

Chemistry 201
Fall Semester 2006

Instructor: Dr. Colleen Scott,
cogst5@siu.edu

Neckers 314,

Phone: 453-6473

Office Hours: by appointment only.

Teaching Assistants:

Teaching Assistant: Your teaching assistant will be your primary source of information for this course. You will consult your teaching assistant first with any questions regarding the laboratory. Your teaching assistant will provide you with his or her office hours and contact information. The **Course Coordinator** will be your secondary source of information for this course. See the **Course Coordinator** when problems arise. The **Instructor** is also available to assist you if you cannot resolve problems with your **Teaching Assistant** or the **Course Coordinator**.

Lab manual: Chemistry 201, Professor Lori Vermeulen (Chemical Education Resources Labs with additions from the Faculty of Southern Illinois University at Carbondale).

Course Description: Chem. 201 is an introductory laboratory course for science and engineering majors usually taken concurrently with Chem. 200. The objectives for this course are:

- 1) To develop an understanding and appreciation for the fundamental concepts in chemistry,
- 2) To develop an understanding and appreciation for how these fundamental concepts in chemistry can be applied to every day life and to current problems of relevance in the world,
- 3) To develop problem-solving skills and to practice these skills,
- 4) To develop an understanding of what professional chemists do.

Course Policies: The following policies are in effect. Any failure to abide by these policies can result from your dismissal from the laboratory session and a grade of zero for that particular laboratory.

While in lab you will wear goggles or safety glasses while the experiment is being conducted and will obey all safety rules that are reviewed during the first laboratory session. Goggles (and one kind of safety glasses) are provided by the department. Other kinds of safety glasses are available in the storeroom that you might wish to purchase.

Teaching assistants will be treated with respect at all times. Any disrespectful behavior including refusal to follow your teaching assistant's directions or refusal to abide by course policies may result in a zero for the laboratory.

Your grade for each laboratory will be determined as follows:

pre-lab assignment (25%). Pre-lab assignments will be turned in to your teaching assistant **immediately** upon entering lab. Academic dishonesty in the form of copying the work of others is unacceptable. Pre-lab assignments will **not** be accepted after the experiment has begun.

pre-lab quiz (25%). The first 15 minutes of class will be dedicated to taking the pre-lab quiz. The quizzes will be given as soon as students enter the laboratory. At 15 minutes after the designated start-time for class, the quizzes will be collected. **No additional quizzes will be given or collected after that time.** The quizzes will be written by the instructor. Helpful hints for preparing for the quizzes will be provided each week on the course web-site.

post-lab report (50%). Post-lab reports and answers to questions are to be turned in to your assistant before leaving lab for the day. The only exception to this is if the lab extends to the end of the period and there is insufficient time to complete the report. Your assistant will then tell you where and when to turn in the report. Academic dishonesty in the form of copying the work of others is unacceptable. This policy applies even though you may work on the experiment in groups. **If you arrive late for laboratory, you will not be able to join a group already doing the experiment.** You will be required to do all of the laboratory work by yourself. It is advisable to check the website often in order to know what is expected from you in each laboratory. There will be times when you are expected to perform certain tasks without assistance from your teaching assistant.

Your teaching assistant will grade the pre-lab assignments, the post-lab reports, and the quizzes. These assignments will be graded according to guidelines provided by the instructor. The course grade will be assigned according to the following guideline: A, 90%-100%; B, 80%-89%; C, 70%-79%; D, 60%-69%; F, 0-59%. The lowest of all laboratory scores will be dropped before determining your grade. **However, if you miss a laboratory, the grade will not be dropped unless you provide a written note to the teaching assistant and instructor explaining the reason for your absence and the reason why you were unable to make up the missed experiment.**

Making up a missed lab is not an option for you unless you provide a written excuse for missing the laboratory and make arrangements to make up the missed laboratory during one of the other laboratory sections doing the same laboratory during that week. Arrangements for this must be made in advance with the instructor of the course and/or the teaching assistants involved.

What you get out of the laboratory experience depends entirely upon what you put into it. Arriving to laboratory well-prepared will enable you to have a good educational experience. Arriving to laboratory unprepared will likely result in a meaningless and frustrating exercise in the laboratory. Each week, information about the laboratory will be posted on the website. Here, you will find specific details about what you will be expected to know when you come to the laboratory. If you have any questions about these concepts, you should arrange to meet with your teaching assistant prior to the day that you have laboratory to obtain assistance. **You should not expect to be able to meet with your teaching assistant on the day of the laboratory to get help before the class meets.**

For some of the laboratories, you will not be allowed to bring your laboratory manual to the laboratory with you. Instead, you will use laboratory guidelines and you must prepare sufficiently so that you can do the experiment without referring to the laboratory manual. The course website will assist you in understanding what is expected.

Other handouts and activities may be required that are not provided in the laboratory manual. Your teaching assistant will distribute these materials when necessary and you will be responsible for completing them as directed.

Some of the experiments will require that you use the computer lab to graph data and to print the data. You will need a copy card (available in the student center) to print. The cost for making copies over the course of the semester is minimal.

If you have any conflicts with your teaching assistant that you cannot resolve, you should contact the Course instructor, Dr. Scott; a meeting will be set up with all involved parties in order to resolve the conflict. It will be most useful if you make an effort to get the conflict resolved as soon as possible after it arises. There will not be any benefit in waiting until the end of the semester to discuss any problems that you are having with the course.

If you drop Chem. 200 on or before the designated drop date, you must also drop Chem. 201, since many concepts needed for 201 are covered in 200. If you drop the course, you must check out of your locker. Do not wait until the end of the semester, but check out the week you drop. Failure to check out will result in a \$20 charge.

Schedule of Laboratory Experiments for Chemistry 201 Fall 2006

Week	Beginning	Experiment
Week 1	Aug 21-25	Locker Assignment/Check-in - Introduction to the Computer Lab
Week 2	Aug 28-Sept 1	Making Measurements in the Chemistry Laboratory What do the Numbers Mean? #490 Exponential Notation and Significant Figures
Week 3	Sept 4-Sept 8	Holiday! No lab
Week 4	Sept 11-Sept 15	#440 Identifying a Liquid
Week 5	Sept 18-Sept 22	Basic Chemistry Concepts - How to Follow a recipe
Week 6	Sept 25-Sept 29	#482 Copper from Start to Finish
Week 7	Oct 2-Oct 6	#442 Analyzing Food for Vitamin C

Week 8	Oct 9-Oct 13	#013 Column Chromatography
Week 9	Oct 16-Oct 20	#357 Spectrophotometric Determination of Cu
Week 10	Oct 23-Oct 27	#360 Colorimetric Determination of Aspirin
Week 11	Oct 30-Nov 3	#014 Measurement of Gas Volumes
Week 12	Nov 6-Nov 10	#346 Enthalpy of Neutralization
Week 13	Nov 13-Nov 17	#409 Molecular Geometry and Bonding
Week 14	Nov 20-Nov 24	Holiday! No Lab (Happy Thanksgiving)
Week 15	Nov 27-Dec 1	#344 Molar Mass Determination by Freezing Point Depression
Week 16	Dec 4-Dec 8	Lab Practical / Check-out