



Honors Course Syllabus - Environment Earth/ Critical Issues in Science, Technology, and Society

EARTH 100H (3) GN STS 200H (3) GS
Fall 2007 Penn State Delaware County

Instructor: Dr. Laura A. Guertin (aka "Dr. G")

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Web sites: <http://cms.psu.edu/> (ANGEL)

<http://www.turnitin.com/> <http://itunes.psu.edu> (iTunes U)

Office hours: MWF, 8:30AM-9:30AM, Tuesdays 9:30AM-10:30AM

Lecture: 11:30AM – 12:20PM MWF in TMZKO 101

Textbooks: *Taking Sides: Clashing views on environmental issues*, by T. Easton,
(McGraw-Hill, 2008, expanded 12th edition, ISBN-13: 978-0-07-351443-7)

The Tipping Point, by M. Gladwell, (Hachette Book Group USA, 2002, paperback
edition, ISBN: 0-316-34662-4)

What's in store for you... For the majority of you enrolled in EARTH 100H/STS 200H, this is your first true scientific introduction to climate change, energy, and biodiversity! There are no prerequisites for this course, all you need is an open mind, and you will learn things about the Earth and environment you never knew before. Stay tuned, and find out why our planet is undergoing a climate change (... or is it??). You will gain insight into the formation and structure of the Earth's ecosystems, inside and out. Learn about energy sources, such as solar, water (hydro), and nuclear. Get the scoop on how human activity and inactivity is impacting Earth's systems. And yes, we'll be starting our journey with the basics—how we define and research this scientific information!

Dr. G's philosophy on higher education: *Students are responsible for their own learning!!!***** I am here to help facilitate your science education to the best of my ability, but you must do your part as well. It is up to YOU to come to class, to take notes, to ask questions, to complete assignments and readings by deadlines, to be an active learner! It is up to YOU to take advantage of the education I am providing you. It is your choice to sink or swim in this course. Remember, I can expect 2-3 hours of work outside of class for every hour you spend with me in class.

COURSE GOALS!!!!

I realize that 99.9% of the students that take my geoscience courses will never become professional geologists. This is why I design all my courses around skill-based goals, where you will acquire and/or further develop skills that will be applicable to you no matter what your future career. This is especially true in this course.

- **The scientific method and working with data sets:** You will be learning about the methods of science and participating in class activities and assignments that require critical thinking and analyzing science issues with various forms of scientific data.
- **Using technology:** You will be working with Microsoft Office, Google Earth, and handheld technology (iPods, GPS) throughout the semester to prepare you for the technology-focused world of employment.
- **Sharing your knowledge with others:** For the rest of your lives, you will always be a student and a teacher. You will also learn the course material better if you explain it to others in and outside of class. There will be a service project required for you to share your new knowledge with Ridley Creek State Park.

Now for all the necessary, important information....

My expectations of you...

I expect every student to come to every class session on time and ready to go. You should have read the corresponding chapters, readings in ANGEL, and listen to the audio files in iTunes U for each lecture BEFORE coming to class. Be sure to bring something to write with and your calculator to every lecture. I encourage everyone to ask questions and work with your fellow students in lecture. There will not be traditional assignments in this class. Your attendance and participation will strongly impact your performance and thereby your resulting grade.

- **Class Participation and Attendance**

Class participation is required! This course is to be an interactive course, filled with questions, discussions, stories on your favorite Earth experience, etc. There is much we can learn from each other! Although I will be lecturing in this course, what you will be doing during class time is a vitally important aspect of how you will learn in this course – whether you be an “active” participant or just come to class and be a “passive” participant. You will also be working in groups during some lecture periods, which places on you serious responsibility to other students in the class. **ATTENDANCE IS STRONGLY ENCOURAGED**, and I will be looking for your presence at every class meeting. I will make exceptions when missing a class for legitimate emergencies when I am **notified AHEAD OF TIME** (such as health, family emergencies, etc.). If you miss lecture for any reason, I will expect you to get in touch with me THE SAME DAY YOU MISS CLASS and make up all the work that you missed *before* the next class meeting. You will also be responsible for getting in touch with a fellow student to get the notes for the work that you missed. I do not provide my lecture notes to anyone, since as you will soon see, our class periods are much more discussion-based and focused on the work you complete outside of class.

