# HMED B12: Man's Place in Nature Session 2003- 2004

**Professor Janet Browne** 

Office Hours: Term 2: Fridays 2-3pm

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This introductory course covers the main figures and themes involved in the idea of evolution in Western history. It takes a wide view, ranging from early creation myths and the "apes and angels" controversies around Darwin's work, to early  $20^{th}$  century debates about eugenics and intelligence. Previous knowledge of the subject is not necessary. The central feature is the way concepts about human beings have changed (hence the course title and the picture above, taken from T.H. Huxley's book.) There are 20 sessions all in the second term. One essay is due, which carries 30% of the total marks. The exam is in the third term.

The course is suitable for  $2^{nd}$  and  $3^{rd}$  year students in Human Sciences, Faculty of Life Sciences, and Intercalated History of Medicine BSc students.

It is not suitable for Science and Technology Studies students.

(HMED B12, ½ unit)

# **MONDAYS AND FRIDAYS 1-2pm**

**Lecture Room,** 2<sup>nd</sup> Floor Euston House, 24 Eversholt Street London, NW1

### **HMED B12: Man's Place in Nature**

# MONDAYS AND FRIDAYS 1-2pm Lecture Room

# 2<sup>nd</sup> Floor Euston House 24 Eversholt Street London NW1

#### Lecture Schedule 2003 – 2004

26 September Introduction and organisation

2004

12 January Introduction (recap)

16 January Creation myths

19 January The Static Universe

23 January Revolution and Evolution

26 January Man's Place in Nature, I

30 January Genesis and geology

2 February Just before Darwin: Vestiges

6 February Darwin overview - video showing of "The Devil's Chaplain"

9 February Darwin, the Beagle voyage and After

13 February Darwin's moon: A.R. Wallace

16 February No lecture

20 February No lecture

23 February The Origin of Species

27 February Apes and Angels

1 March Man's Place in Nature, II

5 March The problem of race

8 March Fingerprints to genes

12 March Eugenics

15 March Measuring intelligence

19 March Breaking the code – video showing of "Life Story"

22 March Revision

26 March Repeat showing of videos 2.00-4.00

<sup>-</sup> Essay due on 23 February, please -

#### **Teaching and Office Locations:**

All teaching is in the **Lecture Room on the Second Floor of Euston House, Eversholt Street.** Security is very tight. Please bear with us – the building is the headquarters of a computer firm. You must always bring your card with you and be ready to show it at the door. Security Cards and Wellcome Library Cards will be issued during the first two weeks of term. We shall need 2 passport photographs with your name on the back. Many thanks.

The Wellcome Library is on the **Second Floor, 183 Euston Road.** It is a private library (not UCL) and houses a large collection of historical books and journals in science and medicine, biographies and reference works, as well as a special Student Loan Collection for your use. Registration can take place at any time. You can also use the main collections but the books are not for borrowing. If you are stuck, please ask the library staff for help. They have dealt with this course for years and are very knowledgeable.

Professor Browne is usually available in her room (Third Floor, Room 333) without appointment on Fridays, before and after lectures 11:30 - 14:30. Other times please leave a message with Bettina Plettenberg (020 7679 8114).

Janet Browne

# **B12 Reading Assignments 2003-2004**

All items are available for borrowing from the Wellcome Student Loan collection.

One copy of each item is also kept as a REFERENCE copy for use in the Wellcome Library ONLY.

Supplementary readings are in the box files marked B12. These include extracts from original books and papers.

Take the chance to browse in the Student Loan collection and use some of the other books that are there.

Good introductory texts that explain something of the basic ideas and methods of history of science and medicine are:

Jaclyn Duffin, *History of Medicine: a Scandalously Short Introduction*, University of Toronto Press, 1999.

John Waller, *Fabulous Science: Fact & fiction in the history of scientific discovery*, Oxford University Press, 2002.

Recommended textbooks (available for loan in the Wellcome) are:

Peter Bowler, *Evolution: The History of an Idea* (California, third edition 2003) David Oldroyd, *Darwinian Impacts* (Milton Keynes, out of print) Steven J. Gould, *The Mismeasure of Man* (Penguin, 1981) David Young, *The Discovery of Evolution* (Cambridge, 1992) John C. Greene, *The Death of Adam* (Iowa, 1959)

There are some duplicated chapters of Oldroyd in the xerox boxes labelled OLD. All references to Bowler are to the 2003 edition.

