Concepts in Chemistry
LON-CAPA ASSIGNMENT GUIDE

Over the course of this year you will be doing a number of assignments and quizzes on LON-CAPA. There are several things to note about the LON-CAPA assignments and quizzes:

1. Assignments:

The assignment folders in LON-CAPA are comprised of two parts -- **the practice assignments and the actual assignments.**

a) Practice Assignments- We want you to be able to repeat questions until you are confident in your ability to solve them, without wasting time doing questions you already know how to do. **Therefore, each assignment in this class has an associated practice assignment.** This consists of a selection of questions similar to those on the assignment that can be attempted whenever you wish. These practice assignments are graded but not counted towards your final class mark.

b) Actual Assignments- These are the assignments that are graded and count towards your class mark. You will be allowed three attempts for each question. **If you have not obtained the correct answer after three attempts, you will not receive credit for that question.**

2. Submitting Answers:

The assignment questions will be presented to you one at a time. You do not have to complete the questions in any particular order, but **you must submit your answer for each question after you have entered it into the answer box** - otherwise your answer will not be recorded and you will not receive a grade.

3. LON-CAPA will convert between different units (within reason):

For most questions you will be required to enter a unit with your answer. **Unless the units are obvious, you will be told the format for the units in the question. To see which units LON-CAPA will accept, follow this link**

4. Significant Figures in LON-CAPA:

Unless otherwise stated in the problem, all numerical answers should be rounded to **three significant figures**.

a) Wrong Number of Significant Figures- If the problem states that the answer must be quoted "to the correct number of significant figures", you must determine what that number should be. If you quote the wrong number of significant figures, you will receive a message stating that you have either too many, or too few, significant figures. **Having the wrong number of significant figures does not count towards your three attempts at a question.**

Note: LON-CAPA regards all digits in a typed answer to be significant, including trailing zeros. Hence your answers should preferably be entered in scientific notation unless noted otherwise. The correct method for doing this is: x.xxE(exponent).

Example: An answer of 12300 would be considered to contain 5

significant figures by LON-CAPA. The correct response (if 3 sig figs is appropriate) would be 1.23E4.

b) Standard Notion and Decimal Places- If you are prompted to report your answer to a certain number of decimal places, report your answer in standard notation. If you decide to enter your answer in scientific notation, there must be as many significant figures as there are in the answer in standard notation.

Example: An answer to two decimal places in standard notation would be 230.42. For the same answer to be correct in scientific notation, it would need to be 2.3042E2.

5. Rounding Errors and Tolerances

In an effort to ensure that you will not be penalized for small rounding errors, tolerances of ± 1% have been incorporated into most problems. **If your answer does not fall within the accepted tolerance range, you will be marked as incorrect.** LON-CAPA does not allocate part marks for such errors. Your answer is either all right or all wrong!

When performing your calculations, **carry at least one more digit throughout the calculation than needed and round only at the last step.**

6. Short Answer Questions

There are many questions requiring an answer to be typed into the answer box (e.g., nomenclature, balancing equations etc.). LON-CAPA marks these by comparing your answer to the ones it has on file. If your answer does not match one of these exactly, **the question will be marked incorrect**. Hence, it is important to read the instructions given in the problem and for the format to be followed when entering your answer. **Check your typing and spelling for errors.** Even an extra or missing space will make your answer wrong!

Molecular formula formats from the book should be followed. There are some ions that need to be typed out in a specific order and deviating from this order will give you the wrong answer.

Example: The acetate anion is CH3CO2-. It cannot be written as C2H3O2-.

7. Calculation Questions and Scientific Notation

Many of the problems that you will do require a calculated answer. **Unless otherwise specified, all answers can be entered in either standard format (0.234) or in scientific notation (2.34E-1).**

Final Note: Full or part marks will not be given for answers that contain the types of mistakes detailed here. If you work accurately and precisely and follow the rules when reporting your answers, you should experience no difficulties.