- **Classroom Etiquette**

Let's work together on this one. Please do not have conversations going on with other students while I am lecturing. No passing notes, no reading the newspaper. **If I find that anyone is being too disruptive to too disrespectful to the students or myself, I reserve the right to dismiss you from the classroom.** You will then have to speak to me in my office before I will allow you back into my classroom. **NO FOOD OR BEVERAGES ARE ALLOWED IN TMZKO 101 OR ANY COMPUTER ROOMS.** This is a school policy, not just mine. We'll be working with computers and many materials that cannot have any food or drink near them. **DO NOT SIT** in the last five rows of the classroom – there are plenty of seats for everyone in the middle and up front. And **do NOT get up and leave the room while I am lecturing.** We will be having class discussions where I want you to volunteer your interpretation and opinion on certain issues. Be open, be honest, and show respect for the opinions your fellow students have. The class will be much more enjoyable if we show respect for one another!

- **A note on cell phones:** There is no reason a cell phone should be going off in lecture. I can't tell you how disrespectful that is to have a cell phone interrupt me while I am lecturing. Turn your cell phone off before lecture begins. If your cell phone goes off during my lecture, I will dismiss you from the rest of class.
- **A note on laptops:** Laptops are NOT ALLOWED in my classes. I have seen such creative uses of laptops in the classroom – all uses except for taking notes. So you can thank your fellow students for showing me such disrespect that I am instituting this classroom rule. If you want all your notes on your laptop, you'll have to take notes the old-fashioned way and type them in later – a very good exercise to reinforce what you've learned.

In a nutshell, it's all about respect!!! I demand respect in my classroom – respect towards me, respect of students to students, and myself respecting the class. I will not tolerate disrespect in class, and neither should you!

- **ANGEL**

ANGEL will be used much in this course. If you are not familiar or comfortable with ANGEL, please set up an appointment with me ASAP so I can sit down with you and show you how to most effectively use Penn State's course management software. There will be several folders and links for you to access relating to various class discussions and assignments. The most "complex" use of ANGEL is where you will need to know how to download Microsoft files that I post, enter text/data, and then place the file in a drop box folder I set up. Trust me, you will not survive this course if you don't use ANGEL.

You must access your Penn State email as well. PSU email is the designated form of official communication between Penn State faculty and their students. Do not email me from an outside email account you might have (such as AOL or hotmail) – if you do, I cannot guarantee that I will receive that message. **ALL EMAILS**

REGARDING THIS COURSE NEED TO BE SENT THROUGH ANGEL IF YOU EXPECT ME TO RESPOND. I will be making use of email as reminders for deadlines, follow-up to classroom discussion, clarification on assignments, etc. I will not send useless messages – only ones that directly relate to the class and to assist your learning. All emails I send to the entire class at once will be done through the ANGEL email system. Please use professional etiquette when emailing me – don't use all lower-case letters, don't use abbreviations that you might use if you were going to IM someone, and please type your name at the end of the message.

- **iTunes U**

Our course is listed in iTunes U. Although your primary course material will be delivered and submitted via ANGEL, PDF files of assignments will be placed in iTunes U as a backup. More importantly, I will be audio recording most of my lectures this semester and placing the audio files in iTunes U. You do not need an iPod to listen to the files. If you do not have speakers on a home computer, you can always listen to these files on any of the Library computers by checking out a set of headphones from the circulation desk.

- **iPods/Digital Voice Recorders/GPS units**

You will be given iPods, digital voice recorders and GPS units to use during the semester. Training will be given on how to use these technological tools. Please treat these “toys” with respect – do not change any formats, move or delete files, etc. If I find that you have intentionally changed anything on the equipment, you will **IMMEDIATELY** lose the right to use the tools the remainder of the semester. (***) Keep in mind that you will need to use the technology for recording and creating semester projects... you lose your privileges, you will forfeit the right to participate in all remaining activities and complete any assignments/projects with them – hence, your grade will be impacted!)

