

**N.B.: Although your access to readings beyond Appleman is electronic, I expect you to print out each of these readings and bring them to class, or have computer access to them during class.*

- We will meet twice a week. Generally, each class will be devoted to a lecture and two to three short student-led presentations and discussions (see below). Regular attendance for both lectures and discussions is absolutely essential to your success in the course. Your **class participation** (worth 10% of your final grade) will be assessed according to your *active, regular, informed* contributions to discussions. Arriving late or leaving early, not keeping up with the readings, or coming to class unprepared is not only disrespectful to the class but will have a negative impact on your success in the course. Exams will test your knowledge of both lecture material and course readings, so keeping up with the readings is essential.
- Your **Critical Evaluation Assignment** will be done **in pairs** and will consist of three components: **1) a five-minute presentation, 2) a one-page critique of one of the course readings, and 3) a self-assessment and peer review.**

1) Presentation: Each **five-minute** presentation will consist of a critical evaluation of one of that week's required **secondary source** readings, which will be followed by a student-led discussion. In your presentation you should clearly identify the **main argument** of the reading, critically assessing the strength of the argument and the evidence used to support it. You must also prepare at least **three questions** to stimulate discussion and debate about the reading. The work in preparing and doing each presentation should be shared equally between members of the pair. I will allot roughly 15-20 minutes for each presentation slot during class.

2) One-Page Written Critique: The one-page critique of the reading **must** be handed out to the entire class and myself just before the presentation. This should be single-spaced, around 5 paragraphs in length, and should begin with a very brief discussion of the contents of the reading. It should outline the main argument of the reading as well as its strengths and weaknesses. I can make copies to distribute to the class if you email me the critique (as a doc or pdf file) by 1pm the day of the presentation. This handout should also include the discussion questions.

3) Self-Assessment and Peer Review: Within one week of your presentation, each member of the pair will email me a) a **self assessment** of the presentation—a few sentences on what you felt were the strengths and weaknesses of your contribution to the presentation and b) a **peer review** of your partner's contribution to the presentation—in a few sentences. You will not receive a grade for your critique and presentation until I receive this. This component will not be graded.

The Critical Evaluation Assignments are opportunities for you to engage with the course material more closely, to develop your skills in critical reading and oral presentation, and to work collaboratively with your peers. You will be evaluated according to the clarity, organization, and effort of your presentation, the quality of your discussion questions, and your written one-page evaluation. I will post a sign-up sheet during the first week of classes.

- The **research proposal and annotated bibliography** will form the basis of your research essay, and is due in class on **February 4**. If it is submitted after class, it will be considered late. Your

proposal should outline a specific historical question you wish to explore in your research paper. You should clearly identify the *topic* of your research and contain a statement of your working *thesis*. It should also include a specific **plan** for the essay. The topic will be of your own choosing, but I expect you to **consult with me** as you begin to prepare for the proposal. The proposal itself should be one page in length (double-spaced) and have a bibliography on a separate page. The preliminary bibliography should include at least six items relevant to your topic, and at least two of the items should be primary sources. Your annotations should summarize the source and explain why it is relevant to your topic.

- **Book Critique:** I will distribute a list of about 30 books related to the course, grouped according to topic. They all can be found in the University of Guelph library system. Your task will be to write a critique of the book in the form of answers to a set of questions that I will distribute on a worksheet. On **November 17 in class**, you will form groups according to the books you chose and share your critique with your peers. At the end of that class you will hand in your critique to me for grading. I will grade your critique according to how carefully you have read the book and how well you engaged with the worksheet questions—i.e. how well you justify your responses—and finally, according to your participation in the group discussion on November 12. Keep in mind a critique is more than a summary—your aim is to critically evaluate the book. This does not mean you are criticizing it, rather you are analyzing it according to its argument and its evidence.
- Your **research paper** is due **March 27**, in class; it will be considered late after that time. It must be at least 12 pages in length (3000 words) but no more than 14 pages in length (3500 words). Please use double-spacing and 12pt font. I will require you to submit the hard copy of your original research proposal and bibliography (with my comments) along with your research essay. Your paper must have at least **two primary sources** and at least **eight secondary sources**. More specific instructions to follow.

