At the Crossroads of Science and Literature

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Required texts (available at the college bookstore, please obtain specific editions):
D’Alembert’s Dream, Diderot
Frankenstein, Shelley
On the Origin of Species, Darwin
The Time Machine, Wells

→ Unless listed above, all other readings are on Blackboard (under Course Docs)

Course Description—
This interdisciplinary course studies the lesser known natural historical records of European scientists alongside the more familiar literary works of Romantic and Victorian Era poets and prose writers. We investigate the way all of these texts employ the non-human as that which restricts the human to, just as it emancipates the human from, the animal that it is. We consider the principles of taxonomy and natural aesthetics, the generation debates, and theories of evolution, in order to understand 18th- and 19th-century efforts at (re)presenting the natural world.

Prerequisite: 2 courses in literature or 2 courses in science.

Grade Distribution—
Attendance, Participation, Preparation: 25%
Critical response postings (course blog): 25%
Lab/Poster presentation (in group): 25%
Final exam (oral, in group): 25%

William Blake’s “I want! I want!” from The Gates of Paradise [1793]
Life is a category of classification, relative, like all the other categories, to the criteria one adopts. —Michel Foucault

Course Calendar—

“Art thou but a worm?”: questions concerning taxonomy

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<th>Date</th>
<th>Activity</th>
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| T 1/17 | Introductions  
Blake, “The Sick Rose” [1794] |
| R 1/19 | Porter, *The Enlightenment* [2001, 2\(^{nd}\) ed.] (Ch 1-2; Ch 8)  
Roger, *Buffon: A Life in Natural History* [1997] (Ch V-VI; Ch XIX)  
- sign up for critical response posting leads and lab groups (same)  
- register for course blog: [http://crossroadsofsciandlit.blogspot.com](http://crossroadsofsciandlit.blogspot.com) |
| R 1/26 | Blake, *The Book of Thel* [1789] [http://www.glyndwr.ac.uk/rdover/blake/bookthel.htm](http://www.glyndwr.ac.uk/rdover/blake/bookthel.htm)  
Lovejoy, *The Great Chain of Being* [1936] (Lecture IV) |

experiments in (re)presentation

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<tr>
<td>T 1/31</td>
<td>Diderot, <em>D’Alembert’s Dream</em> [1764] (Biographical Note on the Characters; Conversation between D’Alembert and Diderot, p141-223)</td>
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| R 2/2 | Diderot, *D’Alembert’s Dream* (Sequel to the Conversation, p225-233)  
- critical response posting/comments due (group 1 lead) |
| T 2/7 | E. Darwin, *Zoonomia* [1794] (select excerpts)  
E. Darwin, *The Temple of Nature* [1803] (Canto I, inc. notes; Preface; Additional Notes) (see also Appendix B, *Frankenstein*)  
- critical response posting/comments due (group 2 lead) |
| R 2/9 | Kant, *Observations on the Feeling of the Beautiful and the Sublime* [1764] |
(Section One)
Kant, *Critique of Judgment* [1790] (select excerpts)
Wordsworth, “I wandered lonely as a cloud” [1804-1807]

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<td>T 2/14</td>
<td>P. Shelley, <em>Mont Blanc</em> [1816]</td>
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| R 2/16 | Keats, *Isabella; or, the Pot of Basil* [1816]  
- critical response posting/comments due (group 3 lead) |
| T 2/21 | Making Monsters: biology lab w/ Professor Smythe (group 1 lead) [SCCT 2025]  
Trembley, *Fourth Memoir* [1744] (select excerpts + images)  
Barnes, et al., excerpt on regeneration (Section 15.6) in *Invertebrates* [2001]  
Sánchez Alvarado, “Planarian Regeneration” [2006]  
Zayas, et al., “The planarian *Schmidtea mediterranea* as model for epigenetic germ cell specification” [2005] |
| R 2/23 | M. Shelley, *Frankenstein* [1818] (Vol. I)  
- critical response posting/comments due (group 4 lead) |

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**the materiality of a vile romanticism**

