

Chemistry 106-01 / Fundamental Chemistry II / 5 credits

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

Syllabus

1. INSTRUCTOR INFORMATION

Dr. Kathryn McGarry
kmcgarry@uwsp.edu

The best way to contact me is by email or on Zoom. I will do my best to respond within 24 hours.

Need Help? Visit me online! M, F 10:00am-11:00am
T, R 10:00am-10:30am. Book 10 minutes [here](#)

If you need to meet with me at a different time, please send me an email to make an appointment.

2. COURSE DETAILS AT A GLANCE

Lecture

*Synchronous Online
(Real Time, Videos
will be On Demand)*

Tues, Thurs, Fri 9:00am-9:50am. You will have a short *lecture video* prepared by your instructor and available on Canvas to be watched *prior to* the synchronous session. The course content is very problem solving based (lots of math!) so our time together online will be spent working through problems together in groups and walking through the solutions. The real time sessions *will not* be recorded.

Discussion

*Synchronous Online
(Real Time)*

Wednesdays during the scheduled times found in AccessPoint. Please attend **ONLY** the discussion section on your schedule. These sessions will be similar to the lecture periods but will cover material from the past week of class and serve as preparation for quizzes. These sessions *will not* be recorded.

Laboratory

*Hybrid: In-Person and
Asynchronous Online
(On Demand)*

These sessions will occur asynchronously online and in-person (**in CBB 230**) during the scheduled times found in AccessPoint. ***Note that our first lab meeting will occur on Zoom at the scheduled time during the first week of the semester.*** While attending lab in-person is critical for developing skills and techniques, we understand these are extraordinary times and an online-only option is available for students who cannot attend in-person. *Please mark the corresponding question in the Welcome Survey if you will not be able to attend laboratory in-person this semester.*

3. REQUIRED TEXT AND TOOLS

Textbook	Tro, Nivaldo. Chemistry: Structure and Properties, 2nd edition, Pearson, 2018. (ISBN-13: 9780134293936). Available for purchase and rent through the bookstore.
Chem101	We will be using Chem101 this semester to work through practice problems, complete homework and quizzes. An access code to Chem101 is available for purchase through the bookstore or you can purchase online. This is a <u>mandatory purchase</u> . Please see the “Chem101 Information” page on our Canvas course site for instructions on how to sign into this program and link to our course. I suggest you do this ASAP in order to access the Review Assignment.
Calculator	Your calculator must be capable of scientific calculations, either graphing or nongraphing. You must be familiar with how to input values into your calculator and how to complete scientific functions! Please see the manual for your calculator if you are unsure.
LabFlow	We will be using LabFlow this semester to ensure seamless transition between in-person experiments and virtual experiments. An access code to LabFlow is available for purchase through the bookstore or you can purchase online. This is a <u>mandatory purchase</u> . Please see the “LabFlow Information” page on our Canvas course site for instructions on how to sign into this program and link to our course. You can do this ASAP or we will go through the process during the first meeting.
Safety Goggles	You are required to bring safety goggles (not safety glasses!) with you to all in-person labs. These can be purchased in the bookstore or online. This is a <u>mandatory purchase</u> .
Laboratory Notebook	Any type of notebook that will allow you to keep notes during the labs (composition notebooks work quite well). All students will need a lab notebook regardless of whether the labs are taken online or in-person.
Technology and Support	Please make sure that you meet the technology requirements necessary to take an online course (see next page). More resources on technology can be found here and here .

4. TECHNOLOGY REQUIREMENTS & RECOMMENDATIONS

Hardware

- Computer or Computer Access** Guidelines for computer specifications can be found at [this link](#). Equipment (laptop, media devices) can be borrowed for a two-day period through UWSP Information Technology at [this page](#).
- Webcam and Microphone recommended** A webcam and microphone allow your instructor and peers to see your face and hear your voice – it makes us feel like we are in the classroom! The use of this equipment is not required, but highly recommended. **Please mark the corresponding question in the Welcome Survey if you will not have access to this equipment.**
- Printer recommended** For the in-person laboratories, you will need to bring a hard copy of the experimental procedure with you. Use of a smart phone or tablet to read the procedure in lab is discouraged in order to avoid chemical contamination of your personal device. Printers are available on the UWSP campus; information about their use and cost can be found [here](#).

