ES 106 Lab 5 Addendum

Read the following directions before starting into the lab activities in this packet. This addendum summarizes changes that are necessary for you to complete the lab at home.

You can work on the lab packet on your own time during Sunday through Thursday of each week.

When you have completed the packet for this lab, you can take the weekly lab quiz that is available on Moodle. The online quiz is due by <u>6:00 PM on Thursday</u> and will no longer be available to students after that time. <u>Be</u> sure to give yourself 30 minutes to complete the quiz!

There will also be a **Hand-In Page** that is due by **6:00 PM on Thursday** (See directions below).

Directions:

Complete the Pre-Lab (Page 7.2) first.

<u>See the presentation</u>, "<u>Oregon Geography and Climate</u>" provided on <u>Moodle</u>. Part of this presentation provides an introduction to the influences on Oregon climate and some of the terms that you will need to look up for the Pre-Lab.

The work that you did in the Lab 4 packet and the presentation on orographic lifting from last week will also be helpful for answering some of these questions.

Laboratory Jump Start Activity (Page 7.3)

Read the directions and go to the URL (the underlined web address) provided above the table. The website will provide the information that you will need to for filling in the table.

It may take a moment for the entire web page to load. It includes aerial photos, typical vegetation types, mean monthly temperatures and average monthly rainfall amounts for each location. If everything does not load on the page, then you may have to click on the individual boxes in the columns labeled, "Rainfall" and "Precipitation" in order to download the data and view it.

Part A: Activity 1 (Pages 7.4 and 7.5)

<u>See the presentation, "Oregon Geography and Climate" provided on Moodle</u> in order to complete the table on Page 7.5

We know that not everyone is native to Oregon, so this guide will be useful for learning the physical geography of this state.

We will Skip Activity 2 on Pages 7.6 and 7.7!

Questions 1-8 on Page 7.8:

<u>See the precipitation map provided on Moodle</u>. You can compare this map to the physiographic map from Part A in order to answer the questions on this page.

Part B:

Activity 1 (Pages 7.9 - 7.11):

Make sure to read and follow the directions on page 7.9 before working on Page 7.11!

The data that you will need is in Table 1 on Page 7.10. Note that the arrows on the left-hand side of the table point to the 6 weather stations that are shown on the graph (Figure 4) on Page 7.11

Answer Question 1 and 2 at the top of Page 7.11 after you have completed the bar graph. A key concept to keep in mind is what is happening to the air as it rises over the western slopes of the Cascades and then sinks back down on their eastern slopes. In addition, think about the fact that cities located farther inland are well away from the influence of the Pacific Ocean. In general, you will see that the Cascades form a significant topographic barrier between the climate zones of Oregon.

Note: Page 7.11 is the HAND-IN PAGE for this week's lab!

When you have completed Figure 4 and answered the two questions on Page 7.11, you will need to scan or photograph that page. Save the image as a jpeg or PDF. Make sure that your answers to Questions 1 and 2 are clear and legible. In addition, the bar graph must be neatly drawn and make sure that the bars for each station are spaced apart in order to obtain full points.

Go to the course Moodle site and find the option for submitting the hand-in page that is shown for this week! **Do not email your lab instructor the hand-in page!**

Activity 1 (Page 7.12):

Answer the question at the top of the page and fill out the table on Maritime vs. Continental climate zones.

Keep in mind that areas classified as being in a <u>Maritime Climate</u> are influenced by the Pacific Ocean. Areas with a <u>Continental Climate</u> are going to be in the interior of a continent away from the influences of the ocean.

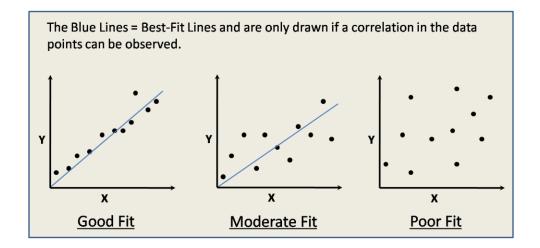
Activity 2 (Pages 7.12-7.16):

Make sure to read and follow the directions at the bottom of Page 7.12 before plotting the graphs on Pages 7.13, 7.14, and 7.15!

As mentioned in the directions, you will need to look up the data in Table 1 on Page 7.10. Each graph is already labeled and the scales are provided for the x and y axis.

When you have completed the three graphs, answer Questions 1-3, and Skip Question 4 on Page 7.16!

See the diagram below in order to understand what is meant by drawing a "best-fit" line. In addition, the diagram shows examples of a good fit, moderate fit, and poor fit when determining if the data points form a consistent pattern in each of the graphs.



We will skip the Post-Lab Assessment on Page 7.17!