

CSPS218G: Earth, Life, and Time Colloquium
SEMESTER III: The Perils, Perversions, and Promise of Science
Fall 2006
Room: CCC1100 Mon, 3:30-5:00
ELT Website: <http://www.geol.umd.edu/~jmerck/eltsite/>
Course Website: <http://www.geol.umd.edu/~jmerck/eltsite/syl218F06.html>

INSTRUCTORS:

Dr. Thomas R. Holtz, Jr. Office: Centreville 1216 Phone: x5-4084 E-mail: tholtz@umd.edu Office Hours: Tue 8:30-11 am or by appointment	Dr. John W. Merck, Jr. Office: Centreville 1218 Phone: x5-2808 E-mail: jmerck@umd.edu Office Hours: Thurs 3-5 pm (GEO 1119) or by appointment
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TEACHING ASSISTANT

Eugenia Leone
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Office Hours: Centreville 1217, M 2-3 pm; W 11:30 am-12:30 pm

NOTE: It is your responsibility as a student to completely read through and understand this syllabus. If you have questions about it, please contact Dr. Holtz or Dr. Merck. You will be held responsible for following all requirements of this syllabus.

COURSE ORGANIZATION: One meeting per week, five weekend field trips (one required).

REQUIRED READINGS: This semester there are two required texts:

Diamond, J. 2005. *Guns, Germs, and Steel: The Fates of Human Societies*. New Edition. (Norton, ISBN 0393061310)

Parks, R. 2000. *Voodoo Science: The Road from Foolishness to Fraud* (Oxford Univ. Press, ISBN 0195147103)

Reading assignments must be done by the classtime listed.

Additional short readings will be handed out during class.

COURSE OBJECTIVES AND PHILOSOPHY: This semester explores the interactions of natural history and Humanity, including the influence of the natural world in shaping ancient and modern cultures; the impact of human technologies (ancient and modern) on the living and non-living world; and the influence of our understanding (and often misunderstanding) of Science upon contemporary society. Throughout this course, consider how our readings, lectures, and activities address the following question:

- How is the scientific understanding of the physical world and its living components (including our own species, our behavior, and our society) more completely comprehended when we take into account time (whether the “deep time” of evolution and geology, or the smaller scale of human history)?

CLASSROOM POLICIES: You should bring the following to every single colloquium meeting:

- A writing implement
- A notebook (containing this syllabus)
- The text for that half of the course (Diamond throughout October 23; Parks after that)
- A willingness to participate constructively, both in small groups and in the class as a whole
- A readiness and ability to discuss the readings for that week

This semester we will have a number of small-group in-class projects. We expect everyone to help move tables and chairs when necessary for a particular project, and to help restore the tables and chairs to the “neutral” position when we are done. Many hands make light work!

During classtime:

- **PLEASE** be courteous to your fellow students and your faculty, and do not engage in side conversations. Even what you might think are hushed whispers in the back row can be heard all the way up front, and are disruptive to the attention of your classmates who are interested in getting a good grade in the class.
- All electronic modes of communication (mobile phones, pagers, etc.) must be turned “off” or be in silent mode.
- No personal electronic listening devices (e.g., CD players, MP3 players, personal radios, etc.) will be allowed.
- No reading of material not germane to the class activity will be allowed.

Finally, please do not leave any debris behind: pick up all food/beverage containers, papers, newspapers, etc. near your seat and on your desk when you leave.

ATTENDANCE: Given the nature of the course and program, participation in colloquium meetings is **MANDATORY**. It is up to you to make certain that your presence has been recorded for every class.