Network Connection

- On campus** Information on how to connect to the UWSP wireless network can be found [here](#).

Online Websites, Software, & Apps

- Canvas through UWSP** Canvas is an online learning management system where you can access information related to your course, including all course material and your current grade in the class. Canvas can be accessed at [this link](#) or from the UWSP homepage using the top right menu. If you cannot access our course once you are in Canvas, please let me know *ASAP*.
- Zoom through UWSP** Zoom is an online conferencing application that is available through UWSP. Information and tutorials can be found at [this page](#).
- Chem101 purchase** [Chem101](#) is a web-based active learning platform where you will be able to access practice problems, the homework assignments, and quizzes.
- LabFlow purchase** [LabFlow](#) is a web-based laboratory program where you will be able to access laboratory videos, the laboratory experimental procedure, pre-lab quizzes, and post-lab reports.
- Office 365 through UWSP** 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. Office 365 can also be linked to Canvas for various assignments. More information can be found at [this link](#).
- Microsoft Lens recommended, free** 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 share with your instructor or peers.

5. 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.

6. COURSE GRADE COMPONENTS

Assignment	Unit Points	Total Points	Percent of Grade
Review Assignment	25 points	= 25 points	4%
Weekly Homework	10 (of 13*) × 9 points	= 90 points	14%
Quizzes	3 (of 4*) × 40 points	= 120 points	18%
Midterm Exam	120 points	= 120 points	18%
Final Exam	120 points	= 120 points	18%
Laboratory Assignments	10 (of 12*) × 18 points	= 180 points	27%
*high scores of these will be kept	Course Total	= 655 points	

Tentative Grade Cutoffs:

A/A- = 100-90%; B+/B/B- = 89-80%; C+/C/C- = 79-70%; D+/D = 69-60%; F = 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 (297.5/425 points) and lab (105/150 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.

7. 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.

This course is structured to assist you in staying on top of this material. The text itself is structured with relevant problems throughout the chapter and a series of problems at the end of each chapter (with solutions to the odd problems in the back of the textbook) to assist you in practicing and learning. A recommended list of problems that you should complete after each lecture period will be provided to you to encourage you to stay on track. Additional problems for you to work will be provided through the lecture videos and during the discussion group work to ensure you have ample problems to practice. Daily graded assignments are intended to check your understanding and help you recognize areas you may need to spend more time on. Take advantage of these opportunities. I strongly suggest you work *all* of the problems in the book. Mastery of these problems is crucial for success on exams.

AVOID CRAMMING.

Suggested class preparation and study routine:

1. Read relevant sections of the text and take notes. (Can be performed after step 2 or 3 if preferred.)
2. Watch the lecture videos and take notes. Re-watch videos as needed.
3. Attend the Lecture meetings to work through problems and interact with classmates and instructor.
4. Re-write and organize your notes in conjunction with reading the relevant sections.
5. 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!
6. Use the Homework assignments and Quizzes as a test of your comprehension.
7. Flag sections of the reading, your notes, and problems where you struggled and follow up with the instructor during office hours, by appointment, or seek help from the Tutoring-Learning Center or a peer.
8. 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!

8. DR. MCGARRY'S SPRING 2021 WEEKLY SCHEDULE

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00	R/P/G	R/P/G	R/P/G	R/P/G	R/P/G
09:00	R/P/G	Chem 106 Lecture	Chem 106 Dis Discussion	Chem 106 Lecture	Chem 106 Lecture
10:00	Office Hour	Office Hour	Chem 106 Dis Discussion	Office Hour	Office Hour
11:00	R/P/G	Chem 106 Lab	Chem 106 Dis Discussion	Chem 106 Lab	R/P/G
12:00	R/P/G	Chem 106 Lab	R/P/G	Chem 106 Lab	R/P/G
13:00	R/P/G	Chem 106 Lab	Chem 106 Dis Discussion	Chem 106 Lab	R/P/G
14:00	Chem 106 Lab	R/P/G	R/P/G	R/P/G	R/P/G
15:00	Chem 106 Lab	R/P/G	R/P/G	R/P/G	R/P/G
16:00	Chem 106 Lab	R/P/G	R/P/G	R/P/G	R/P/G

Please note: virtual office hours are time for you to ask your instructor questions! Please set up an appointment with me ([using this link](#)) during this time so we can work on material you are struggling with. R/P/G stands for research, preparing coursework, grading.

