

**UNIV 1301 16993 Fall 2019**  
**Seminar/Critical Inquiry: *Inventions***  
**Fridays 1:30-4:20 pm in Geology room 218**

Instructor: **Laura Serpa, Professor of Geophysics** 747-6085 GEOLOGY room TBA

Email: [lfserpa@utep.edu](mailto:lfserpa@utep.edu) preferred contact: Blackboard

Office Hours: TBA, by appointment, online

Peer Leader: email:

Advisor: Lydia Hernandez 747-8007 AAC email: lchernadnez11@utep.edu

Librarian: **Robert Klaphor** 747-5040 LIB 228 email: [klaphor@utep.edu](mailto:klaphor@utep.edu)

---

List other contacts here:

---

**Learning Objective:** *To improve the likelihood the students in this course will graduate in a timely manner with a Bachelor's degree in a field of study that they chose because it interests them and they want to build deep conceptual knowledge of that subject.*

---

- Goals:**
1. *Students will develop and apply elements of leadership through effective individual participation and meaningful team collaboration to empower them to be agents of change.*
  2. *Students will examine the roles and responsibilities crucial for their success in college and beyond.*
  3. *Students will identify, assess, and build on their strengths and experiences to develop academic and transitional strategies necessary for success in their academic, career, and life goals.*
  4. *Students will engage in research and critical thinking activities that demonstrate their ability to effectively integrate their learning within, across, and beyond academic settings.*
  5. *Students will engage in campus and community activities to increase their sense of academic and social belonging.*
- 

Upon successful completion of the course, students will be able to

- Demonstrate critical thinking skills about how scientists and engineers work to develop new ideas by making connections between observed phenomena and potential causes of the phenomena
- Use basic knowledge (to be covered in this class) of matter, computer programming, algebra and trigonometry to develop new concepts or explain observations
- Recognize and evaluate potentially faulty explanations for some observed phenomena and apply that knowledge to predictions of future issues such as climate change or population growth
- Understand the need for accuracy and precision in both measurements and descriptions of events

- Communicate their understanding about how things work orally, visually, and in writing
  - Work well within a group and know how to evaluate their role in the group and their expectations of others.
- 

REQUIRED TEXT BOOK:

**Borders: Crossing into Your Future**, 8<sup>th</sup> Edition (Available at the UTEP bookstore).

Raspberry Pi (or something similar) which costs about \$40.

Make sure you have the book by the first week of class and the Raspberry Pi by week 4 of class.

---

This class is a **HYBRID** class which means that more than 50% of the course is online. This is not a lecture class. You will be expected to take an active role in the class meetings. **Computer and Internet use in and out of class are absolutely required for this class.** You must bring an internet communication device—smart phone, tablet, or laptop computer—to class. You need to have your free UTEP email account activated for this course and you need to check it regularly. If you don't have one, go to <http://getmail.utep.edu> now to activate yours. All assignments and written communications will be submitted in Blackboard. **I will not accept papers turned in to me directly or emails that do not go through Blackboard without a very good justification.**

---

### ***PROCESS:***

Check Blackboard at least every other day to make sure you have the latest assignments and information. I will **not** modify a Blackboard assignment or due date to accommodate individual students unless you have a documented disability that justifies the accommodation or other documented medical or family emergency excuse. The due dates are absolute and there is no way to take quizzes after they have closed. Assignments handed in late will be marked late and points (10% of total points) will be deducted for every day an assignment is late. I would prefer to see something incomplete turned in on time for partial credit than a late assignment or nothing at all.

#### **Before each class:**

- \* Read the assigned materials--make sure you have done this *before* class
- \* Identify concepts that are central to understanding the topics to be discussed
- \* Prepare a list of questions from the reading for which you need further clarification
- \* Answer the assigned questions and submit them before class begins

#### **During each class:**

- \* There will be quizzes and activities throughout the class (stay awake!)
  - \* Take careful notes
  - \* Be an active participant—including all classroom activities and discussions.
  - \* You will be part of a group and you are expected to be professional and contribute your share to the group.
-

## ***COURSE REQUIREMENTS:***

**PARTICIPATION:** One intent of this course is for you to have fun learning something useful. To achieve that you should come to class prepared to discuss the assigned topics. You should have a good understanding of the reading and bring a calculator, laptop/tablet/smart phone, ruler, and paper to use during every class. Do not wear clothing you cannot get a bit messy. Invest in a lab coat to protect your clothing if you must dress up for class.

