There will be a total of 520 points accrued throughout the semester with grades (no +, no -) assigned in the following way:

A  88.000%
B  75.000 to 87.999%
C  60.000 to 74.999%
D  50.000 to 59.999%
F  0-49.999%

The number of decimal points show reflects the fact that 74.999% is 75%. Once the percentage is calculated there is **NO Rounding** because of the number of manipulations of the data, as described below.

Types of work:
3 exams, 1 final.

**Discussion** is mandatory and will consist of working problems in groups. You are allowed on absence. Your grade for discussion will be a % of completed work of the total for a total of 50 points.

\[
% \text{Discussion} = 100 \left[ \frac{\sum \text{discussion obtained}}{\sum \text{discussion possible}} \right]
\]

Each discussion period has assignments **turned in during discussion** worth 10 points. The total number of points is typically 120 (12 periods) but may vary if discussion period is used for review for the exam. **There will be no “make up” of discussion.** The reason for this:
a) with 120 students it is maintain a fair and consistent grading policy with late materials;
b) the “point” of requiring discussion is that studies show that students learn better when they work in small groups - discussion is intended to foster the formation of external study groups
c) discussion allows me to move among all of you and find out what are stumbling blocks with the material.

**OWLS** OWLS is a commercial package of online series of questions with immediate feedback. You will be graded by successful completion (not by attempts) of questions. Your grade for OWLS will be a % of completed work for a total of 50 points.

Thus, you can get 100 points (19.2% of total) by simply performing the required work (no grading).

**Paper.** A one and a half or two page paper will be assigned. It must be typewritten, with exceptions of chemical structures and equations, although use of an equation editor and copy and
pasted formally drawn structures will be appreciated. Two compounds will be selected by the student. One compound should be on a toxic registry and one a pharmaceutical. Students are to find for each of the two compounds
a) Henry’s Law Constant  
b) Octanol/water Partition Coefficient  
c) aqueous solubility, s  
d) half life in some appropriate media. That is for the toxic substance this can be in soils, estuary sediments, etc., for the pharmaceutical this would be for some appropriate body organ.  
e) The students should contrast and compare the European regulatory (REACH) approach to the U.S. regulatory approach for the toxic compound.  
f) With the above information and any other the student may wish to present the student is to write a two paragraph chemical description of the compound relating the information to the chemical structure and its properties.

20 points (3.8% of total) are assigned to a 2 page paper. Failure to turn in the paper would lower your final letter grade by ½. For example if your total % points gave you a “B” and you had failed to turn in the paper your final grade would become a “B-“.

Schemes for calculating total points:

<table>
<thead>
<tr>
<th>Scheme 1</th>
<th>Scheme 2</th>
<th>Scheme 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 exams scaled 300</td>
<td>Best 2 of 3 exams 200</td>
<td>Best 1 of 3 exams 100</td>
</tr>
<tr>
<td>Final 100</td>
<td>2x(Final) 200</td>
<td>3x(Final) 300</td>
</tr>
<tr>
<td>%Discussion 50</td>
<td>%Discussion 50</td>
<td>%Discussion 50</td>
</tr>
<tr>
<td>%OWLS 50</td>
<td>%OWLS 50</td>
<td>%OWLS 50</td>
</tr>
<tr>
<td>Paper 20</td>
<td>Paper 20</td>
<td>Paper 20</td>
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<tr>
<td>520</td>
<td>520</td>
<td>520</td>
</tr>
</tbody>
</table>

Schemes 2 and 3 only apply if 3 out of four exams have been taken with average scores 30 points or better. This rule is intended to prevent students from skipping three exams, taking one and the final only.

The goal is to allow students who take a while to “get up to speed” to be able to demonstrate their mastery of chemistry as their learning strategies improve.

My job: to coach you
Your job is the hard one - work:
AN “A” student successfully works 7-12 end of chapter problems EVERY NIGHT!