- **Recording Your Presence:** On days with quizzes and/or group projects, your presence will be taken from these items. On other days, there will be a sign-up sheet. It is *your* responsibility to make certain that you have signed the quiz, project report, or sign up sheet.
 - Students observed leaving the colloquium before 4:50 or before it is formally dismissed will be counted absent.
 - **NOTE:** We expect students to adhere to proper academic decorum during colloquia. This means focusing your attention on presentations, refraining from conversations or activities that are not relevant (e.g., reading newspapers, doing homework for other classes, etc.), and showing proper respect for student, faculty, and guest presenters. *We reserve the right to count you absent from colloquium if you fail to uphold this standard!*
- **Excused Absences:** If you have a legitimate reason for being absent, such as a family emergency, unavoidable academic conflict, or other excuse according the University’s guidelines, we will usually excuse your absence. However you must notify us in a timely fashion. Requests for the excusing of an absence **will not be considered** after two workdays from the absence. Please use the Excused Absence Report form from <http://www.geol.umd.edu/~jmerck/eltsite/rdfs/absence.pdf>. **NOTE:** the next colloquium meeting is **too late** for requests for excuses.
 - Even if you miss a class from an excused absence, you are still held responsible for material during that class, included graded assignments such as quizzes and small group projects. See the faculty about arrangements for a make up. If the small group project is such that it cannot be done alone, it will not be factored into your grade **if** you have an excused absence that you informed the faculty about within two workdays from the absence.
 - **Religious Observances:** The University System of Maryland policy provides that students should not be penalized because of observances of their religious beliefs, students shall be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. It is the responsibility of the student to inform the instructor of any intended absences for religious observances in advance. **Notice should be provided as soon as possible but no later than the end of the schedule adjustment period (September 13).**
- **Unexcused Absences:** All other absences are considered unexcused absence. You may have one unexcused absence that does not directly affect your grade (except for missed quizzes or small group projects: see below). Each subsequent unexcused absence lowers your final course grade by 10 points.
 - If you miss a quiz or small group project because of an unexcused absence, you will not be allowed to make it up.

POLICY ON GRADES: There are seven components to the grade, each of which is worth a certain percentage of the total. These are Field Trip Report (20%), Small Projects (20%), Quizzes (20%); Mini-Poster Project (5%); Practicum Proposal (10%), Practicum Learning Contract (15%), and ELT 3-Semester Review (10%). Here are the details:

- 1) **Field Trip Report:** (20%) This semester there will be five (5) field trips. It is mandatory that every student participates in **one (1)** of these trips. These trips have only minimal expenses; typically the Metro fare and/or lunch. These trips are:

- 10/8 (Sunday): **Chesapeake Beach and Jug Bay Wetlands Sanctuary**
- 10/29 (Sunday): **Sideling Hill and Western Maryland Geology**
- 11/12 (Sunday): **West Virginia Fossil Hunting and Geology**
- 12/2 (Saturday): **National Zoo**
- 12/3 (Sunday): **Marian Koshland Museum of the National Academy of Sciences**

If you do not go on any field trip, this part of your grade will be a 0. However, you may go on all field trips if you like. **You may NOT use a report on a field trip that you also did last year for CPSP 118G to fulfill this grade requirement and/or extra credit!**

In order to get credit for attending a field trip, you must write up a short report about what aspects of the natural sciences you learned about on this event, and mount this report on your website. To clarify the requirements for the Field Trip Report:

- The text should be equivalent to about 2 pages double-spaced: about 500-600 words
- The text must describe where you went, what you did, and what you learned about the natural historical sciences. (Different projects will require answering certain specific questions as well.)
- The text must be factually correct and free of spelling and grammatical errors.
- Your report should demonstrate mastery of the knowledge of the subject, and should include some original synthesis on your part (i.e., what you got out of it, how you linked it to material from this and other courses, etc.)
- You may include links and photographs, but these are not necessary
- The report must be linked to your ELT website.
- Unless there are extenuating circumstances, your report should be uploaded and available by the second Monday class following the field trip itself.

An html template for the Field Trip Report is downloadable from the ELT website at <http://www.geol.umd.edu/~jmerck/eltsite/templates/website.html>. A guide to writing html code is found at <http://www.geol.umd.edu/~jmerck/eltsite/elhtml05.html>. A grading rubric for field trip reports (and ELT websites in general) can be found at <http://www.geol.umd.edu/~jmerck/eltsite/templates/rubric.html>.

2) Small Projects: (20%) Throughout the semester there will be a series of small assignments; some in-class, some take home. Those in-class will be conducted in small groups (to be created on those dates), with your results handed in at the end of that classtime. Everyone in each small group receives the same grade for that day's work.

3) Quizzes: (20%) To verify that you are, in fact, mastering the material of the course, six (6) scheduled quizzes will be administered during the semester. We will automatically drop the lowest of the six grades. NOTE: Quiz materials will cover both the classes and the readings.

4) Mini-Poster Project: (5%) In the mid-semester we will have a small workshop teaching the basics of raster and vector graphics. You will be responsible for creating a small poster concerning your ELT experiences using these software packages; successful completion of this project is worth 5% of the total.