**HOMEWORK:** There will be homework assigned most weeks and it will typically be due on Wednesday before the next class. Homework must be turned in on Blackboard. I will not accept any other submission unless there is some sort of catastrophe and Blackboard is not working.

**OTHER DAILY RESPONSIBILITIES:** You are expected to check Blackboard daily and maintain your own calendar so that you will know what is due and when. You will also compute your grade in the class regularly.

**PROJECTS:** This class is very hands on and you will conduct research related to at least 2 projects. You will be asked to produce something that shows your comprehension of the material in a way that expresses your own personality. That something may be a video, written report, or actual item that you have built.

**TESTS/EXAMS:** We will have 2 high stakes exams worth a total of 30% of your final grade. One exam will be before the deadline to drop the class and the other will be during finals week. The exams will test your practical knowledge of how things work and you may be asked to construct something or analyze a problem as part of your exam.

**PAPERS OR OTHER WRITTEN ASSIGNMENTS:** You will be asked to write reports, turn in written answers to questions, reflections and homework. All of your written work will be graded for correctness in terms of answering a question, coherence, organization, and grammar.

**ORAL REPORTS:** There will be at least one and probably more assigned oral reports. These will be evaluated in much the same manner as a written report. That is, content, organization, and coherence will be the primary basis for grading.

**GROUP ASSIGNMENTS:** Much of the in-class activities and outside assignments will be group activities. Your role in the group will be evaluated by both the other group members and the observations of the instructor and peer leader. Regardless of your personal issues with any member of your group, you are expected to work professionally and show respect to all members of your group.

**UNIV 1301 END-OF-SEMESTER SURVEY:** Everyone will take the survey. It will be treated like a quiz as part of your grade but we will not see your responses to the survey.

**OTHER:** Research projects will include library research, a written plan, construction of some product and an oral/written report on the outcome. There will also be at least one “competition” as part of this class where you and your group will be asked to perform some creative feat and be judged on how well you complete the task. I will bring in outsiders to judge the competition and assign points for your performance.

---

***POLICY:***

**ATTENDANCE/LATENESS:** Each class begins with a quiz and ends with a written reflection. There are assignments throughout the class that you are expected to complete and turn in at specific times that day. If you do not turn them in on time then you will not receive points for completing them. If you know you have to miss a class, talk to the instructor and make arrangements to complete all of the required work ahead of time or online. If you are sick or there is a family emergency that you cannot reasonably anticipate, bring in documentation and discuss the problem with your instructor. If you are often sick and/or have lots of family emergencies, I can arrange for you to complete most of the work online and get credit for that work if it is turned in within a time frame that matches that of the students working in class. You will still lose the class participation points in that case. If you miss more than 5 hours of class time due to unapproved absences or late arrival/early departures you will be dropped from the course if it is prior to the drop deadline and will receive a failing grade for the entire class after the drop deadline.

**DEADLINES AND LATE WORK:** All assignments have a fixed due date and time that will be announced when the assignment is made. If you turn things in late, you will be docked 10% of the total possible grade for that assignment every day that it is late. I would prefer to receive an unfinished assignment on time than a late or missing assignment.

**MISSED TESTS AND QUIZZES:** You will not receive credit for any missed quizzes and they cannot be made up. Exams can be made up with properly documented justification for missing them but the make-up exam may be harder than the original exam.

**EXTRA CREDIT:** There is no extra credit available in this class

**CELL PHONES:** I would like to tell you to turn off your cell phones in class but there are several occasions where you may need them to complete an activity. Please mute your phones and ignore incoming messages and calls during class unless otherwise instructed by me to use your phone.

