GEOG 213 – 500: Planet Earth Lab
Texas A&M University

Instructor: Charles Lafon
TA: Swetha Peteru
Course Time: Thursday 2:20 pm – 4:20 pm
Course Location: CSA 311
Online: http://elearning.tamu.edu/

Email: Speteru@tamu.edu
Office: CSA 203F
Office Hours: Tuesday 10:30 – 11:00 am;
Thursday 9:30 – 11:00 am; or by appointment.

Course Description

GEOG 213: Planet Earth Lab is intended to give students hands on experience with basic concepts in physical geography. This course covers a variety of topics and tools, including GPS, mapping, climatic analysis, weather maps, surveying, dendroclimatology, and hydrology. A problem-based approach underlies the course.

Learning Outcomes

Students will be able to

- Explain basic earth science concepts
- Solve problems by applying earth science concepts and methods
- Articulate how science impacts society
- Extract important points and synthesize material
- Describe earth surface features and concepts through maps, graphs, text, and quantitative expressions
- Solve problems by collaborating in data collection, analysis, and interpretation

Required Books


The lab manual for this course is mandatory. Each week we will be working on a lab directly from the lab manual, which will be turned in the following week. Photocopies of labs or labs that have already been worked on will not be accepted. Students should come to class having read the lab for the particular week (see lab schedule below) as labs will typically be much easier if there is some prior knowledge of the work we will be doing in class.

There are also good textbooks in the library that cover introductory physical geography and there are online textbooks that are good supplements as well. For example – www.physicalgeography.net. Additionally, students are encouraged to bring calculators capable of computing simple calculations to lab each week (cell phones are NOT acceptable calculators). Basic knowledge of Microsoft Excel (or similar) will be helpful for at least one lab.
### Lab Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Lab</th>
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<tbody>
<tr>
<td>1</td>
<td>Aug 27–31</td>
<td>Syllabus and Introductions</td>
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<tr>
<td>2</td>
<td>Sep 3–7</td>
<td>Lab 1: How do you navigate with a GPS?</td>
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<tr>
<td>3</td>
<td>Sep 10–14</td>
<td>Lab 2: How do you read a map?</td>
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<td>4</td>
<td>Sep 17–21</td>
<td>Lab 3: How much energy do we get from the sun?</td>
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<td>5</td>
<td>Sep 24–28</td>
<td>Lab 4: How would the climate change if we replaced a grassy field with a parking lot?</td>
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<tr>
<td>6</td>
<td>Oct 1–5</td>
<td>Lab 5: What controls the climate?</td>
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<td>7</td>
<td>Oct 8–12</td>
<td>Lab 6: What is the weather going to be tomorrow?</td>
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<td>8</td>
<td>Oct 15–19</td>
<td>Lab 7: How cold was it in 1816?</td>
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<td>9</td>
<td>Oct 22–26</td>
<td>Lab 8: How will the type of trees in this forest change in the future?</td>
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<tr>
<td>11</td>
<td>Nov 5–9</td>
<td>Lab 10: How do you make a topographic map? Part 2: Creating contour lines</td>
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<td>12</td>
<td>Nov 12–16</td>
<td>Lab 11: Is there enough water</td>
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<tr>
<td>13</td>
<td>Nov 19–23</td>
<td>Thanksgiving Holiday: No Labs</td>
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<tr>
<td>14</td>
<td>Nov 26–30</td>
<td>Lab 12: How large is a 10-year flood?</td>
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### Grading

Your grade will consist of 12 lab assignments, assignments regarding current events, a participation grade, and responding to discussion questions posted on E-learning. The grades are broken down as follows:

- 12 lab assignments - 60%
- Current events assignments - 20%
- E-learning posts - 10%
- Participation - 10%

Final grades will be assigned based on the following scales:

- $\geq 90\% = A$
- $80\% - 89\% = B$
- $70\% - 79\% = C$
- $60\% - 69\% = D$
- $<60\% = F$
Attendance and Other Policies

*I expect all students to attend every session having done the background reading.* If a student does not attend class and does not have a written university-approved absence (see section 7.1 of the TAMU student rules at [http://student-rules.tamu.edu](http://student-rules.tamu.edu)), the student will receive a zero for that laboratory assignment. If you miss a session for a university-approved reason, you must follow the procedures outlined in section 7.3 of the student rules to have your absence excused. If you missed class with an excused reason, you must make arrangements to meet with your lab instructor as soon as possible to make-up the assignment.

Each lab assignment will be due at the start of your next lab (unless stated otherwise). Late lab assignments will only be accepted with instructor permission. Except in cases of university excused absences, labs turned in more than one week after the due date will not be accepted.

*Cell Phones:* Cell phone use in class is NOT acceptable. All cell phones should be turned off at all times during lab and kept in backpacks, purses, etc. There should be absolutely no texting in class, and certainly no answering the phone while in class. Students should bring a separate calculator, as cell phones will not be allowed. If students fail to abide by this policy, the student will be told to leave class and will only be allowed to return with instructor permission.

Scholastic Dishonesty

It is my hope that academic dishonesty will not be a problem in this class. Texas A&M does, however, have a Scholastic Dishonesty policy to which both students and faculty must comply. If you have any questions about the University’s Scholastic Dishonesty policy please review the Student Rules or see me. The Aggie Honor program is the program that handles all cases of academic dishonesty, their website is located at: [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/).

As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins; a plagiarist destroys the trust among colleagues without which research cannot be safely communicated.

The materials used in this course are copyrighted. These materials include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless permission is expressly granted.

If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, [http://student-rules.tamu.edu](http://student-rules.tamu.edu), under “Scholastic Dishonesty” section.

**Aggie Code of Honor:** “An Aggie does not lie, cheat, or steal or tolerate those who do.” [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/)
Student Support
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact:
The Department of Student Life: Services for Students with Disabilities
Cain Hall, Room B118, 979-845-1637, http://disability.tamu.edu/

There are numerous other student support organizations on campus including:
- Student Learning Center, 118 Hotard Hall, 845-2724; http://slc.tamu.edu/
- Student Counseling Service, Cain Hall, 845-4427; http://www.scs.tamu.edu/