9. COURSE POLICIES AND PROCEDURES: LECTURE & DISCUSSION

Schedule & Format Our class will meet during the scheduled times (in real time, together) for lecture (9:00am on Tuesday, Thursday, Friday) and discussion (Wednesdays in sections) on Zoom. The Zoom links can be found on Canvas. The class meetings will focus on group and individual problem-solving using Chem101.

Lecture Videos Lecture videos will be prepared and recorded by the instructor and posted on Canvas for you to watch prior to attending the real time lecture meeting.

in Canvas Note that all lecture materials and recordings for this course are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings for their personal use related to participation in this class. Students may also take notes solely for their personal use. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation. [Regent Policy Document 4-1] Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

**Review
Assignment**
in Chem101

It is imperative that you know how to use your calculator, how to rearrange equations, and how to solve an equation for a specific variable to be successful in this course. To review these skills, a Review Assignment worth 25 points will be available in Chem101 due on Wed, 2/3 by 8:00am. The assignment will consist of 25 multiple-choice and/or interactive questions. Three attempts per question will be allowed with a 0.10-point penalty for each next attempt. Late Review Assignments will be accepted with an additional 0.10-point penalty per question.

**Suggested
Reading
and Practice
Problems**
*in the Tro
Textbook
and in
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 in the Tro textbook will be provided to you. Additionally, you will be able to access practice problems in Chem101. Feedback will be provided immediately for the practice problems in Chem101 and you can check your answers for odd problems in the back of the Tro textbook.

**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 thirteen Homework Assignments worth 9 points each and the highest ten scores will be kept for the final grade. Homework Assignments will be conducted through Chem101 and will consist of 9 multiple-choice and/or interactive question each worth 1 point. Three attempts per question will be allowed with a 0.10-point penalty for each next attempt. Homework Assignments will be open from Thursday at 10am to the following Thursday at 8:00am.

Quizzes
in Chem101

There will be four 50-min Quizzes worth 40 points each and the highest three scores will be kept for the final grade. Quizzes will cover the previous three weeks of lecture material and will be open notebook. Quizzes will be conducted through Chem101 and will consist of 20 multiple-choice and/or interactive questions each worth 2 points. Two attempts per question will be allowed with a 0.25-point penalty for the second attempt. Quizzes will be open from Friday at 10am to Tuesday at 8:00am.

**Midterm
Exam**
in Canvas

There will be one two-hour Midterm Exam worth 120 points. The exam will be conducted through Canvas, will be cumulative, open notebook, and consist of 40 multiple-choice questions worth 3 points each. One attempt per question will be allowed. The Midterm Exam will open at 6:00am on Thursday, 3/18 and close at 11:59pm on Friday, 3/19. You will receive only the time remaining on the exam if you begin an exam without the allotted time prior to close (i.e. you must begin the exam no later than 9:59pm on Friday, 3/19 to receive the full two hours).

Final Exam
in Canvas

There will be one two-hour Final Exam worth 120 points. The exam will be conducted through Canvas, will be cumulative, open notebook, and consist of 40 multiple-choice questions worth 3 points each. One attempt per question will be allowed. The Final Exam will open at 6:00am Monday, 5/17 and close at 11:59pm on Tuesday, 5/18. You will receive only the time remaining on the exam if you begin an exam without the allotted time prior to close (i.e. you must begin the exam no later than 9:59pm on Tuesday, 5/18 to receive the full two hours).