- **References and Assignments**

It is critical that students learn how to properly cite sources, not just in this course but in all courses. For all of your papers, you must use the APA style of citation for in-text citations and list of references. And be sure to utilize quality sources. Wikipedia is NOT an acceptable reference for any work in this course.

- **Late Assignments**

In a nutshell, you will not be allowed to turn in assignments late during this course. It is your responsibility to stay on top of deadlines. **Do not use “computers” as an excuse for not turning in an assignment on time** (such as the disk ate my paper, I couldn't log in from home, AOL was down, etc.). I will not make exceptions if you wait until 5 minutes before an assignment is due to hand it in.

Unless I tell you otherwise, all assignments will be turned in via an ANGEL drop box or ANGEL quiz form. **DO NOT** place paper copies of assignments in my mailbox or under my office door. I will not be responsible for assignments not turned in via ANGEL.

- **Final Exam**

Yes, we will have a REQUIRED cumulative final for this course – but it won't be the traditional type of final. The final is on Monday, December 17, from 10:30AM-12:20PM. The exam will be held in TMZKO 101 and will be open note/open book.

What you can expect of me...

I will be prepared every day with a full lecture and will start on time. I will keep you updated if there are to be any changes to the syllabus (for example, if the class wants to explore a topic further, I will be flexible!). I will make myself available during and outside of class to answer any question you may have – don't hesitate to ask anything! **I am here to help you IF you put in the effort and work yourself!** I will not only teach you “the material” but why we are learning it, the applicability of this course to your everyday lives. After approximately the first week, I should have all of your names memorized and I will recognize you by name during class discussions. I will not give any makeup assignments, for this is not fair to everyone that is ready to participate in class and hand in everything on time. If you have a medical/family emergency and cannot come to class or hand in an assignment, contact me **PRIOR** to see if there is a way to make up for missed work (please note that there are some in-class exercises where it will not be possible to make up the work). Again, I do not provide notes from my lectures if you miss lecture – you will have to get notes from someone else in the class.

In the end...

You must have fun in this course! I give you my word that I will put as much effort and energy into this course as I possibly can, to make this an enjoyable summer session for you. In return, I hope you come to class with a positive attitude and open mind to new ideas and topics!

Note to students with disabilities

In accordance with the American with Disabilities Act of 1990, it is Penn State's policy to provide reasonable academic adjustments for students with documented disabilities. If you have a disability-related need for modifications in this course, contact Sharon Manco, 610-892-1461, 203A Main Building, sam26@psu.edu. This notification should occur by the end of the first week of the semester. Students may visit www.equity.psu.edu/ods/ for complete information.

Grading

Your grade for the semester will be based on miscellaneous lab exercises, field projects, and the final exam. Each assignment is assigned a point value, and the total point value for the course is 330 points. The breakdown is as follows:

- 81 points – The Tipping Point questions
- 20 points – The Tipping Point take-home exam
- 126 points – Questions from Taking Sides
- 10 points – Introduction to audio recording

50 points – Ridley Creek State Park project
50 points – Audio tour of Solar Decathlon project
50 points – Student Conservation Association project
25 points – Final Exam

The final grades will be assessed at the end of the semester as a % as follows:
A = 96% to 93% (330-307 points); A- = 92.9% to 90% (306-297 points); B+ = 89.9% to 87% (296-288 points); B = 86.9% to 83% (287-274 points); B- = 82.9% to 80% (273-264 points); C+ = 79.9% to 77% (263-255 points); C = 76.9% to 70% (254-231 points); D = 69.9% to 60% (230-198 points); F = 59.9% (197 points) and below

**** Do not expect me to drop any grades, curve any grades, or round up any grades on individual assignments during or on the final average at the end of the semester. Note that the ANGEL Grade Book may round up grades – I do not! I will track all grades in an Excel spreadsheet and calculate final grades from there before I enter grades in eLion. Extra credit is not available in this course.***

Academic Integrity

All students are expected to act with civility, personal integrity; respect other students' dignity, rights and property; and help create and maintain an environment in which all can succeed through the fruits of their own efforts. An environment of academic integrity is requisite to respect for self and others and a civil community.

