CHEMISTRY 111L Fall Semester 2020

Instructor: Dr. Daniel Stelck

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Office: Renfrew Hall 305 Phone: 885-2146

Office Hours: 1:30 - 2:20: M, W, F (online: https://uidaho.zoom.us/j/98266027838)

Textbook: None: All labs are online

Home Page: https://danstelck.weebly.com/chemistry-1111.html

Electronic devices: All cell phones and personal music players must be turned off and put away during

the laboratory.

Calculator: An inexpensive, non-text entry/non-graphing scientific calculator is required. It should

have capabilities for square roots, logarithms, exponentiation (antilogarithms), and

exponential (scientific) notation operations.

LABORATORY

One 3 hour laboratory is scheduled during most weeks. You are expected to come to lab on time and adequately prepared. Prior to each laboratory you must transcribe your experiment for the week into a lab notebook. Experiments may not be printed out in the laboratory. A short quiz may be given at the beginning of any of the labs. You will be assigned to either Group 1 (12 students) or Group 2 (12 students) for your laboratory section. Refer to the schedule to see when you will need to show up to perform that week's experiment. The week that your group is not scheduled to attend lab, you will be emailed the data from a Group partner so you may be able to turn in a Lab Report.

NO LAB GRADES WILL BE DROPPED.

In laboratory you will have the opportunity to experience directly some chemical principles and relationships. Some chemical concepts will be introduced in lecture and some will be introduced in the laboratory. Lab grades will be based on: a) preparation; b) safe work practices; c) quizzes; d) performance; e) reports; and f) comprehension of lab material.

Make-up laboratories will only be given for University excused absences. In order to schedule a make-up lab, you must make arrangements with Yuwei Kan in Lab Services (REN 229). In the case of University excused athletic events and field trips, arrangements must be made at least a week prior to the absence. In the case of sudden severe illnesses, notify Lab Services (chem-labservices@uidaho.edu) as soon as you realize that you are too ill to attend lab. You must bring a note to Dr. Kan in Lab Services (REN 229) from your doctor stating that you were too ill to attend lab as soon as you are back in classes.

In order to pass Chemistry 111L, you must complete at least 10 of the 12 laboratory sessions and achieve a score of at least 60%.

CHEMISTRY 111 LABORATORY SCHEDULE

The laboratory is an integral part of the course. You are expected to attend and to participate in all your Group's scheduled labs. Failure to complete more than two laboratory sessions will result in a failing grade for the entire course.

Download the experiments from the laboratory page of the course web site and be sure to transcribe the lab procedure **PRIOR** to coming to lab.

Exp.#	Week of	Laboratory
	Aug 24	No Lab
1	Aug 31	Safety and Orientation (online only)
	Sept 7	No Lab
2	Sept 14	Safety Quiz, Measuremnt I (Group1)
3	Sept 21	Safety Quiz, Graphing Activity (Group 2)
4	Sept 28	Spectroscopy (Group 1)
5	Oct 5	Copper Chemistry (Group 2)
6	Oct 12	Titration (Group 1)
7	Oct 19	Analysis of a Nickel Complex: Part I (Group 2)
8	Oct 26	Analysis of a Nickel Complex: Part II (Group 1)
9	Nov 2	Enthalpy of Formation of Magnesium Oxide (Group 2)
10	Nov 9	Gases (Group 1)
11	Nov 16	Fluoride Analysis (Group 2)
	Nov 23	Fall recess - No Lab
12	Nov 30	Molecular Geometry (online only)
	Dec 7	No Lab
	Dec 14	Finals Week- No Lab

After taking this course, a successful student should be able to:

- define, explain, and communicate using basic terminology as it relates to:
 - o chemistry and measurement
 - o chemical formulas and equations
 - chemical reactions
 - o thermochemistry
 - electron configurations
 - o molecular geometry
 - formation of gases
- solve problems and/or perform calculations associated with:
 - o dimensional analysis
 - o metric system and measurement
 - o density
 - o atomic mass, molar mass, and Avogadro's number
 - o empirical and molecular formulas
 - o stoichiometry
 - o concentration/molarity
 - o solution stoichiometry
 - o thermochemical equations, heat capacity, and calorimetry
 - o molecular geometry
 - o bond energy
 - o gas laws
- perform general chemistry experiments in a safe manner and learn to use basic laboratory equipment and instrumentation to perform chemistry experiments

Healthy Vandals Policies

It is a longstanding tradition that Vandals take care of Vandals, and we all do our best to look out for the Vandal Family. These simple precautions go a long way in reducing the impact of coronavirus on our campuses and in our communities. With everyone engaging in these small actions, we can continue to participate in our vibrant campus culture where we are able to learn, live, and grow. Please bookmark the <u>University of Idaho Covid-19 webpage</u> and visit it often for the most up-to-date information about the U of I's response to Covid-19.

- 1. Daily Symptom Monitoring and In-Person Class Attendance. Evaluate your own health status before attending in-person classes and refrain from attending class in-person if you are ill, if you are experiencing any of the known symptoms of coronavirus, or if you have tested positive for COVID-19 or have been potentially exposed to someone with COVID-19.
 - If you display symptoms and/or test positive, you should quarantine following the <u>CDC's recommendations</u>. Do not return to class until you meet the <u>CDC's</u> <u>requirements</u>.
 - If you have been exposed but are asymptomatic, you should stay home for 14 days from last exposure if you remain asymptomatic, adhering to the <u>CDC's</u> requirements.

If you miss an in-person class session, you may be able to attend via Zoom and access course materials on BbLearn. Documentation (a doctor's note) for medical excuses is not required; instead, email me to make arrangements to submit any missed work and make plans to use Zoom and/or online course materials to stay current with the course schedule.

- 2. Face Coverings. All faculty, staff, students and visitors across all U of I locations must use face coverings whenever in any U of I buildings. You are required to wear a face covering over your nose and mouth in this classroom at all times.
 - a. If you have a medical condition that you believe affects your ability to comply with the face covering policy, please contact the Center for Disability Access and Resources (CDAR) to request a reasonable accommodation.
 - b. If you have other reasons you believe make you exempt from wearing face coverings, please contact the Covid-19 Coordinator at covid19questions@uidaho.edu.
 - c. Failure to wear a face covering means you will be required to leave the classroom. If a disruption to the learning experience occurs due to repeated offence and/or egregious behavior, it will be referred to the Dean of Students Office for potential code violation.