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| T 2/28 | An Alchemist’s Currency: chemistry lab w/ Professor Brewer (group 2 lead)  
Davy, *A Discourse, Introductory to a Course of Lectures on Chemistry* [1802] (found in Appendix B, *Frankenstein*)  
| R 3/1 | M. Shelley, *Frankenstein* (Vol. II; Appendix C)  
- critical response posting/comments due (group 4 lead) |
| T 3/6 | M. Shelley, *Frankenstein* (Vol. III; Appendix G – Intro to 1831 edition) |
| R 3/8 | poster information session (visual literacy workshop w/ Jim LaVere, ITS) |
| T 3/27 | Survey Says… : geology lab w/ Professor Rayne (group 3 lead)  
Rudwick, *Georges Cuvier* [1997] (p74-88; 112-126; 173-183)  
Lyell, *Principles of Geology* [1830-1833] (p98-111)  
Winchester, *The Map That Changed the World* [2001] (prologue) |
| R 3/29 | Somerville, *On the Connexion of the Physical Sciences* [1834]  
- critical response posting/comments due (group 1 lead) |
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<td>• critical response posting/comments due (group 2 lead)</td>
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<td><strong>T 4/10</strong></td>
<td>Per/de/ception: psychology lab w/ Professor Skipper (group 4 lead)</td>
<td>Helmholtz, “Concerning the Perceptions in General” [ca. 1870s] Gregory, “Knowledge in perception and illusion” [1997]</td>
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<td><strong>M 4/16</strong></td>
<td>print poster drafts and post copy to Bb (6-8pm w/ Jim LaVere in MPC Lab)</td>
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<td><strong>T 4/17</strong></td>
<td>poster critique and proofing session, w/ Jim LaVere</td>
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<td>• critical response posting/comments due (group 3 lead)</td>
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<td><strong>M 4/23</strong></td>
<td>print final poster (9-11am appts w/ Jim LaVere in MPC Lab; pick up by 10pm)</td>
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<td><strong>T 4/24</strong></td>
<td>poster presentations and discussion (SCCT atrium, until 4pm)</td>
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<td>• critical response posting/comments due (group 4 lead)</td>
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**“Wherefore all this wormy circumstance?”**

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<td><strong>T 5/1</strong></td>
<td>Kendall, “Lower Life” [c.1880s] C. Darwin, <em>The Formation of Vegetable Mould, through the Action of Worms, with Observations on their Habits</em> [1890]</td>
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<td><strong>R 5/3</strong></td>
<td><em>Punch</em> Fancy portrait #54 [1881] and “Man is but a worm” [1882] (in class)</td>
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<td><strong>Su 5/6</strong></td>
<td>final oral exams, group 1 (A/B) and group 2 (A/B) [times and place TBD]</td>
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<tr>
<td><strong>M 5/7</strong></td>
<td>final oral exams, group 3 (A/B) and group 4 (A/B) [times and place TBD]</td>
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Assignments—

**Critical Response postings (course blog):**  [crossroadsofsciandlit@blogspot.com](mailto:crossroadsofsciandlit@blogspot.com)

Throughout the semester you are responsible for posting leading prompts for discussion on our course blog. You will post these lead prompts as part of a group of 6-7 students (labeled as groups 1 – 4 above). These same groups will be working together on the lab/poster presentations, as well as for the final oral exam (see below). If you are in the lead group, you must submit your original post to the blog by 5pm the day before your group is set to lead discussion. (For example, if you are group 1, set to lead the discussion on the second half of Diderot’s text on R 2/2, then you each must submit your original posts to the course blog by 5pm on W 2/1). For those not leading discussion, you must post a comment to one or more of the 6-7 original posts by midnight on the same day. (For example, if you are not in the lead group for the second half of Diderot’s text on R 2/2, you must post your comment[s] by midnight on W 2/1).

- The grading for this blog works as follows: If you are in the lead group, you should treat your 2 original posts as critical abstracts of your ideas about the text, **in 250 words or less**. Each post will be graded by me, replete with comments, and distributed to you personally via email. If you are not in the lead group, you will be posting comments to your peers’ work. These should help enact a dialogue between all of you, so feel free to post as many comments as you like. However, **you must post at least one comment for each time you are not in the lead group**. These comments will be graded pass/fail. Either you do it by the deadline or you don’t. At the close of the semester I will average together your grades for the original posts and comments. This will serve for 25% of your final grade.