Academic integrity includes a commitment to not engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty include cheating or copying, plagiarizing, submitting another persons' work as one's own, using Internet sources without citation, fabricating field data or citations, "ghosting" (taking or having another student take an exam), stealing examinations, tampering with the academic work of another student, facilitating other students' acts of academic dishonesty, etc.

Students charged with a breach of academic integrity will receive due process and, if the charge is found valid, academic sanctions may range, depending on the severity of the offense, from F for the assignment to F for the course.

The University's statement on academic integrity, from which the above statement is drawn, is available at: <http://www.psu.edu/dept/oue/aappm/G-9.html>

OK, so **WHAT DOES THIS ALL MEAN... DO NOT EVEN THINK OF CHEATING!!!** Do not copy off of your fellow students, do not share assignments, do not work with other students on assignments (unless I instruct that you can), do not plagiarize (from books, the internet, from yourself, etc.). Be sure that you document all of your sources in the APA style. I will vigorously pursue any suspicions I have of academic integrity violations! If I suspect a violation, I will first have an informal conversation with you to discuss the issue. Then, depending on the outcome of that conversation, I will have another conversation with you that requires us both to sign an academic integrity report

form that will be turned in to the campus academic integrity committee. I will determine what I feel is appropriate punishment for your violation of PSU's academic integrity policy. The sanction may be from failing the assignment to failing the course, depending on the severity of the violation. We will be reviewing academic integrity and plagiarism the first week of classes.

To ensure that we do not have any accidental cases of plagiarism, we will be utilizing the Turnitin.com program to review all written assignments this semester. Before you turn in any graded work, you will run your assignments through this online plagiarism detection program. After you receive your report from Turnitin.com, then you can submit your work.

FIELDTRIP!!!

This course has a required fieldtrip to Washington DC on Tuesday, October 16. We will leave campus at 7AM and return no later than 7PM. We will be visiting the Solar Decathlon (see <http://www.solardecathlon.org/>) and visiting museums. You will have a project in this course relating to the Solar Decathlon.

If you have classes on that day, the trip will be counted as an excused academic absence. The faculty of your classes are required to allow you to make up any missed work. Please let me know during the first week of classes who the faculty are for your Tuesday classes. I will initially contact the faculty member to inform him/her of the fieldtrip, then it is up to you to approach your class instructors to make arrangements about missed work.

Breakdown of topics covered during each class meeting

- *note that this syllabus is subject to change with prior notification*

TS = Taking Sides text TP = The Tipping Point

► Week 1

M, 08/27: Introduction, scientific method, review of academic integrity, iTunes U

READ (ASSIGN READING): TS Issue #1

ASSIGN: Set up your account in Turnitin.com

ASSIGN: TS Issue #1 questions

ASSIGN: Introductory audio project

W, 08/29: The precautionary principle, how to audio record

DUE (11PM in ANGEL): TS Issue #1 questions

F, 08/31: FIELDTRIP: Ridley Creek State Park, meet next to TMZKO Building

ASSIGN: Ridley Creek tour
DUE (11PM in ANGEL): TP Starter question, Introduction, Ch. 1

► **Week 2** **READ:** TS Issues #2 & 3
M, 09/03: NO CLASS (Labor Day)
W, 09/05: Sustainable development and human welfare, price of world's ecosystems
F, 09/07: FIELDTRIP: Ridley Creek State Park, *may run into common hour
 DUE (11PM in ANGEL): TS Issues #2 & 3, TP Ch. 2 & 3

► **Week 3** **READ:** TS Issues #4 & 5
M, 09/10: protecting biodiversity
 DUE (11PM): Introductory audio project
W, 09/12: environmental racism
F, 09/14: principles versus politics
 DUE (11PM in ANGEL): TS Issues #4 & 5, TP Ch. 4 & 5