# 12 January Introduction

#### 16 January Creation Myths

Genesis chapter 1 (xerox in Box Files)
J. Browne, Noah's Flood (in xerox box)

#### 19 January The Static Universe

Oldroyd, Darwinian Impacts, 1-23

Bowler, Evolution, ch 2

Further reading: M. Fournier, Fabric of Life (Baltimore, 1996) 49-91

A.R. Hall 'Leeuwenhoek' (in xerox box)

#### 23 January Revolution and Evolution

Oldroyd, Darwinian Impacts, 29-37

Bowler, Evolution, ch 3

R. Porter, 'Erasmus Darwin: Doctor of evolution' in History Humanity and Evolution,

ed. J.R. Moore (Cambridge, 1989)

Further reading: L. Jordanova, *Lamarck* (Oxford)

#### 26 January Man's Place in Nature, I

Oldroyd, Darwinian Impacts, 61-70

Bowler, Evolution, ch 4, 96-129

Mary Shelley, Frankenstein (Penguin)

Further reading: T.R. Malthus An essay on the principle of population, ed. A. Flew (Penguin)

W. Paley. Extracts from *Natural Theology* (in xerox box)

#### 30 January Genesis and geology

Bowler, Evolution, recap 1-3, ch 4, 129-134

Oldroyd, Darwinian Impacts, 37-46

Charles Lyell, Extracts from *Principles of Geology* (in xerox box)

Further reading: M.J.S. Rudwick, *The Meaning of fossils* (Science History Publications, 1976)

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Oldroyd, Darwinian Impacts, 54-60

Bowler, Evolution, ch 4, 134-140

Further reading: R. Chambers, Vestiges, with an introduction by J.A. Secord (Chicago, 1994)

T.H. Huxley and A. Sedgwick, reviews of Vestiges (in xerox box)

J.A. Secord, 'Behind the veil', in History, Humanity and Evolution,

ed. J.R. Moore (Cambridge 1989)

# 6 February Darwin overview - video showing of "The Devil's Chaplain"

Video about Darwin, *The Devil's Chaplain*, TV programme presented by A. Desmond and J. Moore, authors of *Darwin* (Penguin, 1990)

Further reading: A. Desmond and J. Moore, *Darwin* (Penguin 1990, chap 18, pp. 256-79)

#### 9 February Darwin, the *Beagle* voyage and after

Oldroyd, Darwinian Impacts, 74-82.

Bowler, Evolution, ch 5

**Further reading:** J. Browne and M. Neve, *Voyage of the Beagle* (Penguin), Introduction **or** J. Browne, *Voyaging* (Cape, 1995, as much as you can)

#### 13 February Darwin's moon: A.R. Wallace

Oldroyd, *Darwinian Impacts*, chapters 8 and 9.

A.R. Wallace, 'On the Tendency of Species', reprinted from *Journal of the Linnean Society*, 1858 (xerox in Box files)

J.R. Durant 'Scientific Naturalism' (in xerox box)

#### 16 February No lecture

#### 20 February No lecture

#### - ESSAYS DUE -

# 23 February The Origin of Species

C. Darwin, Origin of Species (any edition) Darwin's Introduction, Chapter 4 and Conclusion.

### 27 February Apes and Angels

Oldroyd, Darwinian Impacts, chapter 14.

Bowler, Evolution, ch 6, 177-207

Further reading: J. H. Brooke, Science and Religion (Cambridge, 1991) chapter 8.

David C. Hull, The Reception of Darwin's Theory of Evolution

(Cambridge, 1973) Introduction (xerox in Box file)

#### 1 March Man's Place in Nature, II

Oldroyd, Darwinian Impacts, 298-308.

Bowler, Evolution, ch 6, 207-223

C. Darwin, Extracts from *Descent of Man* (xerox in Box file)

Further reading: A. Desmond, *Huxley* (M. Joseph, 1997)

H.G. Wells, The Time Machine (1935)

#### 5 March The problem of race

Bowler, Evolution, chapter 10.

S.J. Gould, Mismeasure of Man, 30-72.

Further reading: D.A. Lorimer, Colour, class and the Victorians (Leicester, 1978)

N. Stepan, The Idea of Race in Science (London, 1982)

or H. Augstein, Race and the Origins of an Idea (Bristol, 1996)

#### 8 March Fingerprints to genes

Bowler, Evolution, ch 7

Oldroyd, Darwinian Impacts, 158-73.

**Further reading:** P. Bowler, *The Mendelian Revolution* (Baltimore, 1989)

M. Neve and M. Jay eds. 1900: A fin de siecle Reader (Penguin 2000)

#### 12 March Eugenics

Gould, Mismeasure of Man, 73-145.

P. Bowler, *The Mendelian Revolution* (Baltimore, 1989) chapter 8.

Further reading: Daniel Kevles, In the Name of Eugenics (New York, 1985)

Aldous Huxley, Brave New World (1932)

D. MacKenzie, *Eugenics in Britain* (xerox in box file)

#### 15 March Measuring intelligence

Gould, Mismeasure of Man, chapter 5.

#### 19 March Breaking the code

Video showing of Life Story, TV programme about Watson, Crick, Franklin and Wilkins.

P. Bowler, *The Mendelian Revolution* (Baltimore, 1989) chapter 9.

Paul Strathern, The Big Idea, Crick, Watson and DNA (Arrow, 1997)

#### 22 March Revision

#### 26 March Repeat showing of videos 2.00-4.00

# HMED B12: Man's Place in Nature Essay Question, due 23 February 2004

This independent piece of coursework counts for 30% of your total mark. It should include evidence of wider reading around the subject, ie. you should know what some acknowledged experts on the subject have said. Browse in the Wellcome Student Loan collection and consult the computer catalogue for books in the main collection as well. For this essay a useful keyword is "science fiction".