5) Practicum Proposal: (10%) All ELT students must participate in a practicum in order to complete their Citation. While the work for the practicum will be done after this semester, we use this semester to help you organize your projects. By **November 23** you will have to turn in a proposal for your practicum work, giving a preliminary view of a) where you will be doing your work; b) what that work will likely entail; and c) what you expect to get out of this project. Failure to provide a proposal will not only mean loss of 10% of your grade, but it will also prevent you from receiving any credit from the practicum!!

6) Learning Contract: (15%) The second practicum-related portion of your grade this semester is the Learning Contract. This is a formal agreement between you, your site supervisor, and our office, making clear the tasks and hours for which you will be responsible and the credit level to which your practicum course will be given. The Learning Contract is due on the last colloquium day of the semester (**December 11**). Failure to provide a proposal will not only mean loss of 15% of your grade, but it will also prevent you from receiving any credit from the practicum!! You can download the Learning Contract from

<http://www.geol.umd.edu/~jmerck/eltsite/pracforms.html>.

7) ELT 3-Semester Review: (10%) Also due the last day of classes, you should write up a short report detailing your experiences with the Earth, Life & Time Program so far. This will be mounted as a **unique webpage** linked to your ELT site. Specifics about the review will be given later, but your target audience will be prospective incoming students. A template is available at <http://www.geol.umd.edu/~jmerck/eltsite/templates/threesemester.html>.

GRADE SCALE (Course): ≥ 90 , A; 80-89, B; 70-79, C; 60-69, D; < 60 , F. “+” and “-“ grades are given to the top and bottom two-point range, respectively, within each grade.

GRADE SCALE (Small Projects): +, 100; $\sqrt{+}$, 90; $\sqrt{-}$, 80; -, 60; 0, 0 points

EXTRA CREDIT: ELT offers several different means of earning extra credit this semester. You earn 5 points maximum extra credit per item, up to a total of two items (i.e., 10 points total). Below are the options and requirements for Academic and Service extra credit. You may do two items in one category, or one in each.

Academic: You may write an additional report on colloquium-related academic material, and mount this report as a separate page on your website. Topics could include:

- A second field trip report beyond the one required.
- A “reaction paper” based on any full-length chapter in *Guns, Germs & Steel* or *Voodoo Science*.
- A “reaction paper” to any of the Supplementary Readings for the semester listed on the website <http://www.geol.umd.edu/~jmerck/eltsite/readings.html>
- A “reaction paper” to a non-classroom academic presentation on campus, such as a departmental seminar.
- A “reaction paper” to some other academic event: check with the ELT faculty to make sure it qualifies.

Reports for field trips should follow the format assigned for that trip, including the specific questions required. “Reaction papers” are reports that would address both a summary of the material encountered as well as your thoughts and comments on this material and how it relates to related matter you may have encountered (in colloquium, other classes, etc.) Reaction papers require you to show insight into the matters concerned, not a simple retelling of what was there nor your “feelings” about it. See the Reaction Paper template at <http://www.geol.umd.edu/~jmerck/eltsite/templates/reactionpaper.html>.

Full extra credit will only be earned if all format issues are properly completed (sufficient length, proper html coding, no spelling or factual errors, etc.). Problems with these issues will result in a decrease in the extra credit grade received, as per field trip and other web-based reports. All Academic extra credit assignments must be online by the end of classes (i.e., before finals).

Service: College Park Scholars seeks to promote civic responsibility among its students and faculty. To help fulfill Scholars’ commitment to community service, we offer extra credit to your grade total for students who participate in some form of community service this semester.

- You cannot be paid for this service activity, nor be receiving credit for it in any other classes, nor be doing this service for disciplinary purpose for some other entity on campus (i.e., no “double-dipping”)
- This service must be conducted between Move-In Day and the last day of exams this semester
- This activity must be approved by the Faculty Directors of ELT, or else you will not receive credit for it. Your best bet is to get it pre-approved, so you know in advance if it will count for extra credit!
- You must turn in an Activity Report form (see <http://www.geol.umd.edu/~jmerck/eltsite/rfts/activityreport.pdf>) signed and dated by yourself and a site/activity supervisor in order to get credit
- This extra credit can be earned by any of a number of activities. The list below is by no means exhaustive, but gives you an example of some of the sorts of activities that would count:
 - Serve as the ELT sophomore representative on the Scholars Student Advisory Board
 - Serve as a Scholars Ambassador, or in Student Program Council, or in the Residence Halls Association
 - Go to a high school to promote ELT (and Scholars, and UMCP)
 - Participate in a Voting Drive
 - Donate blood
 - Volunteer at a clinic, shelter, or other similar institution

