

SEMESTER I & II
GET1020 – DARWIN AND EVOLUTION

Prerequisite: None

Workload: 46 lecture hours

Public understanding of Darwin and evolution remains a serious problem. What most people think they know about Darwin and his famous book 'On the origin of species' is wrong. This module, requiring no background in biology or the history of science, will provide a solid background for understanding how the history of biology actually unfolded through the life and work of its principal thinkers. Along the way there is a lot of myth busting.

The course covers the history of geology, paleontology and biology from the 1700s to the 20th century. The central focus is on the life and work of Charles Darwin (1809-1882) and how biological evolution was uncovered and accepted by the international scientific community in the 19th century, and beyond. There are case studies on how to assess historical claims and evidence.

S/N	Topics	Lecture hours
1	The age of the Earth & fossil record 1500-1830. Part 1	2 h
2	The age of the Earth & fossil record 1500-1830. Part 2	2 h
3	Darwin's childhood & education	2 h
4	The voyage of the <i>Beagle</i> 1	2 h
5	The voyage of the <i>Beagle</i> 2	2 h
6	The beginnings of a theory	2 h
7	Another naturalist: Alfred Russel Wallace	2 h
8	Wallace in the Malay Archipelago	2 h
9	Did Darwin delay?	2 h
10	<i>The Origin of Species</i>	2 h
11	Reception of the <i>Origin</i> . A conflict of science and religion?	2 h
12	Victorian naturalism	2h
13	<i>The Descent of man</i>	2 h
14	The sex life of plants	2 h
15	Darwin and religion	2 h
16	Evolution after Darwin: Mendel and the beginnings of genetics	2 h
17	Discovering the origins of mankind	2 h
18	New theories of human evolution: The cooking ape hypothesis (JvW)	2 h
19	Modern opponents of evolution	2 h
20	Lecture TBA	2 h
21	The last 13,000 years of human history	2 h
22	Modern opponents of evolution	2 h
23	The principles of evolution, or, what's it all about?	2 h
Total lecture hours:		46 h

TEXT BOOK (Recommended texts):

- Jonathan Miller, *Darwin for beginners*. 1982.
- John van Wyhe, *The Darwin experience*. 2008.
- John van Wyhe, *Dispelling the darkness: Voyage in the Malay Archipelago and the Discovery of Evolution by Wallace and Darwin*. 2013.
- Charles Darwin, *Autobiography*.
- Martin Rudwick, *The meaning of fossils: Episodes in the history of palaeontology*. 2nd edn. 1985.
- Charles Darwin, *Journal of Researches (Voyage of the Beagle)*.
- Charles Darwin, *On the origin of species*, 1859, Introduction.
- Janet Browne, *Darwin's Origin of species: A biography*. 2006.

Readings will be provided online or on IVLE.

MODE OF ASSESSMENT: 50% Continual Assessment + 50% Final Examination

MODULE CO-ORDINATOR & LECTURE:

Dr. John van Wyhe (Tel: 6601 1163; Email: dbsjmvw@nus.edu.sg)

Updated on 21 June 2017