► **Week 4** **READ:** TS Issue #6
M, 09/17: National Constitution Day!
W, 09/19: trading pollution rights
F, 09/21: trading pollution rights
 DUE (11PM in ANGEL): TS Issue #6, TP Ch. 6 & 7, audio recording

► **Week 5** **READ:** TS Issues #7 & 8
M, 09/24: the military and environmental regulations
W, 09/26: ANWR and oil
F, 09/28: combating global warming
 DUE (11PM in ANGEL): TS Issues #7 & 8, TP Ch. 8 & Afterward

► **Week 6** **READ:** TS Issue #9
M, 10/01: Tipping Point discussion
 DUE (11PM): Ridley Creek Project
T, 10/02: Honors luncheon, Ridley Creek State Park, 11:30AM-1PM
W, 10/03: Tipping Point discussion
 DUE (11PM in ANGEL): TS Issue #9
F, 10/05: NO CLASS (Dr. G at UP)
 DUE (11PM in ANGEL): The Tipping Point take-home exam

► **Week 7** **READ:** TS Issues #10 & 11
M, 10/08: a hydrogen economy, LNG import facilities
 ASSIGN: audio tour of Solar Decathlon

W, 10/10: MOVIE: Who Killed the Electric Car? (*plan on staying during common hr)

F, 10/12: wind power

DUE (11PM in ANGEL): TS Issues #10 & 11

► **Week 8** -- Earth Science Week! **READ:** TS Issue #12

M, 10/15: reviving nuclear power, fieldtrip prep

T, 10/16: Fieldtrip to Solar Decathlon, Washington DC

W, 10/17: fieldtrip breakdown

F, 10/19: audio tour working session

DUE (11PM in ANGEL): TS Issue #12

► **Week 9** **READ:** TS Issues #13 & 14

M, 10/22: food and population

W, 10/24: birth rates and human welfare

F, 10/26: genetically-engineered food

DUE (11PM in ANGEL): TS Issues #13 & 14

► **Week 10** -- Dr. G in Denver for the week for meetings

M, 10/29: work on Solar Decathlon

W, 10/31: work on Solar Decathlon

F, 11/02: work on Solar Decathlon

DUE (11PM in ANGEL): rough product of audio Solar Decathlon tour

► **Week 11** **READ:** TS Issues #15 & 16

M, 11/05: fisheries

W, 11/07: DDT

DUE (11PM): Solar Decathlon project

F, 11/09: Dr. G at UP, post on discussion board initial SCA project ideas

DUE (11PM in ANGEL): TS Issues #15 & 16

ASSIGN: SCA project

► **Week 12** **READ:** TS Issues #17 & 18

M, 11/12: synthetic chemicals

W, 11/14: superfund site

F, 11/16: SCA workgroups

DUE (11PM in ANGEL): TS Issues # 17 & 18

November 19-23: Happy Turkey Day! No classes all week!

► Week 13 **READ:** TS Issue #19

M, 11/26: Yucca Mountain

T, 11/27: Socratic Symposium, Large Conference Room, 11:30AM-1PM

W, 11/28: SCA workgroups

F, 11/30: nuclear fuel

DUE (11PM in ANGEL): TS Issue #19, SCA project

► Week 14 **READ:** TS Issue #20

M, 12/03: organic farming

W, 12/05: organic foods

F, 12/07: organic lifestyle

DUE (11PM in ANGEL): TS Issue #20

► Week 15 **READ:** TS Issue #21

M, 12/10: endangered species

W, 12/12: invasive species

F, 12/14: back to the global environment

DUE (11PM in ANGEL): TS Issue #21

FINAL EXAM (cumulative) will be held in TMZKO 101 on
Monday, December 17th, 10:30AM – 12:20PM

You must be there to take the final! Remember that the final is open note, open book. If you show up late, you do not get any extra time to complete the final. If you do not show up at all, you will receive a score of zero on the final – no excuses allowed! *I will not grant permission to take the final exam early under any circumstances!*