**Lab/Poster presentation (in group):** As you can see on the syllabus, you will be performing 4 laboratory experiments over the course of the semester—biology, chemistry, geology, psychology. The same lead groups for the critical response postings (directly above) will be responsible for “leading” your peers through the respective science experiment. In other words, you will sign up for a specific lab and this will form your lead group for the semester. As the date of your individual lab nears, you will need to meet with the guest professor in charge of running the lab. And then on the day of the lab, each of you in the lead group will help orchestrate the lab for your peers, as well as for yourselves. And it is this lab on which your group poster presentation will be based. You will also be working closely with the MPC Lab in Burke Library and Jim LaVere (details to follow). For the poster presentation itself, you should treat this as a formal science poster project, replete with the following (if slightly adapted) sections:

- **A. Introduction and Purpose** (This will include an hypothesis not simply of your experiment, but of **how you think the experiment relates to the course content**. In other words, in addition to the question that each lab will be investigating, you will need to come up with a question to which your poster presentation will respond.)
- **B. Materials** (straightforward scientific article approach)
- **C. Methods** (straightforward scientific article approach)
- **D. Data** (straightforward scientific article approach)
- **E. Results** (straightforward scientific article approach)
- **F. Discussion and Analysis** (In addition to relaying the substance of the experiment, this section should contextualize the lab with relevant course readings and discussions. In short, each poster should become a visual representation and interpretation of how the lab you prepared and performed responds to the question you devised for the Intro/Purpose.)
G. Conclusions and Further Questions (In addition to relaying the substance of the experiment, this section should contextualize the lab with relevant course readings and discussions. In short, each poster should become a visual representation and interpretation of how the lab you prepared and performed responds to the question you devised for the Intro/Purpose.)

H. Figures and Graphs (straightforward scientific article approach)

I. References (straightforward scientific article and literary research paper approach)

- You may include modern-day echoes of the course content in your poster presentations; but do so only in order to further contextualize/examine your response to the question you devised for the Intro/Purpose. Don’t shy away from taking a risk with your poster. And remember: the form and content are of equal importance—the visual presentation is tantamount to the information itself. (Note: you will want to preserve photographic or illustrative evidence of your experiments, so that you will have images to include on your poster. So take lots of pictures and/or make careful drawings during the experiment!) These posters will serve for 25% of your final grade.

- FYI: I have reserved the SCCT atrium for T 4/24, until 4pm. Beginning at 10:30am, your posters will be on display for the campus community. You will be on hand to discuss your posters from 10:30-11:45am. At 4pm please have one or more members of your group come by the SCCT atrium to pick up your poster. I have also placed an announcement of this event on Hamilton’s events calendar. And, should this help with your thinking through the poster presentation itself, this is the text announcing the event: “In this interdisciplinary course, students performed scientific experiments alongside the analyses of popular 18th- and 19th-century literature. Their goal was to gain a better understanding of how "science" and "literature" intersect as distinct disciplinary fields, as well as to determine the (perhaps) misleading nature of this institutionalized distinction.”

Final exam (oral, in group): Within your groups and later in the semester, you will be signing up for one of the two dates on the syllabus for the oral final exam (Su 5/6, M 5/7). Moreover, each group will be divided in half, so that there will be 3-4 people total collaborating for the exam (referred to as A/B on the syllabus). There are several steps to the oral final exam, please read them thoroughly:

1. Carefully review on your own, individually; revisit all course materials. Earlier readings may look different when viewed in light of later readings and developing discussions. Be sure to return to the texts to identify insights, arguments, or positions that you find most important or most valuable for our semester-long study. You might want to use the authors we have read as “shoulders” on which to stand or as “springboards” for generating your own view. It is very important that you can demonstrate a thorough understanding of the materials we have discussed in this course; you need to be able to synthesize these materials and move beyond the readings critically as well as imaginatively.

2. Your group of 3-4 will then gather for a substantive review, drawing upon the work you did individually. With a little luck and a lot of effort, this can be a very rich (and energizing!) learning experience. You should expect to have at least 2 meetings with your group prior to the exam itself.