- Volunteer at a non-profit organization
- Serve as an officer in an SGA group
- Serve as a Student Representative on Service Day
- Volunteer for Scholars on the Hill

COMMUNICATION: Because many of our communications will be by e-mail, all students are required to maintain e-mail accounts and arrange for access to the Internet. Although not a course requirement *per se*, students should get into the habit of checking their e-mail daily. Failure to do so may cause you to miss crucial course information. A list of available computer labs on campus can be found at <http://www.oit.umd.edu/wheretogo/seeTable.cfm>.

ACADEMIC INTEGRITY: The University of Maryland has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.studenthonorcouncil.umd.edu/whatis.html>

The University of Maryland is one of a small number of universities with a student-administered Honors Code and an Honors Pledge, available on the web at <http://www.jpo.umd.edu/aca/honorpledge.html>. The code prohibits students from cheating on exams, plagiarizing papers, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures. The University Senate encourages instructors to ask students to write the following signed statement on each examination or assignment: "I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment)."

ACADEMIC ACCOMODATIONS: If you have a documented disability, you should contact Disability Support Services 0126 Shoemaker Hall. Each semester students with documented disabilities should apply to DSS for accommodation request forms which you can provide to your professors as proof of your eligibility for accommodations. The rules for eligibility and the types of accommodations a student may request can be reviewed on the DSS web site at http://www.counseling.umd.edu/DSS/receiving_serv.html.

MAIN SYLLABUS

9/4/06	LABOR DAY – NO CLASS
9/11/06	Introduction & Class Logistics; Introduction to the Practicum Why Everyone (Not Just Scientists) Should Know About Science
9/18/06	Natural Resources: "Farming" & "Mining" Reading: Diamond Prologue & Chaps. 1-3
9/25/06	Quiz 1 Climate Change: The REAL High Cost of Fuel! Reading: Diamond Chaps. 4-5
10/2/06	Workshop: Graphics Reading: Diamond Chaps. 6-8
10/8/06 (Sun.)	FIELD TRIP 1: Chesapeake Beach and Jug Bay Wetlands Sanctuary
10/9/06	The Biodiversity Crisis, and Why It Matters Reading: Diamond Chaps. 9-11
10/16/06	Quiz 2 All Food is from GMOs; The Origin of Disease

- DUE:** Graphics Project
- 10/23/06 Nations, “Races”, and the Fates of Human Societies
Reading: Diamond Chap. 15, 16, 17, 18 or 19 (assigned)
- 10/29/06 (Sun.) FIELD TRIP 2: **Sideling Hill and Western Maryland Geology**
- 10/30/06 **Quiz 3**
The First Word in “Science Fiction”
Reading Diamond Epilogue
- 11/6/06 Recognizing Good Science, Bad Science, and Pseudoscience
Reading: Park Chaps. 1-3
- 11/12/06 (Sun.) FIELD TRIP 3: **West Virginia Fossil Hunting and Geology**
- 11/13/06 **Quiz 4**
Mad Science and Evil Scientists—Do They Really Exist?
DUE: Science Fiction review
Reading: Park Chaps. 4-6
- 11/20/06 The End of the World as We Know It!
Reading: HANDOUT “The World as a polder: what does it all mean to us today?” Chap. 16 from
Diamond, J. 2005. *Collapse: How Societies Chose to Fail or Succeed*.
DUE: Project Proposal
- 11/27/06 **Quiz 5**
Making Science Happen
Reading: Park Chaps. 7-8
- 12/2/06 (Sat.) FIELD TRIP 4: **National Zoo**
- 12/3/06 (Sun.) FIELD TRIP 5: **Koshland Museum of the National Academies of Sciences**
- 12/4/06 Confidence in Science: The Scientific Method Revisited
Reading: Park Chaps. 9-10
- 12/11/06 **Quiz 6**
Grandeur in This View of Life
DUE: Learning Contract & ELT 3-Semester Review