fall of the Third Chimpanzee*. J. Diamond.
- *The Ancestor's Tale*. R. Dawkins.
- *The Thinking Ape: Evolutionary Origins of Intelligence*. R. Byrne.
- *Evolution, the Triumph of an Idea*. C. Zimmer.
- *The Kiwi's Egg; Charles Darwin and Natural Selection*. D. Quammen.
- *The Greatest Show on Earth*. R. Dawkins.
- *Darwin's Dangerous Idea*. D.C. Dennett.
- *The origin of our species*. Chris Stringer.
- *Supercooperators: Evolution, Altruism and Human Behaviour or, Why We Need Each Other to Succeed*. M. Nowak & R. Highfield..

Physiology

- *Why Elephants Have Big Ears*. C. Lavers.
- *The Energy of Life*. G. Brown.
- *Keep on Running*. E. Newsholme.
- *Power, sex, suicide: mitochondria and the meaning of life*. N. Lane.
- *Oxygen*. N. Lane.
- *The Hot Zone*. R. Preston.
- *Life at the Extremes*. F. Ashcroft.
- *Life in a Shell*. Donald C. Jackson. Harvard University Press.

Immunology

- *Friendly Fire: Explaining Auto-immune disease*. E. Isenerg.

Psychology and the Brain

- *The Man Who Mistook His Wife For a Hat*. O. Sacks.
- *An Anthropologist on Mars*. O. Sacks.
- *Seeing Voices*. O. Sacks.
- *A Leg to Stand On*. O. Sacks.
- *Awakenings*. O. Sacks.
- *Migraine*. O. Sacks.
- *The Man who Forgot how to Read*. O. Sacks.
- *Mapping the Mind*. R. Carter.
- *How the Mind Works*. S. Pinker.
- *The Language Instinct*. S. Pinker.
- *The Brain Story*. S. Greenfield.
- *Evolutionary Psychology*. Robin Dunbar, Louise Barrett and John Lycett.

Biochemistry

- *The Chemistry of Life*. S. Rose.
- *Foundations of Chemical Biology*. C.M. Dobson, J.A. Gerrard & A.J. Pratt
- *Atkin's Molecules*. P. Atkins.
- *Life from an RNA World: The Ancestor within*. Michael Yarus.