Lecture Schedule

12 January **Introduction to the Course**

1. CULTURES OF NATURAL HISTORY

14 January **European Colonial Expansion** (*no presentation today*)

David Mackay (1996). “Agents of empire: The Banksian collectors and evaluation of new lands,” in David Philip Miller and Peter Hanns Reill (eds.) *Visions of Empire: Voyages, Botany, and Representations of Nature*. Cambridge University Press, pp. 21-37.

19 January **Practices and Institutions**

Emma C. Spary. (1999). “The ‘nature’ of the Enlightenment, in William Clark, Jan Golinski, and Simon Schaffer (eds.) *The Sciences in Enlightened Europe*. Chicago: University of Chicago Press, pp. 272-306.

Kapil Raj. (2007). “Surgeons, fakirs, merchants, and craftspeople: Making L’Empereur’s *Jardin* in Early Modern South Asia,” in Londa Schiebinger and Claudia Swan (eds.) *Colonial Botany: Science, Commerce, and Politics in the Early Modern World*. Philadelphia: University of Pennsylvania Press, pp. 252-269.

2. NATURAL HISTORY IN FRANCE AND BRITAIN

21 January *Histoire Naturelle*

Olivier Lagueux (2003). "Geoffroy's Giraffe: The Hagiography of a Charismatic Mammal," *Journal of the History of Biology* 36(2): 225-247.

Primary Source:

Jean Baptiste Pierre Antoine de Monet Lamarck (1809) *Zoological Philosophy* (Appleman pp. 44-49).

26 January **Natural Theology**

Adam R. Shapiro (2009). "William Paley's Lost 'Intelligent Design'," *History and Philosophy of the Life Sciences* 31(1): 55-77.

Jonanthan R. Topham. "Science, natural theology, and the practice of Christian piety in early-nineteenth-century religious magazines," in Geoffrey Cantor and Sally Shuttleworth (eds) *Science Serialized: Representations of the Sciences in Nineteenth-Century Periodicals* (Cambridge, MA: MIT Press, 2004), 37-66.

Primary Source:

William Paley (1802) *Natural Theology* (Appleman pp. 41-44).

3. DARWIN'S EDUCATION & SOCIAL MILIEUX

28 January **British Science and Society in the 1830s**

Adrian Desmond (1985). "Richard Owen's reaction to transmutation in the 1830s" *British Journal for the History of Science* 18(1): 25-50.

James Secord (1991). "Edinburgh Lamarckians: Robert Jameson and Robert E. Grant," *Journal of the History of Biology* 24(1): 1-18.

2 February **Darwin's Education**

Aileen Fyfe. (1997). "The reception of William Paley's Natural Theology in the University of Cambridge," *British Journal for the History of Science* 30: 321-35.

Stuart Max Walters and Ann Stow. (2001). "Educating Charles Darwin – and others," in S.M. Walters and A. Stow (eds.) *Darwin's Mentor: John Stevens Henslow, 1796-1861*. Cambridge University Press, pp. 78-107.

Primary Source:

Charles Lyell (1830-33) *Principles of Geology* (Appleman pp. 49-52).

4. DARWIN'S PATH TO PUBLICATION

4 February **1831 to 1844: Beagle Voyage, Chambers**

Jim Endersby (2009). "Sympathetic Science: Charles Darwin, Joseph Hooker, and the Passions of the Victorian Naturalists," *Victorian Studies* 51(2): 299-320.

Primary Sources:

Thomas Robert Malthus (1798) *An Essay on the Principle of Population* (Appleman pp. 39-40).

