

Chemistry 105-06 / Fundamental Chemistry II / 5 credits

University of Wisconsin-Stevens Point / Main Campus / Fall 2021

Syllabus

1. INSTRUCTOR INFORMATION

Dr. Kathryn McGarry
kmcgarry@uwsp.edu
The best way to contact me is by email.
I will do my best to respond within 24 h.

Need Help? Visit me during office hours!
CBB 446 or Zoom (link on Canvas)
M, T 3:00-4:00PM; R 12:00-1:00PM
Please send me an email if you need to meet at a
different time (any light grey times in my schedule).

2. COURSE DETAILS AT A GLANCE

Lecture	Mon, Tues, Thurs 2:00pm-2:50pm
<i>In-Person in CBB 105</i>	Our class will meet in person in the Chemistry Biology Building (CBB) 105 for lecture. We will discuss new material and work through problem sets posted online; feel free to bring an electronic device (phone, tablet, laptop). Questions will also be projected on the screen. Charging ports are available at the desks in CBB 105.
Discussion	Mon (D1) 9:00-9:50am; (D2) 10:00-10:50am; (D3) 11:00-11:50am
<i>In-Person in CBB 265</i>	Please attend only the session that is on your AccessPoint schedule! Discussion periods are an opportunity for you to check your understanding and work with your fellow students to better understand the course material.
Laboratory	Tues 8:00am; Wed 11:00am; Thurs 8:00am.
<i>In-Person in CBB 226</i>	Please attend only the session that is on your AccessPoint schedule! All labs will be held in person. Bring a <u>printout of the lab handout</u> and <u>safety goggles</u> to each lab.

3. COVID-19 PROTOCOLS

As we continue to move through the COVID-19 pandemic, the university protocols are regularly updated to follow current information in order to maintain the health and safety of students, faculty, and staff. Students are expected to stay informed and adhere to the current protocols set forth by the university, which can be found [here](#).

4. DR. MCGARRY'S FALL 2021 WEEKLY SCHEDULE

Hour	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 AM		105 Lab 06L1 CBB 226		105 Lab 06L2 CBB 226	
9:00 AM	105 Dis 06D1 CBB 265				
10:00 AM	105 Dis 06D2 CBB 265				
11:00 AM	105 Dis 06D3 CBB 265		105 Lab 06L3 CBB 226		
12:00 AM				Office Hour CBB 446	
1:00 PM					
2:00 PM	105 Lec 06 CBB 105	105 Lec 06 CBB 105		105 Lec 06 CBB 105	
3:00 PM	Office Hour CBB 446	Office Hour CBB 446			
4:00 PM					

Light grey boxes indicate time for course preparation, grading, meetings, or research.

5. REQUIRED TEXT AND TOOLS: MANDATORY ITEMS

Textbook Tro, Nivaldo. Chemistry: Structure and Properties, 2nd edition, Pearson, 2018. (ISBN-13: 9780134293936). Available for rent at the bookstore.

Calculator Your calculator must be capable of scientific calculations, either graphing or non-graphing. You must be familiar with how to input values into your calculator and how to complete scientific functions! See the manual for your calculator if you are unsure. A standalone calculator must be used for exams (no smartphone calculators!).

Chem101 [Chem101](#) is a web-based active learning platform where you will be able to access practice problems, the homework assignments, and quizzes. An access code to Chem101 is available for purchase through the bookstore or you can purchase online. Please see the “Chem101 Information” page on Canvas for instructions on how to sign into this program and link to our course.

LabFlow [LabFlow](#) is a web-based laboratory program where you will be able to access laboratory videos, the experimental procedure, pre-lab quizzes, and reports. An access code to LabFlow is available for purchase through the bookstore or you can purchase online. Please see the “LabFlow Information” page on Canvas for instructions on how to sign into this program and link to our course.

Safety Goggles You are required to bring safety **goggles** (not safety glasses!) with you to all in-person labs. Purchase in the bookstore or online.

6. ADDITIONAL TOOLS

Technology	Please make sure that you meet the technology requirements necessary to utilize the online platforms. UWSP has a number of Student Homework Labs for you to utilize (more information here .) At that webpage, click on a computer lab location to see the layout of the room, computers available, and what time the room closes that day. At that webpage, if you navigate to “Hours and Services” then “IT Classroom & Lab Hours – Fall and Spring Semester”, you will see the hours for each computer lab.
Canvas <i>through UWSP</i>	Canvas is an online learning management system where you can access information related to your course, including all course material (lecture notes, PowerPoints, videos, handouts, etc.) and your current grade in the class. Canvas can be accessed at this link or from the UWSP homepage using the top right menu.
Office 365 <i>through UWSP</i>	Access to Office 365 is provided to you free of charge through UWSP. Through Office 365, you can access all Microsoft applications (Word, Power Point, etc.) either through the online interface or by installing the Desktop apps onto your computer. More information can be found at this link .
Microsoft Lens <i>free</i>	Microsoft Lens is a free scanner application for your smart device. This app will be useful if you need to digitize your handwritten work to upload online.
Zoom <i>through UWSP</i>	Zoom is an online conferencing application that is available through UWSP. Information and tutorials can be found at this page .

