

Bismarck State College

Bismarck State College, an innovative community college, offers high quality education, workforce training, and enrichment programs reaching local and global communities.

Current Semester: Summer 2018

Course: CHEM 122L, General Chemistry II Lab

Credit Hours: 1

Instructor Contact Information: Scott Tschaekofske (chai-cough-ski)
301F Jack Science Center (phone 701-224-5628)
Office Hours: by appointment
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Course Materials: General Chemistry II Lab (Spring 2018 printing) – custom lab manual

Lab apron and chemical safety goggles.

The learning management system for this course is **Blackboard**. It can be accessed at the following link: <https://bismarckstate.edu/bsc-online/>

MasteringChemistry – Pre-lab assignments will be given via the same online homework system used in the lecture course. If you are not enrolled in the lecture course, please discuss your options with the instructor.

Course Description: Two three-hour lab sessions per week (summer session). Labs completed will follow topics covered in the lecture portion of the class. Concurrent registration in CHEM 122 is required.

Course Outcomes:

Course Learning Outcomes	Institutional Essential Learning Outcomes (IELOs)
Students will reinforce and expand their understanding of chemical concepts learned in Chem 122.	(discipline-specific)
Students will reinforce their knowledge of chemical laboratory safety protocols, proper handling of chemicals, and treatment/disposal of chemical waste.	(discipline-specific)
Students will develop and strengthen their skills to correctly and accurately use techniques and equipment relevant to the subject.	(discipline-specific)
Students will effectively interpret, apply, evaluate, and communicate data collected in experiments by use of tables, graphs, calculations, and reports.	Quantitative Literacy

* The BSC Institutional Essential Learning Outcomes can be found at <https://bismarckstate.edu/uploads/0/BSCsInstitutionalEssentialLearningOutcomes.pdf>

Active Learning: In addition to educational strategies such as reading, listening, and reflecting, when appropriate this class makes use of learning techniques commonly known as active learning. Students should expect to participate in active learning techniques such as discussions and presentations, small group activities, writing, problem-solving, movement, case studies, role-playing, etc. These activities promote analysis, synthesis, and evaluation of class content in order to improve student learning outcomes.

Assessment Methods: Student achievement in the laboratory will be assessed using the post-lab questions and the laboratory reports prepared each week. A portion of the grade will also be determined from pre-lab questions, quizzes, a chemical demonstration project, and a final lab practical.

Grading: For each student, the lowest individual pre-lab grade and the lowest individual post-lab grade will be dropped. **There will be no makeup labs!**

Most weeks will have the following breakdown for assigned points (total of 50 points):

- pre-lab materials (10 points)
- post-lab materials/lab report (40 points)

Post-lab materials and/or lab reports are due at the start of the *next* lab period.

Pre-lab materials are due the day of the lab experiment at 9:30 a.m.

Late submissions: Late pre-lab materials will receive no credit. Late post-lab materials/lab reports will result in a 20% deduction for each day late. *Once lab materials are returned to the class, no late papers will be accepted!*

Students must score 70% or higher on the laboratory safety quiz to participate in the lab.

Students must checkout of their lab drawers at the end of the semester to receive a course grade.

The grading scale is as follows:

A	90.0% – 100%	D	60.0% – 69.9%
B	80.0% – 89.9%	F	Below 60.0%
C	70.0% – 79.9%		

Attendance/Makeup: Attendance will be taken; students are expected to attend every lab. The lab is scheduled for 3 hours, although not every lab may last the entire 3-hour period. If you make appointments or you start a job within that 3-hour period and you have to leave before the lab is finished, you will not get full credit for that lab.

Tardiness will not be tolerated! Arriving late for the pre-lab session will result in a loss of 20% of the score for that lab. A student arriving after the pre-lab session is complete will not be allowed to participate in the lab and will receive a zero.

Policies and Procedures:

Academic Honor Code: Students at BSC are expected to be honorable in behavior and above reproach in pursuit of their academic achievements. Cheating, plagiarism, or collusion in class work, laboratory performance, shop work, or test taking is unacceptable and subject to

disciplinary action. More information can be found at <https://bismarckstate.edu/uploads/resources/356/studentacademichonorcode.pdf>.