**CIVILITY/CLASSROOM CONDUCT:** Treat this class as if it is the job of your dreams and you do not want to be fired. That means you must behave professionally at all times and treat everyone in the class with respect. Disruptive or disrespectful behavior will reduce your class participation grade by the percent of time your behavior was unacceptable compared to the total time over which your behavior was evaluated for that day.

**UTEP FINAL EXAM POLICY** [From the 2017-18 UTEP Undergraduate Catalog]:

Exemption from final examinations cannot be given. Final examinations are scheduled to be two hours, forty-five (45) minutes in length and take place during the final examination period. It is the policy of the University not to administer a second final examination in a course. It is also University policy that students shall not have more than two final examinations in a single day. In the unlikely event that the examination schedule results in a student having three final examinations on a single day, the faculty member upon the request of the student shall reschedule the second of that student's three examinations.

**COPYRIGHT STATEMENT:** Some of the materials in this course are copyrighted. Violation of US copyright law can result in civil damages up to \$100,000 for each work copied. Copying of textbooks is not "fair use" under the Copyright Act. The "fair use doctrine" only permits non-commercial copying of part (in general, not more than 10%) of a copyrighted work. Do not bring a copied textbook to this class. Your cooperation is expected

**STUDENT CONDUCT:** [From the Handbook of Operating Procedures: Student Affairs] All students are expected and required to obey federal, state, and local laws, to comply with the Regents' Rules and Regulations, with The University of Texas System and University rules and regulations, with directives issued by an administrative official of the U.T. System or The University of Texas at El Paso in the course of his or her authorized duties, and to observe standards of conduct appropriate for an academic institution.

**SCHOLASTIC DISHONESTY:** [From the Handbook of Operating Procedures: Student Affairs] Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

**DISABILITY STATEMENT:** If you have or suspect you have a disability and need an accommodation, you should contact the Center for Accommodations and Support Services at 747-5148 or at [cass@utep.edu](mailto:cass@utep.edu) or go to Room 106 Union East Building.

**MILITARY STATEMENT:** If you are a military student with the potential of being called to military service and/or training during the course of the semester, you are encouraged to let me know well in advance.

**POLICY ON MAKE-UP EXAMINATIONS:** **NO** make-up exams will be given for reasons other than illness (doctor's note required), absence with the instructor's prior approval, or when a student is on official University business or has an unexpected family emergency (documentation required). There are no make ups for quizzes or in class activities. If you arrive late and miss something, it is your responsibility to get the information from other students and complete assignments on your own.

**POLICY ON ACADEMIC HONESTY:** **Academic Dishonesty will not be tolerated. All university guidelines will be strictly followed. Please read these guidelines carefully. If you have any questions regarding the university policy please contact the Dean of Students.**

---

**Class activities** include a wide range of things that we do in class including lab experiments (50%), written reports and responses (10%), discussions (10%), and presentations (10%). Your group participation (20%) will be evaluated by your group members and the instructor. It will also be included in your class activities grade.

**Videos, homework, online activities:** You will make videos, have assignments outside of class, and conduct online activities both individually and with your group that will make up the second category. These activities vary enough that the breakdown for credit in each subcategory cannot be defined here but will be given when the work is assigned.

**Projects:** There will be 2 research projects which will involve close collaboration with your group. 50% of the grade will be based on the outcome for the group and the remaining 50% will be based equally on an equal combination of the instructor evaluation of your effort and your group's evaluation of your effort.

**Community Service and participation:** You will be expected to volunteer for at least 2 days of community service activities, attend 2 university events and participate in a student organization during the semester. You will write a report on each activity and present a description of your community service to the class. The activities should relate to what we are doing in class and could be group or individual activities. We will discuss a number of options that should fit everyone's requirements and interests for this service.

There is a short **quiz** at the beginning and a **reflection** at the end of each class and two **exams** during the semester.

### **Grading:**

Class activities including participation	10%
Videos, homework, online activities	10
2 Projects (15% each)	30
Community Service & participation	10
Quizzes & reflections	10
2 Exams (15% each)	30
Total .....	100%

Each category will be averaged separately and reduced to the percentage of the final grade indicated above. We will go over some examples of how this is done in class.

91-100 = A, 81-90 = B, 71-80 = C, 61-70 = D, 0-60 = F