Phenology Project: Rubric and Planning

In Spring 2009, students in BS 110 Lab will work together with their lab section to:

1) construct an original question related to springtime phenologic events,
2) design and conduct an experiment and/or a method for data collection related to the question,
3) analyze their results,
4) organize and present their research in the form of a scientific poster.

The phenology project constitutes 25% of students’ lab grade. Components of the phenology project grade are distributed as follows:

• 50% Final Poster Product – Students will reassemble into task groups that will be responsible for completing different poster components (described in detail below). The overall poster grade will be applied to all students in the section.

• 20% Data Production – Base groups are all accountable for:
  - producing data that contributes to the class phenology project, and
  - reporting their spring phenophase data for their assigned trees in lon-cap.

• 20% Discretionary Points – TAs may assign tasks unique to their section for the purposes of keeping the project moving forward and ensuring accountability.

• 10% Evaluation of Member Contributions – Students will have an opportunity to provide feedback about the quality and quantity of their team members’ contributions in both their permanent base groups and in the task groups.

*Note: the above are weighted values for different categories of grades associated with the phenology project. Points within a category do not necessarily reflect their overall weight. For example, “data production” and “TA discretionary points” may have different point values associated with them, but both categories will have an equal impact on your final grade (20%).
Phenology Project Proposed Timeline

Base groups work together to collect data for the project and search literature for relevant papers, resources.

Wks 11/12 (4/13-4/17; week of pollination lab)
1. Poster planning. TAs review with students the goals of a scientific poster and the requirements for each of the poster elements.

2. Base group members reassemble into task groups – at least 1 member from each base group will work in:

<table>
<thead>
<tr>
<th>Task Group</th>
<th>Responsibilities</th>
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<tbody>
<tr>
<td>Writing Team</td>
<td>write the introduction, methods, and conclusions</td>
</tr>
<tr>
<td>Data Team</td>
<td>compile results, analyze data, construct figures and tables for results, including legends, captions, etc.</td>
</tr>
<tr>
<td>Design and Editorial Team</td>
<td>design poster template, craft poster title, format all poster elements, write captions for photos and images, “posterize” written materials received from other teams, print final poster at library, upload electronic version of poster to Angel</td>
</tr>
</tbody>
</table>

3. Task groups work together to:
   • exchange contact information so that materials may be e-mailed to all members
   • discuss how you will divide labor in order to make progress in an efficient manner
   • strategize about a plan for communication to ensure that all members have access to the materials and are kept informed of members’ progress on tasks (e.g., Angel group, blog, Ion-cap, etc.).

Wk 14 (4/13-4/17)
1. Base groups (permanent groups of 4) are accountable for bringing to lab:
   • complete project data (excel spreadsheet that can be transferred it to the data team)
   • a minimum of 1-2 references related to their research topic (e.g., primary literature, websites, etc., bring an electronic or hardcopy and transfer to the writing team)

2. Group Effort Analyses for base groups.

3. Work time for task groups.

Wk 15 (4/20-4/24)
1. Task groups (writing, data, and design teams) are accountable for:
   • e-mailing final poster elements to TA 24 hours BEFORE lab time

2. Design team will incorporate poster elements into the template and project the poster so that all students may
   • review and provide comments on materials created by other task groups
   • discuss final edits to materials for a final draft

3. All students provide $1.00 to design team to cover printing cost.

4. Design team takes final poster file to library for printing.

Wk 16 (4/27-5/1)
1. Design team uploads final poster to Angel.
2. Group Effort Analyses for task groups.
3. Spring phenophase data uploaded into Ion-cap for trees.
4. Course evaluations.
5. Visit posters from other sections!!