Charles Darwin (1845). Selections from *The Voyage of the Beagle* (Appleman, pp. 67-81).
William Whewell (1833). *Astronomy and General Physics Considered with Reference to Natural Theology*
(Excerpt) (Appleman, pp. 57-61).

RESEARCH PROPOSAL DUE TODAY

9 February 1844 to 1859: Barnacles, Wallace

Martin J.S. Rudwick (1982). "Charles Darwin in London: The integration of public and private science," *Isis* 73(2): 186-206.

Melinda Fagan (2007). "Wallace, Darwin, and the practice of natural history," *Journal of the History of Biology* 40(4): 601-635.

Primary Sources:

Charles Darwin (1859). Selections from *The Origin of Species*. (Appleman pp. 95-174).

Alfred Russel Wallace (1858). "On the tendency of varieties to depart indefinitely from the original type" (Appleman, pp. 61-64).

11 February MIDTERM EXAM IN CLASS

15-19 February Reading Week

5. DARWIN'S SACRED CAUSE: DARWIN ON HUMAN EVOLUTION

23 February Reception: Religious Debates

Bernard Lightman (2001). "Victorian sciences and religions: Discordant harmonies" *Osiris* (2nd series) 16: 343-366.

Frank A.J.L. James (2005). "An 'Open Clash between Science and the Church?': Wilberforce, Huxley, and Hooker on Darwin at the British Association, 1860" in David M. Knight and Matthew D. Eddy (eds.) *Science and Beliefs: From Natural Philosophy to Natural Science, 1700-1900*. London: Ashgate, pp. 171-193.

Primary Sources:

Adam Sedgwick (1860). "Objections to Mr. Darwin's Theory of the Origin of Species" (Appleman, pp. 265-267).

Richard Owen (1860). "Darwin on the Origin of Species" (Appleman, pp. 267-270).

25 February *The Descent of Man*

Stephen G. Alter (2007). "Race, language, and mental evolution in Darwin's *Descent of Man*" *Journal of the History of the Behavioral Sciences* 43(3): 239-255.

Gregory Radick (2000). "Language, brain function, and human origins in the Victorian debates on evolution," *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 31(1): 55-75.

Primary Sources:

Charles Darwin (1871) Selections from *The Descent of Man* (Appleman pp. 173-254).

Thomas Henry Huxley (1863). "On the Relations of Man to the Lower Animals" (Appleman pp. 280-285).

6. FILM AS HISTORY: *Creation* (2009)

1 March *Creation* (2009)

3 March Discussion and Analysis

7. RECEPTION: DARWINISMS & VICTORIAN CULTURE

8 March Darwin and Literature

Gowan Dawson (2005). "Aestheticism, immorality, and the reception of Darwinism in Victorian Britain" in Anne-Julia Zwierlein (ed). *Unmapped Countries: Biological Visions in Nineteenth-Century Literature and Culture*. Anthem Press, pp. 43-54.

Piers Hale (2003). "Labor and the human relationship with nature: The naturalization of politics in the work of Thomas Henry Huxley, Herbert George Wells, and William Morris," *Journal of the History of Biology* 36(2): 249-284.

10 March Darwin's Popular Image

Janet Browne (2003). "Charles Darwin as a Celebrity," *Science in Context* 16(1): 175-194.

Jonathan Smith (2009). "Evolutionary aesthetics and Victorian visual culture," in Jonathan Smith, *Endless Forms: Charles Darwin, Natural Science, and the Visual Arts*. New Haven: Yale University Press, pp. 236-251.

8. CULTURAL STATUS OF SCIENCE IN VICTORIAN BRITAIN

15 March Popularization of Science

Joel S. Schwartz (1999). "Robert Chambers and Thomas Henry Huxley, Science Correspondents: The Popularization and Dissemination of Nineteenth Century Natural Science" *Journal of the History of Biology* 32(2): 343-383.

Bernard Lightman (1997). "'The voices of nature': popularizing Victorian science," in *Victorian Science in Context* (ed. Bernard Lightman). Chicago: University of Chicago Press, pp. 187-211.