A history essay should set the book in its historical and scientific context. Find out about the author's life, politics, intentions, why the book was written, what sort of metaphors about society (if any) it relies on, what morals are expressed, etc. The usual structure of such an essay would be-- an opening paragraph, a very short summary of the plot, a brief account of the author, an account of the historical circumstances, some key moments in the story with your comments, some concluding thoughts. The aim is to give you practice in presenting and summarising complex materials. You are encouraged to express your own opinions. Length about 4 sides of A4 please (no more than 6), either handwriting or typing is welcome. Copies of the set texts are in the Wellcome Student Loan collection.

Choose ONE of the following texts and answer the following question:

'Designing descendents'. How did Mary Shelley / H.G. Wells / Aldous Huxley describe the possible futures of the human race?

Mary Shelley, Frankenstein (1818) By special request only:

H.G. Wells The Time Machine (1895) Phillip Dick Do Androids Dream of Electric Sheep

Aldous Huxley Brave New World (1932) (1968)

Suggested readings (Not all of them! Use the web to find sources, too)

Jon Turney, *Frankenstein's Footsteps: Science, Genetics and Popular Culture*. Yale University Press, 1998 David Oldroyd, *Darwinian Impacts* ch 22 'Darwinism and Literature'

Daniel Kevles, In the Name of Eugenics. New York, 1986, 1995

M.Neve and N.Jay eds. 1900. A fin de siecle reader. London, 2000

Peter Kemp, H.G. Wells and the culminating Ape; biological themes and imaginative obsessions. London, 1982

Lane Lester and James Hefley, *Human Cloning: When Science Fiction becomes Reality*. London, 1999 Rosemary Haynes, *From Faust to Strangelove: Representations of the Scientist in Western Literature*. Baltimore, 1994.

Chris Baldick. *In Frankenstein's Shadow: Myth, Monstrosity, and Nineteenth-Century Writing.* Oxford University Press, 1990.

Susan Merrill Squier. *Babies in Bottles: Twentieth-Century Visions of Reproductive Technology*. Rutgers University Press, 1994.

Martin Tropp. *Images of Fear: How Horror Stories Helped Shape Modern Culture*. McFarland & Company, 1999.

**Please note that UCL takes plagiarism very seriously.** This is particularly important in a history course where you are heavily penalised for copying out even short statements from someone's book or article. You are meant to think your own thoughts not someone else's. Please put it in your own words or make it a quotation and give your source in a footnote. Otherwise paraphrase eg. "As Tony Blair says in *The Third Way....*"

Forms for you to sign and attach to your essay about plagiarism are available from your departmental secretary. Otherwise preface your essay with a signed statement "This essay is entirely my own work."

#### **B12** "Man's Place in Nature"

#### **Supplementary Reading List**

These are for dipping into and for interest. They are mostly in the Wellcome Student Loan Collection. The remainder are in the ordinary Wellcome collection. None are compulsory.

Allen, David E. The Naturalist in Britain. Princeton.

Berra, Tim. Evolution and the Myth of creationism. Stanford.

Bowler, Peter J. Theories of Human Evolution. A century of debate. John Hopkins Press.

Browne, Janet. Charles Darwin: Voyaging and Charles Darwin: the Power of Place,

1996 and 2003.

Brooke, John Hedley. Science and Religion: Some historical perspectives. Cambridge UP.

Crick, Francis. What mad pursuit. Penguin, 1990.

Darwin, Charles. Autobiography. reprint edition, Dover.

Dawkins, Richard. The Blind Watchmaker. Penguin, 1988.

Desmond, Adrian and Moore, James. <u>Darwin.</u> Penguin, 1992.

Desmond, Adrian. Huxley. 2. vols, Michael Joseph.

Diamond, Jared. The Rise and Fall of the Third Chimpanzee. Vintage.

Farley, John. The Spontaneous Generation Controversy. Hopkins.

Greene, John C. The death of Adam. Hopkins.

Jardine, N, Secord, J.A. and Spary, E. <u>Cultures of Natural History</u>. Cambridge UP.

Johanson, Donald C. and Edey, Maitland A. <u>Lucy: the beginning of humankind.</u> Penguin.

Jones, Steve. Almost like a Whale: The Origin of Species. updated, London 1999.

Olby, R. The Path to the Double Helix.

Porter, Duncan M. and Graham, Peter W. (Eds.) The portable Darwin. Penguin.

Raby, Peter. Alfred Russel Wallace.

Ruse, Michael. The Darwinian Revolution.

Stocking, George. Victorian Anthropology.

Watson, James D. <u>The double helix</u>. Penguin, 1970.

Young, Robert M. <u>Darwin's metaphor</u>. Nature's place in Victorian culture. Cambridge UP.