This exercise replaces your grade (20 pts) for the Plant Diversity lab. This make-up is in two parts. The first part consists of 5 questions and an essay. The second part consists of the Greenhouse Self-Guided Tour (pp. 190 – 198 of your lab manual).

First read through the Plant Diversity section of your lab manual to familiarize yourself with the terminology necessary for understanding this lab. You must then answer the following questions. All responses must be written in YOUR OWN WORDS and in COMPLETE SENTENCES. The essay topic and guidelines are on the next page. The questions and essay total 10 pts. If you have any questions, feel free to contact your TA.

1. (1 pt) Complete the following table: a comparison of the four major plant groups

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mosses</th>
<th>Ferns</th>
<th>Gymnosperms</th>
<th>Angiosperms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does it have <strong>vascular tissue</strong>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it have <strong>true roots</strong>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it have <strong>true leaves</strong>?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it produce airborne pollen?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it produce airborne spores?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it produce seeds?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it produce flowers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does it produce fruit?</td>
<td></td>
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</tr>
</tbody>
</table>

2. (1 pt) Complete the following cladogram: plot the terms in **bold** from the table above. ‘Spores’ has been plotted for you as an example.
Describe 3 different species of invasive plants that are currently found in Connecticut. For each species, explain where it is originally from, how it got here, and why it is considered such a problem.

3. (1pt) Explain why most mosses are short and tend to live close to water.

4. (1pt) Explain why some plants are carnivorous.

5. (1pt) Define the term “Convergent Evolution”.

Make-up Assignment Essay: Plant Diversity

The following constitutes the essay portion of your lab make-up, with the topic provided below. Your essay will be worth up to 5 points. Basic guidelines for this essay are listed below.

Guidelines for Writing the Lab Essays

Please note: Your grade will be reduced if these guidelines are not followed.

1. Everything must be on one page only, single-sided, NO exceptions!
2. Must include your Name, Lab Section Number and the Title (the question or assigned topic) at the top.
3. 300-350 words, not including Name, Lab Section, Title or References.
4. Single-spaced
5. Typed
6. 12-point font size
7. Must use Times, Times New Roman, or Arial font style
8. Everything must be stated in your own words. Do not plagiarize!
9. Must include at least Two References Cited (only one of which can be Wikipedia).
University Greenhouse Self-Guided Tour

• Research the six topics on pages 188 and 189, and answer the questions listed. All responses must be typed on a separate sheet of paper, in YOUR OWN WORDS and in COMPLETE SENTENCES. This will be handed in to your TA.

• Follow the procedure starting on page 190. Complete sections A – D (pages 191 - 194).

• You will be handing in pages 192 - 194 of your manual to your TA.