17 March Science and Education

Graeme Gooday (1991). "'Nature' in the laboratory: Domestication and Discipline with the Microscope in Victorian Life Science" *British Journal for the History of Science* 24(3): 307-341.

Suzanne Le-May Sheffield (2004). "The 'Empty-Headed Beauty' and the 'Sweet Girl Graduate': Women's Science Education in Punch, 1860-1890" in Louise Henson, Geoffrey Cantor, Gowan Dawson, Richard Noakes, Sally Shuttleworth, and Jonathan R. Topham (eds.) *Culture and Science in the Nineteenth-Century Media*. London: Ashgate, pp. 15-28.

9. BOOK CRITIQUES & EUGENICS

22 March *Book Critiques*

24 March Social Darwinism and Eugenics

Thomas Gondermann. "Progression and retrogression: Herbert Spencer's explanations of inequality," *History of the Human Sciences* (2007) 20(3): 21-40.

Wendy Kline, "Motherhood, morality, and the "moron": The emergence of eugenics in America" in *Building a Better Race: Gender, Sexuality, and Eugenics from the Turn of the Century to the Baby Boom*, pp. 7-31 (Berkeley: University of California Press, 2001).

10. MODERN EVOLUTIONARY DEBATES: AMERICAN FUNDAMENTALISM, CREATIONISM, and EDUCATION

29 March **The Scopes Trial**

Edward J. Larson (2003). "The Scopes Trial in history and legend," in David C. Lindberg and Ronald L. Numbers (eds.) *When Science and Christianity Meet*. University of Chicago Press, pp. 245-264.

Andrew Nolan (2007). "Making modern men: The Scopes Trial, Masculinity, and Progress in the 1920s United States," *Gender & History* 19(1): 122-142.

Primary Source: *The Scopes Trial* (1925), Selections from Transcript (Appleman, pp. 542-549).

31 March **Creationist Debates and Scientific Creationism**

Adam R. Shapiro, "Civic biology and the origin of the school antievolution movement," *Journal of the History of Biology* (2008) 41: 409-433.

Hee-Joo Park. (2000). "The politics of anti-creationism: The Committees of Correspondence," *Journal of the History of Biology* 33: 349-370.

Primary Source: Various, "Scientists' opposition to creationism" (Appleman, pp. 613-623); Henry M. Morris (1985) "Scientific creationism" (Appleman).

11. FILM: *Judgement Day: Intelligent Design on Trial*

5 April **Judgment Day Part I**

Primary Sources:

Philip E. Johnson (1991) "Darwin on Trial" (Appleman, pp. 581-586).

Michael Behe (1996) "Darwin's Black Box" (Appleman, pp. 592-601).

7 April **Judgment Day Part II & Class Discussion; Summary**

Course Policies

1. **Contact.** My email address is taabraha@uoguelph.ca. As per university regulations, all students are required to check their <uoguelph.ca> email account regularly: E-mail is the official route of communication between the university and its students. Please put the course number (i.e. **HIST3690**) in the subject line of your message. *Please keep in mind that I generally do not check email on weekends.*

2. Late Assignments. Hard copies of assignments are due on their assigned due dates. Late assignments will be penalized **3% per day**, including weekends and holidays. You may submit your assignment electronically to the **Assignment Dropbox** on the course website, to confirm the date and time submitted. However, I will not grade your assignment until I receive a hard copy. If there are any discrepancies between the hard copy and electronic copy, I will consider the date the hard copy was submitted to be the submission date for your assignment. For instructions on submitting assignments outside of class, please see item 7 below.

