CHEM 1141 Honors

Syllabus addendum for Honors

Additional Honors Requirements:

A. Formatted Lab report (typed)

Students not in honors will only turn in a data sheet for first semester. Honors students will write reports in the same format expected of second semester students and upper level students. This is the format, in order, of the report to be turned in each week.

Title – this does not have to be a separate page. All information can be placed at the top of the first page of the report

Name Date Lab day (T 1 or T 3:10) Experiment number

Reactions – Each reaction in the lab and any others given in lecture should be written in this section. Each reaction is to be briefly explained. This includes type of reaction (or reason for reaction) and any specific color(s) of product. One reaction and explanation per new line. Do not start a new explanation or reaction at the end of another line. Example:

A + B \rightarrow C A and B undergo a redox reaction which forms a white precipitate. X + Y \rightarrow Z Explanation.....

*reactions can be hand written to save time on the amount of super and sub numbers as well as arrows that must be written.

Calculations – There is a designated area on the data sheet for this.

Conclusions- This section should include the 1. The main objective(s) and techniques used during the lab; 2. definition/use of equipment (*not equipment* found in your drawers, but those specific to the experiment, usually the ones handed out or an instrument you must use in the laboratory – this includes the balance); 3. any chemistry specific terms that are not used in everyday speech/general public: Precipitate, decant.... Etc.; and, 4. A discussion of the results including numbers as well as conclusions made by understanding and interpreting data.

Sources of Error – This is also a section on the data sheet BUT honors students should not put information there but in the "sources of error" section of the lab report. Two strong, dominant sources of error should be written down: the error itself and how it affected (or would affect)

the results. There may be more errors, or minor errors. Points will be taken off if major errors are absent.

Application: Research an industrial/commercial (i.e. large scale) use of the equipment (again, not the ones given in your drawers) **or** technique used in the lab for that experiment. The application should include a brief explanation of the process/application/company or area of industry where this is used, including a reaction or process if it is about the technique or a schematic of the equipment if the application being discussed is about the equipment. A url will suffice the cite where the information was found (information and any pictures used)

Datasheet: the completed data sheet goes last.

Writing: All written sections must follow formal written protocol (third person; absence of clichés, contractions, bulleted points, and casual jargon; appropriate spacing and font); complete sentences; and, correct syntax and spelling.

B. Seminar

Each honors student is required to go to two seminars each semester and turn in a half page double spaced summary over each seminar. Notes are to be taken during the seminar and stapled to the back of the summary. *Each seminar summary with notes should be stapled separately and turned in by your last lab day of the semester*. These may be seminars may be chosen from the chemistry department seminars (there are usually 2 professional/alumni lectures set up each semester); the ACS professional section seminars (one each semester and is at night which may help with your scheduling); EURICA symposium; or, the senior seminars which usually involve a talk over their own research within the department. All department seminars are at 1 PM on Fridays with the exception of the ACS professional meeting(s), which is usually on a Tuesday around 7 PM once or twice a semester. When a specific chemistry seminar schedule is made for the semester, it will be made available to you.

C. Group Project

Honors students will work on a group project (2-3 per group). You will be introduced to research concepts by doing a literature review over a topic chosen from a list at the beginning of the semester. **This will take the place of your midterm.** The rubric and due date will be posted in D2L.

D. Grading

The quizzes, labs, homework assignments, and final exam will count 90% of your score. This will be your average on D2L. After completion of the added seminar and project requirements (5% each), the additional 10% will be averaged into your score for your final grade.