

HSTC 2204 WINTER 2016
THE DARWINIAN REVOLUTION

Instructor Carlos Mariscal (mariscal@dal.ca)

Office Hours 5-6 Wednesdays
McCain 3131

Course Goals

The Darwinian Revolution marks one of the greatest changes in our conception of nature and our place within it, challenging received views on religion, history, culture, teleology, essence, knowledge, and ethics. This class explores the historical and philosophical background to Darwin's great contribution as well as its consequences for science, society, and beyond.

Reading

There is no required text for this class. But Peter Bowler's *Evolution: The History of an Idea* (978-0-520-26128-0) and Laland & Brown's *Sense & Nonsense: Evolutionary Perspectives on Human Behavior* (978-0-199-58696-7) are recommended. All readings will be provided in class.

Communication

We urge you to send comments, questions, and concerns via email. One of us will respond within a day or so.

Academic Disabilities and Discrimination

If you have or believe you have a disability and would benefit from any accommodations, you may wish to self-identify by contacting the Student Disability Access Office at (902) 494-2836 as soon as possible to better ensure that such accommodations can be implemented in a timely fashion. It is your responsibility to inform me or an SDAO representative in a timely manner if services/accommodations provided are not meeting your needs.



Evaluation

- 35% Final Paper (3500-5000 words)
- 35% Short Assignments (no more than 300 words)
- 20% Presentation
- 10% Informed Class Participation

Final Paper

The final paper in this class will be on a topic of the students choosing. The paper topic must be approved by one of the instructors, the paper must make essential contact with at least one of the class readings, and it must relate to one or more of the ideas in this course. The best papers will make an original argument showing an understanding and synthesis of the material.

Presentation

For each reading, one student must introduce and help guide a discussion of the relevant reading. Handouts and outside reading are encouraged. Performance will be assessed by demonstrated depth of understanding, .

Informed Class Participation

Contribution to the class discussion is encouraged. If you have difficulties speaking up in class, credit will also be given for online contributions.

Schedule

DARWINIAN EVOLUTION

TOPIC	DATE	READINGS
Introduction & Course Overview	Jan 7	Syllabus,
What Darwin Thought	Jan 14	Darwin <i>Origin</i> , Chs. 3 & 4 Bowler – <i>Evolution</i> ('A New Classification' p. 59-63, 'Erasmus Darwin & Lamarck' p. 76-84,) Bowler – <i>Evolution</i> Ch. 6 "The Origins of Darwinism"
The Eclipse of Darwinism and the Modern Synthesis	Jan 21	Bowler – <i>Evolution</i> Ch. 9 "The Eclipse of Darwinism" Plutynski – "The Modern Synthesis"
The Received View	Jan 28	Sterelny & Griffiths – "The Received View" Laland et. al. & Wray et. al. "Does evolutionary theory need a rethink?"

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TOPIC	DATE	READINGS
Darwinism and Religion	Feb 4	Bowler – <i>Evolution</i> Ch. 8 "Religious and Moral Problems" Excerpts from the <i>Dover Trial</i>
Adaptationism, Teleology, and The Great Chain of Being	Feb 11	Mayr – "The Idea of Teleology" Gould & Lewontin – "The Spandrels of San Marcos..."
Essences, Typological, and Population Thinking	Feb 18	Mayr – "Typological versus population thinking" Gannett – To Be Announced
Gradulism, Punctuated Equilibria	Feb 25	Dawkins – "Accumulating Small Change" Eldredge & Gould – "Punctuated Equilibrium comes of Age."
Genes, Groups, Species	Mar 4	Dawkins – selections from <i>The Selfish Gene</i> Gould – "Fallacy of Selfish Genes"
Gaia & Chopping Down the Tree of Life (Guest Lecture)	Mar 11	Doolittle – "Uprooting the tree of life" Doolittle – To Be Announced

DARWINIAN EXTENSIONS

TOPIC	DATE	READINGS
Evolutionary Ethics, Social Darwinism and Eugenics	Mar 18	Bowler – <i>Evolution</i> Ch. 10 "The Social Implications of Evolutionism" To Be Announced
Evolution & Human Behavior	Mar 25	Laland & Brown – "Evolutionary Psychology" Sterelny – <i>The Evolved Apprentice</i> ch. ???
Cultural Evolution	Apr 1	Dawkins – "Memes: the new replicators" Laland & Brown – "Gene-culture coevolution"
To Infinite Evolution... <i>and Beyond!</i>	Apr 8	Callebaut – "Beyond Generalized Darwinism" Chaisson – "Evolution, Broadly Considered"