7. COURSE OUTCOMES AND COURSE GOAL

Foundational Chemistry consists of a lecture and laboratory portion. In lecture, you will explore fundamental concepts in chemistry, including: making measurements, atomic and molecular structure, chemical bonding, intermolecular forces, stoichiometry, reactions in aqueous solutions and thermochemistry. In lab, you will enhance your ability to observe, problem solve, document methods, and communicate scientific results. Whatever career path you choose, be it medicine, scientific research, or a field outside of the sciences, the information and skills you gain in this course will help you along the way.

Upon completion of Foundational Chemistry second semester, you will be able to:

- Explain major concepts, methods, or theories in the natural sciences to investigate the physical world.
- Interpret information, solve problems, and make decisions by applying natural science concepts, methods, and quantitative techniques.
- Describe the relevance of aspects of the natural sciences to your life and society.

My goal in this course is for you to cultivate your foundational skills in chemistry. Whether you realize it or not, chemistry is a part of your *everyday life*. This is a fascinating field, impacting the world every day with new discoveries and applications. I hope that by the end of this course you will find value in the various aspects of chemistry.

8. COURSE GRADE COMPONENTS

Assignment	Unit Points	Total Points	Percent of Grade
Homework	9 (of 11*) × 5 points	= 45 points	9%
Quizzes	4 (of 5*) × 30 points	= 120 points	24%
Exams	3 × 75 points	= 225 points	45%
Laboratory Assignments	10 (of 12*) × 10 points	= 100 points	20%
Laboratory Safety Quiz	10 points	= 10 points	2%

*high scores of these will be kept Course Total = **500 points**

Grade Cutoffs:

A = 93.0% | A- = 90.0% | B+ = 87.0% | B = 83.0% | B- = 80.0% | C+ = 77.0% | C = 73.0%
C- = 70.0% | D+ = 67.0% | D = 60.0% | F = anything below 60.0%

Grade cut-offs will not be raised but may be lowered at the instructor's discretion.

Notes on Grading:

In accordance with UWSP Department of Chemistry policy, a student **must achieve at least 70% of the points in the lecture (280/400 points) and lab (70/100 points) separately in order to pass this course with a C- or higher grade.**

If you have questions concerning the grading, please make an appointment to discuss.

I reserve the right to re-grade the entire assignment/exam.

9. TIPS FOR SUCCESS

Throughout this semester, I am here to teach and provide you with tools, concepts, and methods that will help you understand this material, but ultimately your development rests on your studying practice. I do not believe you can learn chemistry purely by memorization. While there are some aspects to be memorized, overall, I believe this material is best learnt through *actively interacting with the material and working as many problems as possible*. Just as with any sport or musical instrument, the more you practice, the better you become. I believe the same is true for chemistry. To help you find the study habits that are right for you, I have created the "Study Skills" module available on Canvas. You will find more information related to study habits in that module, but here is a suggested study routine:

1. **Preview:** Read relevant sections of the text and take notes.
2. **Attend:** Attend all Lecture meetings.
3. **Review:** Summarize what you learned in the lecture meeting. Re-write and organize your notes in conjunction with reading the relevant sections.
4. **Study:** Have focused study sessions where you actively interact with the material and work homework problems. A schedule for daily problems in the textbook is provided to you!
5. **Assess:** Use the Homework assignments and Quizzes as a test of your comprehension.
6. **Follow up:** Flag sections of the reading, your notes, and problems where you struggled and follow up with me or seek help from the Tutoring-Learning Center or a peer.
7. **Modify:** Think about the study habits that are effective for you. Think about what study habits you have tried that are not as effective. Use the ones that work!

10. COURSE POLICIES AND PROCEDURES: LECTURE & DISCUSSION

Reading and Practice Problems

*Textbook,
Chem101*

It is essential that you spend a significant amount of time with the course material, reading the textbook and solving problems outside of class to be able to successfully answer questions and solve new problems that you will encounter on exams. This is a key aspect of successful study skills. For each lecture period, a list of relevant chapter sections to read and chapter problems to complete in the textbook will be provided to you. You can check your answers in the back of the Tro textbook (odd problems only). You will also be able to access more practice problems in Chem101.

