Introduction to Physical Geography – Lab
GARP 0102, Sections 01A/01B/01C

The Physical Geography Lab builds on your knowledge of physical geography developed through class lectures, the study of your textbook, and the series of homework assignments. Here you can put your knowledge to use in solving problems that are based on topics addressed in the lecture. Some of the exercises also reach out into new directions and explore topics not covered in the lecture or textbook. We will also spend time, as needed, to review material, answer questions, and discuss geography-related news items.

Lab Manual

The exercises in this lab manual give you an opportunity to apply many of the concepts discussed in the lecture. Each exercise begins with a brief introductory section that reviews key concepts and provides important background information. The lab manual is a derivative of the textbook – at the beginning of each lab exercise you will find the appropriate textbook reference for that topic (e.g. Exercise 8 “Solar Angle” is covered by pp. 17-22 and p. 26 in the textbook).

You are required to have your own copy of the lab manual and to read the associated text material and the lab exercises prior to lab.

The Fine Print
• All lab exercises must be completed during the respective lab session.
• Attendance is mandatory as we meet only once every week. Therefore, missing class (for any reason) leaves you with a considerable gap in your learning process.
• No make-up labs (see grading).
• If you fell that you are not progressing as well as you hoped, please feel free to talk to me. The sooner the better! Please do not wait until the end of the semester.

Grading
Each lab (n = 12) is graded on a 10 point scale (at 0.5 point increments). The two lowest grades are dropped – the mean of the remaining 10 grades will be your lab grade and contribute 30 percent to your final course grade.

At-Home Labs
Lab #5 (Week 6) and Lab #9 (Week 10) are designated as “at-home labs”. We will not meet formally during these two weeks. Instead, you can complete the assigned at your discretion. I encourage you to collaborate with fellow students on these “at-home labs” – however, you are required to submit (and you are responsible for) your own work. The “at-home labs” are due at the beginning of the following formal lab session.
## Lab Schedule

<table>
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<tr>
<th>Week</th>
<th>Lab</th>
<th>Dates</th>
<th>Theme(s)</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>No Lab</td>
<td>9/6, 9/8</td>
<td>First Week of Semester</td>
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| Week 2 | Lab #1  | 9/11, 9/13, 9/15  | Metric Conversions
Earth-Sun Relations | Ex.1
Ex.4-I, Ex.6
Ex.7 |
| Week 3 | Lab #2  | 9/18, 9/20, 9/21  | Insolation
Temperature Patterns | Ex.9-I
Ex.10 |
| Week 4 | Lab #3  | 9/25, 9/27, 9/29  | Pressure
Wind | Ex.11
Ex.12 |
| Week 5 | Lab #4  | 10/2, 10/4, 10/6  | Humidity | Ex.13-I/II |
| Week 6 | Lab #5  | At-Home Lab       | Contour Lines
Topographic Maps | Ex.22
Ex.23 |
| Week 7 | Lab #6  | 10/16, 10/18, 10/20 | Adiabatic Processes
Stability | Ex.14-I/II
Ex.15-I |
| Week 8 | Lab #7  | 10/23, 10/25, 10/27 | Mid-latitude Cyclones | Ex.16-I/II |
| Week 9 | Lab #8  | 10/30, 11/1, 11/3  | Weather Satellite Images
Hurricanes | Ex.18-I/V
Ex.19, Part I |
| Week 10 | Lab #9 | At-Home Lab       | Weather Satellite Images
Hurricanes | Ex.18-II
Ex.19-II |
| Week 11 | Lab #10 | 11/13, 11/15, 11/17 | Plate Tectonics
The San Andreas Fault | Ex.27-I
Ex.31-II |
| Week 12 | No Lab | 11/20, 11/22 | Thanksgiving Week |              |
| Week 13 | Lab #11 | 11/27, 11/29, 12/1 | Flood Recurrence Intervals
Coastal Landforms | Ex.36
Ex.42-I/II |
| Week 14 | Lab #12 | 12/4, 12/6, 12/8  | Continental Glaciation
Alpine Glaciation | Ex.40-I/III
Ex.41-I/IV |

### What To Bring
- Ruler
- Pencil and colored pencils
- Calculator
- Optional: inexpensive magnifying glass