Accessibility: If you have a disability that may limit your ability to fully participate in this class, please contact the Student Accessibility Office (SAO) at 701-224-2575. Personnel from the SAO will work with you and your instructor to arrange for reasonable accommodations after you have completed the registration process and it has been determined that you qualify.

Camera/Video Recording: Photographic, audio, and video recording of this class and/or the instructor are prohibited unless specifically requested by a student and approved/authorized in writing by the instructor or the Student Accessibility Office.

Email: Please note that I will only correspond with students through their **BSC email account**. Student Email Policy states: "In an effort to protect student privacy and better ensure student authenticity, official email exchanged between registered students and BSC personnel requesting a response shall require the response be exchanged from the student's official email address (i.e., NDUS ID@bismarckstate.edu). This policy is for the protection of faculty, staff, and students." More information can be found at <https://bismarckstate.edu/uploads/resources/1197/studentemailpolicy.pdf>.

Military/Veteran Statement: If you are currently or have served in the military, please contact the Veterans Services Office at 701-224-2576 regarding services/benefits to which you may be entitled.

Drop/Withdrawal Deadlines: Term dates can be found on Campus Connection in the class details. Drop and withdraw dates for each term can be found at <https://bismarckstate.edu/academics/records/calendarsdeadlines/>.

Student Rights and Responsibilities: Student rights and responsibilities along with student policies can be found at https://issuu.com/bismarckstatecollege/docs/bsc_student_rights_and_responsibili?e=19734813/52188116.

Title IX: For more information on sexual misconduct/Title IX please go to the BSC home page (www.bismarckstate.edu), scroll to the bottom and click on Title IX.

Course Outline:

<u>DATE</u>	<u>LAB</u>
5/21/18	Initial Investigations (190)
5/23/18	IMF Mini Experiments (220)
5/28/18	Memorial Day – No Class!
5/30/18	Introduction to Extractions (251)
6/4/18	Molar Mass Det. by F.P. Depression (650)
6/6/18	Analysis of an Antacid Via Titration (307)
6/11/18	Determination of a Rate Law (750)
6/13/18	Equilibrium Simulation (825)
6/18/18	Determination of an Equilibrium Constant (510)

6/20/18	Demo Project – Preparation (899)
6/25/18	Demo Project – Presentation (899)
6/27/18	Det. of K_a and Molar Mass Via Titration (309)
7/2/18	Strong & Weak Acids, Salts, and Buffers (675)
7/4/18	Independence Day – No Class!
7/9/18	Final Practical (922)
7/11/18	Determination of Avogadro's Number (723) and Check-Out

Additional Information:

Cheating: Academic honesty is expected in this class. Students caught cheating will receive a zero for the lab. Further, the student's overall lab course letter grade will decrease by one grade (e.g., an earned grade of C will become a D). Submission of identical or highly similar assignments is considered cheating by both parties.

Assistance/Tutors: Tutors are available in the Sykes Student Success Center at the times posted. You also are encouraged to see me during my office hours or at other times when I am available.

Classroom Behavior:

Please turn off all cell phones or put them on silent ring prior to class starting.

Please remove hats/caps in the lab.

Do not wear contact lenses in the lab.

Students with long hair are required to have it tied back away from the face.

No shorts or sandals are allowed in the lab.

No food or drink is allowed in the lab.

Students are expected to clean up their work areas before leaving. *Any problems with unclean work areas will result in the loss of points for the lab.*

Please wash your hands carefully with soap and water before leaving the lab.

Each student is required to have safety goggles and an apron. Safety goggles are to be worn at all times in the lab. Failure to wear safety equipment may result in dismissal from the lab for that day.

Students are **NOT ALLOWED** in the chemistry stockroom for any reason.

Expectations: You are expected to arrive fully prepared to work in the laboratory. This includes reading over the lab manual in advance and bringing any necessary safety equipment. **You are also required to complete assigned pre-lab exercises. The pre-lab material is worth 20% of the assigned grade for each week.**

Final Notes: The laboratory is a wonderful hands-on supplement to the lecture. It is to your advantage in the lab to stay caught up on the lecture material. As stated in lecture, chemistry is a very cumulative subject – don't fall behind!

****This syllabus is subject to change and/or rearrangement without prior announcement.****