Homework Assignments in Chem101

The purpose of this assignment is to provide you with a check of your understanding and encourage you to maintain a regular schedule with your studying in this course. There will be eleven homework assignments worth 5 points each and the highest ten scores will be kept for the final grade. Homework assignments will cover the past week of material, will be conducted through Chem101, and will consist of 5 multiple-choice and/or interactive questions each worth 1 point. Three attempts per question will be allowed with no point penalty for subsequent attempts. Homework assignments due dates can be found in the course calendar (typically Mondays).

Quizzes On Chem101

There will be five 50-min Quizzes worth 30 points each and the highest four scores will be kept for the final grade. Quizzes will be conducted in Chem101, are open-notebook, will cover material since the last quiz, and consist of 15 multiple-choice and/or interactive questions each worth 2 points. Two attempts per question are allowed with a 0.5 point deduction for the second attempt. Quizzes must be conducted within the quiz window which will be open for five days prior to the deadline (typically Friday 8:00am to Wednesday 8:00am). Make-up quizzes will be allowed only for excusable circumstances as written in the syllabus. Please note that internet connectivity issues while you are taking the quiz is not an excusable circumstance since you have access to computers through the Student Homework Labs on UWSP campus (see Technology under section 6: Additional Tools in the syllabus for more details). Late submissions will incur a 10%-point deduction.

Exams In-Person

There will be two 50-min Exams worth 75 points each and one 2-hour Final Exam worth 75 points occurring on the dates listed in the course calendar. Exams will cover all material since the last exam while the Final Exam will be cumulative. Exams will be conducted in our lecture meeting and will consist of 25 multiple-choice questions. For each Exam, each student is allowed one *handwritten* note card that covers *one side* of an 3x5" index card. For the Final Exam only, the note card may have handwriting on both sides of the 3x5" index card. Blank index cards will be provided to you and completed index cards must be surrendered with your Exam. Make-up exams will be allowed only for excusable circumstances as written in the syllabus. Should you arrive late to any exam, you will have only the time remaining to complete the exam. If you score higher on the Final Exam than on a previous Exam, the Final Exam score will replace *one* of the lower Exam scores for your final grade.

Lecture Videos in Canvas

I will record each lecture meeting and post the videos to our Canvas course page. Uploading of these videos may take up to 48 hours. Additional lecture videos by the instructor from a prior semester will be provided to you on Canvas.

11. COURSE POLICIES AND PROCEDURES: GENERAL

Lecture/Disc. Attendance	Attendance in lecture or discussion does not directly impact your course grade, but I hope you will join us for all meetings!
Laboratory Attendance	In the laboratory, you gain valuable hands-on skills. Students are expected to attend <i>all in-person laboratory meetings</i> . If you miss a lab due to an excusable circumstance as stated in the syllabus, a virtual make-up will be allowed. Students absent from more than two lab meetings may not pass this course.
Make-Up Policy for Quizzes	Quizzes will be available on Chem101 online for five days. Please inform me immediately if you experience an excusable circumstance during this time so that a make-up can be scheduled.
Make-Up Policy for Exams	All exams are scheduled during one of our lecture periods. Please inform me immediately if you experience an excusable circumstance so that a make-up can be scheduled.
Excusable Circumstances for Make-Ups	Include the following: a UWSP Athletic event, an armed forces related training or drills, illness (including COVID-19 quarantine), medical emergency, death in the family, an event related to your religious beliefs as outlined here under <i>Rights and Responsibilities</i> ; a child or dependent related emergency.
Late Work	When something comes up that is not an excusable circumstance, late work will be accepted with a 10%-point deduction for Homework, Quizzes, and Laboratory Assignments until Wednesday, 12/15 at 8:00 am. If you would like your late work graded prior to this deadline, you <u><i>must inform me by email requesting the grade and specifying the assignment</i></u> . Once late work is graded, no further changes can be made to the assignment.
Course Accommodations	I want all students to have access to the tools they need to be successful in this course. Any student who anticipates they may need an accommodation based on the impact of a disability (including mental health, chronic or temporary medical condition) is encouraged to speak with the Disability and Assistive Technology Center (DATC) in order to determine appropriate accommodations for their needs. Please follow up with me after accommodations have been determined. More information about the DATC can be found at this page .
Academic Integrity	Academic Standards will be rigorously enforced as outlined here under <i>Rights and Responsibilities</i> . A violation of this policy will result at a minimum in a zero for the work involved and may lead to an F in the course or further disciplinary action, depending on the nature of the infraction.
Classroom Behavior	UWSP values a safe, honest, respectful, and inviting learning environment. To ensure that each student has the opportunity to succeed, a code of behavior has been developed for all students and instructors which can be found here under <i>Rights and Responsibilities</i> . This code of behavior applies to all class meetings.

