

## Chemistry 104 Lab Syllabus

**Lab Manual:** Catalyst: "A Custom Laboratory Program for Chemistry", by Prof. Wayne Stalick, Pearson, 2004.

Week	Experiment Title	Pages
1	Introduction, Lab Safety, Check-in, Excel Tutorial	1-12
2	Hydrocarbons-Modeling	13-22
3	Reactivity of Hydrocarbons	23-34
4	Aldehydes, Ketones and Carboxylic Acids	35-47
5	Aspirin and Oil of Wintergreen	49-54
6	Polymers	55-60
7	Soaps and Detergents	61-68
8	Fat Content of Snack Foods	69-72
9	Carbohydrates	73-84
10	Amino Acids and Proteins	85-96
11	Casein and Other Proteins	97-102
12	Vitamin C Content Of Commercial Supplement	Handout
13	Canned Fuel	103-109
14	<b>FINAL EXAM</b> -Lab Check-out	

### Quizzes

Quizzes will be given for every experiment and will be based on the on the information in the lab manual or handout for the given experiment. You should look up information about the experiment either from the lab manual or handouts or as assigned by instructor.

### Lab Reports

Will be submitted at the end of each lab. For the three formal labs, they will be handed in the following week. So you will not need the numbered spiral notebook this semester.

*It is your responsibility to frequently check your e-mail and Blackboard for updates on upcoming experiments.*

## Breakdown of points in CHEM 104 Lab:

Item	Qty	# points each	Total Points	% of total grade
Informal Lab reports	9	30	270 points	21 %
Formal Lab reports	3	60	180 points	14 %
Quizzes	12	50	600 points	46 %
Lab Safety/Check-in	1	100	100 points	8 %
Final Exam	1	150	150 points	12 %
			Total 1300 points	100 %

## Participation in Laboratories is Critical

Hands-on laboratory experience is critical to learning techniques in basic non-major science courses. The laboratory introduces students to important concepts in chemistry in a very concrete way, reinforces concepts from the lecture, and teaches scientific thinking. ***Laboratory work in this course is not optional; do your own work.*** You cannot learn by simply watching your lab partner and operating in a spectator role. Every student is expected to be actively engaged in each laboratory exercise and to do the assigned laboratory work.

*If you are a student with a disability and you need academic accommodations, please see the instructor after contacting Disability Services at 703-993-2474. All arrangements for academic accommodations must be initiated through that office.*

### What if I miss a lab?

There are no make-up labs in Chem 104. In the event of an unavoidable absence, the instructor must be notified as soon as possible. If the instructor is not notified, then a grade of zero will be given for the missed lab. A student cannot receive a passing grade in this course unless at least 11 of the 13 lab experiment sessions are attended and satisfactory report pages for them are handed in on time. Attending a lab session and not performing the experiment does not constitute completing an experiment. Dry-labbing (analyzing data that you did not collect) is an honor code violation and will be dealt with accordingly.

## Safety

You must wear proper clothing and protective gear for experiments that involve chemicals. You will be given gloves when you need them, which are not reusable and should be discarded at the end of each lab. You will be given a lab coat which you must take home and bring back to the lab for the rest of the semester. You must buy your own safety goggles and bring them each time.

## Maintain Your Records

It is your responsibility to maintain records of all graded materials. Lab instructors will regularly post scores on Blackboard, giving you an opportunity to double-check the scores in case of recording errors. Recording errors are to be cleared up with the lab instructor ***prior to the last day of lab.*** Requests for re-grades and total points adjustment (due to addition errors, etc.) will not be entertained after the lab class officially ends (the date of the lab final exam). ***All grading error issues must be discussed with the lab instructor first to resolve the matter. If the matter is not resolved, it is then vetted with the Head GTA for General Chemistry and MUST BE resolved within one week after receiving the graded material.***

## Grading Policies

All students enrolled in the course are expected to abide by the honor code. The instructor reserves the right to award a grade of zero for any plagiarized work. This includes any work that is not your own, *i.e.*, it has been copied from the internet or another classmate or used during the previous time that you took the course. Work that has been copied cannot be submitted for credit. In other words, copying another person's lab report will result in the lab instructor filing an honor code violation with the office of Academic Integrity. It is your responsibility to be familiar with the Mason Honor Code and have a working knowledge of activities that are considered honor code violations.

- First time offenders will receive a grade of ZERO for the lab exercise (quiz and lab report).
- Second time/repeat offenders will receive a grade of "F" for the lab, thereby resulting in a grade of "F" for the entire course. If a student has previously been reprimanded for honor code violations in other courses at the university, the recommendation will be for a grade of "F" for course as well as expulsion from the university.