

SYLLABUS
CHEM-111L General Chemistry Laboratory
Dr. Terrie Salupo and Dr. Jeff Osborne

COURSE WEBSITE

All lab-related material can be found on the Canvas page for the course. You must print all lab material before coming to class.

OFFICE HOURS AND CONTACT INFORMATION

Our office hours are posted outside of our office doors; you can also make individual appointments. You can contact your professor directly at:

Dr. Terrie Salupo: Office phone 982-5318, email (tsalupo@manchester.edu); office SciC 314

Dr. Jeff Osborne: Office phone 982-5075, email (jposborne@manchester.edu); office SciC 313

We will try to respond to your questions or course-related problems within 24 hours, either by email or by addressing them in class.

COURSE OBJECTIVES

To become familiar with common laboratory techniques, which emphasize the empirical nature of chemistry, and also to cultivate abilities in observation, analysis, critical thinking and communication.

COURSE CONTENT

This course is a companion to *CHEM 113—General Chemistry II*. There will be eight laboratory experiments and two lab skills tests. Reports are required for each experiment. In addition, there will be pre-lab assignments and quizzes for each experiment.

REQUIRED MATERIALS

Safety goggles, lab notebook with duplicate pages, permanent ink pen

SAFETY POLICY

Safety procedures must be followed at all times. In particular, do not remove lab equipment or chemicals from the lab. Failure to follow these safety instructions can result in failure of the course.

ATTENDANCE POLICY

Attendance is required at *all* sessions. If you have an excused absence, please contact your lab instructor as soon as you become aware that attending your regularly scheduled lab is not possible. Making up an experiment is very difficult, and if an absence is necessary, then the best solution is to request permission to attend another section of the laboratory in the same week. Absence due to illness requires confirmation from the campus nurse or another medical professional. **Oversleeping is clearly not considered an excused absence.**

PORTFOLIO

If you plan to be a chemistry or education major, you will need to assemble a portfolio of your work in your senior year that covers all four years of material. You should save all of your work for this course, so that you will have your choice of samples when you prepare this document.

ACADEMIC DISHONESTY

Plagiarism in written assignments of any type is not allowed. A quick description of plagiarism is that proper credit is not given to someone else who originated the thought, words, or conclusions you are writing about. If

you discuss information that is not common knowledge and was obtained from a source other than your notebook, make a reference list at the end of your report.

The work you turn in must be your own. You may discuss the lab with others as you write; however, complete your report sheets independently. Do not, under any circumstances, share notebook pages or report sheets with another student, or ask another student to share these things with you. Again, you may discuss your thought process, data analysis, calculations, etc. with other students, but sharing notebooks, papers, and files is prohibited. Copying and pasting items is also prohibited, of course.

We will use this rule of thumb to judge plagiarism: if six or more words in a row in your document are exactly the same as another source (student, internet, book, etc.), you must put "quotation marks" around the words and cite your reference. Otherwise, the document will be judged to contain plagiarism. The "Plagiarism and Academic Dishonesty" section in the college catalog provides more information.

CALENDAR

Week 1 – 31 Jan - 2 Feb. NO LAB	Week 2 – 7-9 Feb. Introduction, Data Analysis, Check-in	Week 3 – 14-16 Feb. Calorimetry(short report)
Week 4 – 21-23 Feb. No Lab, Discussion Day on Wednesday	Week 5 – 28 Feb – 2 Mar. Rates of Reaction (long/oral report)	Week 6 – 7-9 March Oxidation of a Dye (long/oral report)
Week 7 – 14-16 March Skills Test 1 Oral Lab Reports	Week 8 – 21-23 March NO LAB – Spring Break	Week 9 – 28-30 March Vitamin C (short report)
Week 10 – 4-6 April K _a of a Weak Acid (short report)	Week 11 – 11-13 April Buffers (long/oral report)	Week 12 – 18-20 April K _{sp} (long/oral report)
Week 13 – 25-27 April Redox Titration (Long/oral report)	Week 14 – 2-4 May Skills test practice Oral lab reports	Week 15 – 9-11 May Skills Test #2 and Checkout

GRADING

Grades will be based on results, not effort, following a straight scale of the percentage of total points. Note that this total is tentative; additional assignments may be given.

Prelab Worksheets	8	@ 4 pts	32 pts
Long Lab Reports/Oral Reports	5	@ 30 pts	150 pts
Short Lab Reports	3	@ 20 pts	60 pts
Lab Quizzes	8	@ 4 pts	32 pts
Lab Skills Tests	2	@ 30 pts	60 pts
Total			334 pts

SPECIFIC INSTRUCTIONS FOR LAB ASSIGNMENTS

Pre-Lab Worksheets. Pre-lab worksheets cover the week's upcoming experiment and are distributed on Canvas with the lab handout. Pre-lab worksheets are due *at the beginning of class* and will not be accepted after the pre-lab lecture begins.