3. As a result of your collaborative review/study, the group as a whole should generate 3 questions. These will act as starting points for the oral exam. You must email these
to me the day before the exam by midnight. Please also bring a hard copy of these questions for each member of your group, including yourself and plus a copy for me.

4. Our collective discussion, the oral exam itself, will begin with your questions. You should be able to cite concrete content from the materials studied throughout the semester, as well as develop your own opinion on the topics under discussion. You may bring some texts with you, but be sure to have a good sense of where the important passages are located. You may also bring well-organized notes. Expect the exam to run 40-45 minutes.

5. My evaluation will include the quality of the initial 3 questions, your familiarity with the authors, texts, and ideas we discussed throughout the semester, and your ability to shape and explicate your understanding of—and judgment about—readings and topics. Again, I am most interested to learn about how you have synthesized the course material: to what end, how and why? I will ask you to complete a self-evaluation, due the day after the exam (via email).

• On the day of the exam: Location TBD. Please arrive 5-10 minutes early. Each member of the group should be able to answer all of the questions you submit—do not divide up the labor by assigning one question to each person; the goal of this oral exam is to construct a conversation. Help each other prepare; practice your answers together; talk things over. If you don’t all agree on an answer, that’s great! Rather than work to smooth out disagreement, work on how such disagreements might lead to productive debate. Don’t be shy: tell me when you agree or disagree, have hesitations or are “all in.” And I will do my best to make sure all different viewpoints get voiced. Think of me as a moderator for the discussion, posing pointed questions to guide the discussion or asking for clarification of articulated ideas. The oral exam will serve for 25% of your final grade.

(Thax to Professor Janack for giving me free use of her oral exam formula!)

Course Guidelines—

Attendance, Participation, Preparation are crucial to the success of this course. They are the foundation on which we will build all of our discussions. Thus, I expect that you will not only make every effort to come to every class, but that you will come prepared and ready to participate. Should you miss class, it is your responsibility to obtain notes and/or assignments from the day(s) you were absent—not from me, but from one of your peers. But don’t miss class. And don’t come unprepared. You should think of this course as a collaborative effort, in which your voice plays an integral part: it is needed to both complicate and clarify the content provided. Please note: once you acquire absences exceeding 1 week of class (i.e. more than 2 class meetings), your final grade will suffer. This will serve for 25% of your final grade.

Late Work is not accepted. And yet, extenuating circumstances do arise, so please make it a habit of coming to me with questions and concerns earlier than the due date of a particular assignment. It is only if you communicate your concerns to me before they become an obstacle to your performance in the course that I can try to help. 

The Honor Code (which you signed) stipulates a standard of integrity that you should uphold in all of your courses. This course is no different. In particular, please familiarize
yourself with the “Academic Dishonesty” section of the Honor Code, which itemizes such violations as plagiarism and cheating. And please be aware that I stand firm on the College’s policies for dealing with academic dishonesty. Please communicate to me any questions or concerns you might have pertaining to Honor Code violations. If you are uncertain what constitutes academic dishonesty do not hesitate to discuss it with me. If, for example, you try to explain after the fact that you “didn’t know” what you did “counted” as plagiarism, I will not be appeased, nor will I accept it as an extenuating circumstance. Bottom line: Don’t do it!

Course Resources—

Blackboard. The course syllabus and other pertinent documents will be available here.

Although this course is not writing intensive, the Writing Center can still be a great resource if you want additional help on your critical postings to our course blog. While I do not require that you go to the Writing Center, I do recommend that you at least familiarize yourself with the services offered—both online and in person—if not utilize them directly. http://www.hamilton.edu/writing/home

Burke Library is clearly a wonderful resource. In addition to its vast online and hard copy resources, Burke Library has an extremely helpful staff of Reference Librarians. I recommend that you count these librarians in among your resources for this course. You can find their names, numbers and email addresses at: http://www.hamilton.edu/library/researchaids/subjectguides

Disability Support Services. Hamilton College will make reasonable accommodations for students with properly documented disabilities. If you are eligible to receive an accommodation(s) and would like to make a formal request for this course, please discuss it with me during the first two weeks of class. You will need to provide Allen Harrison, Associate Dean of Students (Elihu Root House; ext. 4021) with appropriate documentation of your disability.