3. Copies of Assignments: Please keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

4. Accessibility: The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible. For more information, contact CSD at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the website: <http://www.csd.uoguelph.ca/csd/>

5. When You Cannot Meet a Course Requirement. When you find yourself unable to meet an in-course requirement due to illness or compassionate reasons, please **advise the course instructor** (or other designated person, such as a teaching assistant) in writing, with name, ID#, address and e-mail contact. See the Undergraduate Calendar for more information: <http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

6. Academic Misconduct. The University of Guelph is committed to upholding the highest standards of academic integrity and enjoins all members of the University community – faculty, staff, and students – to be aware of what constitutes **academic misconduct** and to do as much as possible to prevent academic offences from occurring. Included in this category are such activities as cheating on examinations, plagiarism, misrepresentation, and submitting the same material in two different courses without written permission. **Students are expected to be familiar with the section on Academic Misconduct in the Undergraduate Calendar, and should be aware that expulsion from the University is a possible penalty.** Students should also familiarize themselves with the concept of plagiarism and take the tutorials to learn what plagiarism means, and how to avoid it, at: <http://www.academicintegrity.uoguelph.ca/> If an instructor suspects that academic misconduct has occurred, that instructor has the right to examine the student orally on the content or any other facet of submitted work. Moreover, in the College of Arts it is expected that unless a student is explicitly given a collaborative project, all submitted work will have been done independently. Students have the responsibility to familiarize themselves with the Undergraduate Calendar, including Section VIII “Undergraduate Degree Regulations and Procedures” which includes a sub-section addressing academic misconduct.

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

You are also advised to make use of the resources available through the Learning Commons (<http://www.learningcommons.uoguelph.ca/>) and to discuss any questions you may have with your course instructor or teaching assistant.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Instructors have the right to use software to aid in the detection of plagiarism or copying and to examine students orally on submitted work. For students found guilty of academic misconduct, serious penalties, up to and including suspension or expulsion, can be imposed. Hurried or careless submission of work does not exonerate students of responsibility for ensuring the academic integrity of their work. Similarly, students who find themselves unable to meet course requirements by the deadlines or criteria expected because of medical, psychological or compassionate circumstances should review the university's regulations and procedures for Academic Consideration in the calendar and discuss their situation with the instructor and/or the program counsellor or other academic counsellor as appropriate.

7. Classroom Etiquette and Useful Tools. To avoid distraction, the History Department requests that you turn off your wireless connections during class unless requested by the instructor to do otherwise. The Department maintains a web site (<http://www.uoguelph.ca/history>) that will be helpful in various ways to students in History courses - such as conveying names of student award winners, information on undergraduate and graduate programs at Guelph, and news of the Department. There are useful links to on-line resources that include *A Guide to Writing History Research Essays* which will be valuable to students in all History courses. The University of Guelph History Society operates a number of programs to assist History undergraduates, and information about these programs can be accessed through the Department website or <http://www.uoguelph.ca/~histsoc>.

8. Handing in and Getting back Assignments. Unless the course instructor says so, all History papers and assignments are to be handed in at class and returned at class. The student must keep copies of any submitted assignments. Students may be asked to re-submit work at any time.

LATE PAPERS may **ONLY** be placed through the open slots in the mailboxes of faculty members and Graduate Teaching assistants at the student's own risk.

Mailbox for Dr. Abraham is located in Room 2009, on the 2nd Floor of MacKinnon Extension and the hours are from 8:30 a.m. to 4:30 p.m. Monday to Friday. **Late papers will not be date stamped.** The History department and its instructors bear no responsibility whatsoever for late papers.

9. Recording of Materials. Presentations in relation to course work – including lectures – cannot be recorded in any electronic media without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

10. Student Rights and Responsibilities. Each student at the University of Guelph has rights which carry commensurate responsibilities that involve, broadly, being a civil and respectful member of the University community. <https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/c01/index.shtml>

11. Drop Date. The last day to drop one-semester Winter 2016 courses, without academic penalty, is **Friday, March 11th, the 40th class day**. For regulations and procedures for dropping courses, please see the Undergraduate Calendar.

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>

12. Resources. The **Academic Calendars** are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs. <https://www.uoguelph.ca/registrar/calendars/>