12. COURSE POLICIES AND PROCEDURES: LABORATORY

Safety and Behavior	General chemistry laboratory presents a unique learning environment in which you will encounter new techniques and hazardous chemicals. It is important that each of us take responsibility for our own safety as well as assisting in the safety of others. In lab, be aware of your surroundings at all times and pay attention to chemical contamination on your skin, gloves, and clothing. You are expected to comply with the safety regulations outlined in the experiment handouts. Additionally, classroom behavior expectations for laboratory are the same as for lecture and discussion.
Lab Drawers	Each student will check into a drawer and becomes responsible for the drawer contents from the day of check-in until locker check-out. A lock and combination will be provided; students must unlock/lock their drawer every lab period.
Laboratory Assignments in LabFlow	All laboratory assignments will be completed on the web-based program LabFlow. The first assignment is the Safety Quiz worth 10 points and you have two attempts. This score is kept for your final grade. There will be twelve laboratory assignments (Pre-lab Quiz and Report together is one assignment) each worth 10 points and the highest 10 scores will be kept for your final grade. Laboratory assignments are due on Fridays on the dates in the course calendar. Pre-lab Quizzes cannot be submitted late; Reports can be submitted late with a 10%-point deduction.

Laboratory Assignment Details

A complete Laboratory Assignment consists of two parts: Pre-Lab and Post-Lab.

- Pre-Lab (2 points)
 - Complete the Pre-Lab Quiz after reading through the Experiment handout, watching the relevant video on Canvas, and watching the videos available on LabFlow.
 - The Pre-Lab Quiz for the experiment should be completed on LabFlow PRIOR to lab.
 - You have two attempts to complete the Pre-Lab quiz on LabFlow.
 - Pre-Lab Quizzes will not be accepted past the deadline (no late submissions).
- Post-Lab (Report) (8 points)
 - The Report should be completed after you have conducted the lab in person.
 - You have two attempts to complete the Post-Lab Report.
 - My suggestion is to try the first attempt well in advance of the deadline! After submitting, go through the answers, make corrections, and try again.
 - ***Note that a second attempt on the Report is an override. Your initial attempt will be wiped from the system. If you begin a second attempt, you must submit the new Report for your score to be counted.***
 - I will not grade your first attempt before the deadline, but I am happy to answer specific questions that you have. If you have questions regarding your calculations, your calculations **MUST be legibly written** out so that I can follow your work.

Keep in mind that our laboratory is scheduled for one THREE HOUR session during the week and you should expect to spend another hour on lab work outside of the lab. Often our experiments may not take the full time. Be sure to manage your time during the week to complete the laboratory assignment.

13. ADDITIONAL STUDENT RESOURCES

Tutoring-Learning Center (TLC)

This semester, the Tutoring-Learning Center (TLC) offers free group tutoring for specific classes (ours included!), free drop-in tutoring, and free one-on-one tutoring (upon request) to support you in your classes starting Sept 13th. These services will all be held in person (virtual one-on-one available upon request). The tutors are UWSP students who have done well in their classes and who are here to share their successful study habits and chemistry content knowledge to help others succeed. Discussing chemistry concepts and practicing problems together clarifies and solidifies knowledge, and the tutors are eager to study with you. If you have questions about the schedules or would like to make an appointment, please visit the TLC in ALB 018 (library basement), email (tlctutor@uwsp.edu), or call (715) 346-3568. TLC website can be found [here](#).

Mental Health

As we continue to move through a global pandemic, please take care of yourself and others by checking in with each other. UWSP has developed a resource for you to learn about and practice skills to support other students. I strongly encourage all students to take the online training course found [here](#). You will use your UWSP email account to sign in to the training.

University Counseling Center

College is an exciting and challenging time that brings both expected and unexpected stressors. These stressors can have a profound effect on a student's quality of life and academic performance. The UWSP Counseling Center is committed to helping students get the most from their college experience. The Counseling Center uses diverse, but proven approaches to enhance students' social, emotional, and developmental well-being. The Counseling Center is staffed with licensed mental health professionals dedicated to assisting students as they navigate difficult circumstances or resolve personal concerns. More information can be found [here](#).

Title IX Reporting

Students are encouraged to report incidents of sexual misconduct by using the anonymous link or speaking with a Title IX coordinator or the Dean of Students. See "Reporting options" at the website found [here](#).

Emergencies

Information on how to respond to various emergency situations that may arise on campus can be found [here](#).

UWSP Police and Security Services

Students can reach UWSP Police and Security Services at 715-346-3456 in emergencies or to utilize the Safe Way Home program, which assists students in finding a safe way home from campus 24/7. Additional information can be found at [this page](#).

More Resources

Looking for more help? Try these websites:

- Check out [this page](#) for general student resources at UWSP.
- The TLC has compiled a list of resources for online classes [at this link](#). (You may still find it useful for in person courses!)
- [This page](#) contains additional resources compiled by Student Affairs.
- The UWSP Student Handbook can be found [here](#).
- Use [this link](#) to access a list of resources from the Dean of Students.