Lab Quizzes. At the beginning of each pre-lab lecture, you will take a short quiz on the experiment for the day. Quizzes will assess your comprehension of the procedure and handling of chemicals. If you arrive late to the pre-lab lecture, you will not be permitted to take the quiz.

Lab Notebooks. During the laboratory session, all writing will be done in your lab notebook. Do not use any other paper for notes during the lab, and write neatly in pen. At the end of each period, show your lab pages to your instructor or lab assistant for their approval and initials, and turn in the carbon copy pages.

Short Lab Reports. Some experiments require a short write-up. More information will be provided with those labs. You must write your report alone, even if lab work has been done in pairs or groups. Again, *although you may discuss the lab experiment with others, you must write your report sheet independently.*

Formal (Long) Lab Report. Some experiments require a more in-depth, longer write-up. More information will be provided with those labs. You must write your report alone, even if lab work has been done in pairs or groups. Again, *although you may discuss the lab experiment with others, you must write your lab report independently.*

Oral Lab Reports. Two oral lab report periods are scheduled: one in Week 7, and one in Week 14. You will only present at ONE of these periods (chosen by draw). See the "Oral Lab Report Guide" on Canvas for more information.

Lab Skills Tests. Two skills tests will be administered during the semester: one in Week 7, and the other in Week 15. Topics will be drawn from previous lab experiments as follows:

- Skills Test 1 – calorimetry measurements and calculations, calculations from rate law data
- Skills Test 2 – performing accurate and precise titrations, performing accurate titration calculations, using a pH meter

Diversity: Disrespect of other students, in the form of verbal or written threats, attacks, or insults on the basis of gender, race, physical disability, physical stature, culture, socio-economic class, creed, sexual preference, mental disability or any form of social group membership will not be tolerated.

Student disability and reasonable accommodation statement

Manchester University, in compliance with federal guidelines, is committed to assuring students with disabilities equal access to programs and activities that are provided to students without disabilities.

Any student who feels she or he may need an accommodation based on the impact of a disability should contact Audrey Hampshire, the Director of Academic Support and Disability Services, to establish eligibility and to coordinate reasonable accommodations. It is the student's responsibility to self-disclose the disability. Students whose accommodation requests are approved will be provided with confidential letters to deliver to their professors which verify the nature of the student's disability and document the need for auxiliary aids and services and/or academic adjustments/accommodations. Students are encouraged to meet with each professor early in the semester to discuss the academic implications of the disability as they relate to the specific course and to request appropriate accommodations. The Disability Support Services Office is located in the Success Center (second floor of the Switzer Center). Students may call (260) 982-5036 or (260) 982-5888 to schedule an appointment.

Medical emergency evacuation schedule

Students should speak to the instructor immediately if (1) they may require medical attention during class, or (2) they have a disability, chronic condition, or a temporary injury that may limit or affect their ability to evacuate the classroom/building in an emergency. The student and the instructor should discuss the student's specific needs and the types of precautions that should be made in advance of such an event. In the event of a fire or other situation requiring emergency evacuation, students with ambulatory disabilities are to go with or without assistance to the nearest stairwell area. Faculty and staff will assist with evacuation management efforts until such time as the Campus Safety and/or Police and Fire Departments arrive on the scene to assist in student evacuation from the building. Elevators are not to be used for evacuation by any persons.

Students who need special arrangements in the event of an evacuation should also register with Audrey Hampshire as early as possible in the semester to help facilitate the provision of needed emergency assistance.

Title IX reporting requirements

While students should feel comfortable approaching the professor with issues they may be struggling with or concerns they may be having, students should be aware that faculty members have some reporting requirements that are part of their job duties at Manchester University.

For example, if a student informs a faculty member of an issue of sexual harassment, sexual assault, or discrimination, the faculty member will keep the information as private as possible, but the faculty member is required to bring it to the attention of the institution's Title IX Coordinator (x. 5052 ajmachielson@manchester.edu) or the Human Resources office (ext. 5038). Additionally, students can report incidents or complaints to Campus Safety (ext. 5999 or in Fort Wayne: 260-266-1800). Students can also obtain support from the University Counseling Services (260-982-5306).

Finally, students should know that if, for some reason, the interaction between a student and faculty member involves a disruptive behavior or potential violation of policy, the faculty member will inform the appropriate student experience staff, even when the student and faculty member may have reached an informal resolution to the incident. The purpose of this is to keep University leaders apprised of any behaviors and what was done to resolve them.

Campus resources

Health services

260-982-5306

<http://www.manchester.edu/OSD/Health/Index.htm>

Counseling center

260-982-5306

<http://www.manchester.edu/OSD/Counseling/Index.htm>

Safety

NM: 260-982-5999; FW: 260-266-1800

<http://www.manchester.edu/OSD/Security/index.shtml>