Assignment descriptions and grading criteria

<table>
<thead>
<tr>
<th>Point distribution</th>
<th>Graduate</th>
<th>Undergraduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly questions</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Posted questions/answers</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Questions for presenters</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Class participation</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Group presentation</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>News and views paper</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>260 points</strong></td>
<td><strong>210 points</strong></td>
</tr>
</tbody>
</table>

**Grading for weekly questions: (100 points total)**
10 points possible per assignment: 5 for typed answers prepared before class and 5 points for final answer (including revision) submitted at the end of class. To receive the full 5 points for the final answer you must add something to your original answer (even if it met the pre-class criteria for a 5 shown below).
A maximum of 100 points can be earned for the 12 problem sets (120 points possible). This allows you to miss one or two, or to raise your score by completing extra question sets.
Assignments are **due at the end of class and will not be accepted after I leave the classroom** unless prior arrangements have been made or there is a documented emergency.
0 = no response
1 = incomplete assignment (<50%)
2 = incomplete assignment (>50%)
3 = answers taken directly from paper without synthesis or commentary
4 = thoughtful answer, but no references to the assigned reading.
5 = thoughtful answer with arguments supported using evidence from assigned readings

**Grading for questions/answers posted online (10 points total)**
For the 7 classes without question sets assigned, you are required to post a question that arises during your reading. The question can be either for clarification of material, about the “bigger picture” of the scientific work, or nearly anything else. Some of these questions will be discussed in class. In addition, you are required to post a possible answer to another student’s question some of the time (it is ok to speculate rather wildly here as long as it doesn’t contradict what we have covered in class). Each posted question or answer earns 1 point. There is a maximum of one question and one answer point that can be earned for any one lecture. This means that if you post both questions and responses, you only need to participate 5/7 weeks.

**Grading for presentation questions: (20 points total)**
Each day of student presentations will include two groups. **All students not presenting that day must submit two questions by midnight the day before the presentations.** Questions posted after midnight (including 12:00:01) will automatically lose 1 point. One of the questions must be technical and the other conceptual, with one question for the first group and the other for the second group. You will automatically earn all 4 points on the day you present.
0 = none submitted
1 = both questions same type (technical or conceptual)
2 = one technical, one conceptual/discussion question

**Class participation (30 points)**
10  Attendance (you can't participate if you are not present. -1 point for every 2 classes missed)
10  Frequency of contributions (10 = question or comment at least every other class)
10  Quality of contributions (0 = disruptive 5 = off-topic 10 = insightful)

**Group presentation (50 points)**
25 minute presentation, 10 minutes for questions. PowerPoint is best for these presentations, but overheads can also be used if you tell me ahead of time. You are welcome to use the TabletPC, but have to try out your presentation ahead of time with me.
10 Contribution to the group (as judged by your group members)
15 Visual aids
15 Verbal presentation
10 Discussion/questions

**Graduate students: News and views (50 points)**

Due Friday April 20 by 5pm at my lab (1061 Natural Science Building). 10 points off for every day late, starting at 5:01 (according to the university server clock on my computer). Printer failures, computer problems, getting lost, etc are not valid excuses for being late. Don’t plan to submit your paper at the last minute. Unforeseen problems ALWAYS arise. Pretend this is a non-negotiable grant deadline.

20 Accuracy: Data and conclusions are correctly summarized
10 Context: Describing the relationship of the work to other studies
10 Insightfulness: Suggested future research directions
10 Presentation: Including grammar, spelling, following guidelines

**News and Views (Modified from Nature’s guide for Authors)**

These articles inform non-specialist readers about new scientific advances, as reported either in recently published papers (in *Nature* and elsewhere) or at scientific meetings. Many examples can be found in *Nature*.

NOTE: You can focus your News and Views article on any paper discussed in class, including one that you used for your group presentation. A single paper should serve as the foundation for the paper (this is the news), but your views on its importance and implications must be supported using other papers (either read in class or that you find on your own.)

These guidelines should be followed in writing it:

Authors are not allowed to discuss work in which they are involved or work from their own or colleagues' institutions.

Articles should be 500-800 words.

Titles should contain no punctuation marks or abbreviations. News and Views articles also carry a 'strapline' of one or two words to define the general subject area of the article, and a sentence to summarize the message of the article in simple language.

The 'news' should be mentioned in a succinct opening paragraph to attract the attention of those who are not experts in the field. This paragraph should explicitly refer to the paper under discussion and touch on the significance of the new work.

More detail, background and explanation should follow, including the author's own 'views'. The text must be rounded off with comment on the implications of the new work and on future research directions.

Articles should not read like textbooks: most readers will have a general scientific background but specialized terminology should be avoided.

Diagrams should be used to explain the new points made, or the background science to the new result.

References should be kept to a minimum, that is, less than ten. They should be given superscript numbers and cited sequentially in the text, as *Nature* style. References should be listed at the end of the article in the usual *Nature* style but without the titles of citations (see: http://www.nature.com/nature/authors/gta/index.html#a5.4).