10. COURSE POLICIES AND PROCEDURES: GENERAL

Attendance	Attendance will be recorded at all class meetings so that I am aware of the level of engagement of each student in the course. Attendance does not impact your course grade.
Late Work	Late work will be accepted with a 10%-point penalty per question for Homework. Late work for lab assignments (Reports only) will be accepted with a 4-point deduction.
Make-Up Policy for Laboratory	Due to the nature of this semester, missed in-person labs due to an excusable circumstance (see below) may receive a deadline extension for the report, if necessary, but the lab will be performed online. Missed in-person labs for any other reason (such as oversleeping) will not receive a deadline extension and the lab will be performed online. Please inform your instructor if you are going to miss an in-person lab that you were scheduled to attend.
Make-Up Policy for Quizzes and Exams	The Quizzes, Midterm Exam and Final Exam are scheduled so that you can take these at a time that suits your schedule. If during the allotted time you encounter an excusable circumstance, please inform your instructor immediately so an accommodation can be made.
Excusable Circumstances for Make-Ups	<ul style="list-style-type: none">• UWSP Athletic event• Armed forces related training or drills• 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
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> . All students are expected to adhere to this policy for all in-person and synchronous online meetings as well as any online discussion boards.

11. 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. These services will all be held virtually via Zoom or GoBoard. 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. More information about these options can be found [here](#).

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. More information can be 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 about UWSP Police and Security Services and this program 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 that can be accessed [here](#).
- Use [this link](#) to access a list of resources compiled by the Dean of Students.
- The UWSP Student Handbook can be found [here](#).
- [This page](#) contains additional resources compiled by Student Affairs.

Additionally, don't forget to read through the **Suggestions for Students Learning in an Online Environment** document which I compiled from various sources and can be accessed on our Canvas course site.

12. CHEM 106: QUICK STATS

- Lecture & Discussion
 - *Required Textbook:* Tro, Nivaldo - Chemistry: Structure and Properties, 2nd edition.
 - *Required purchase:* Chem101 – active-learning platform used in class and for assignments
 - *Required tool:* scientific calculator (graphing or nongraphing)
 - Weekly lecture videos released on Mondays – watch the corresponding lecture video prior to the scheduled lecture meeting
 - Lecture meetings on Zoom Tuesday, Thursday, Friday at 9:00am
 - Discussion meetings on Zoom Wednesday – check AccessPoint for your schedule and attend only that session
 - Review Assignment on calculations, in Chem101, **due Wednesday, 2/3 at 8:00am**
 - Homework Assignments – weekly, in Chem101, **due Thursdays at 8:00am**
 - Quizzes – about every three weeks, in Chem101, **due Tuesdays at 8:00am**
 - One Midterm Exam and one Final Exam, in Canvas
 - Late work for Homework will be accepted with a 10%-point penalty per question.
- Laboratory
 - *Required purchase:* LabFlow – online laboratory platform used for all laboratory experiments
 - *Required purchase:* safety goggles (if attending in-person labs)
 - Hybrid and cohort schedule: alternating in-person and online (on-demand) lab experiments, check AccessPoint for your schedule and attend that session
 - Laboratory Assignments – weekly, in LabFlow, generally **due Mondays at 8:00am**
 - Late work for lab assignments (Reports only) will be accepted with a 4-point deduction.

Please see the Syllabus – Laboratory Addendum for complete laboratory information.

Chemistry 106-01 / Fundamental Chemistry II / 5 credits

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

Syllabus - Laboratory Addendum

1. INSTRUCTOR INFORMATION

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

Need Help? Visit me online! M, F 10:00am-11:00am
T, R 10:00am-10:30am. Book 10 minutes [here](#)
If you need to meet with me at a different time, please
send me an email to make an appointment.

Wednesday, 2pm section only:
Dr. Laura Cole
lc@uwsp.edu

Dr. Cole will be your instructor for the in-person meetings
and is available to answer questions during this time.
Check your Canvas course for office hour information.
Note that Dr. McGarry grades all assignments.

2. LABORATORY DETAILS AT A GLANCE

Laboratory
*Hybrid: In-Person and
Asynchronous Online
(On Demand)*

These sessions will occur asynchronously online and in-person (**in CBB 230**) during the scheduled times found in AccessPoint.

Note that our first lab meeting will occur on Zoom at the scheduled time during the first week of the semester. Note that your laboratory section, ie. meeting day and time, can be found in AccessPoint.

While attending lab in-person is critical for developing skills and techniques, we understand these are extraordinary times and an online-only option is available for students who cannot attend in-person.

Please mark the corresponding question in the Welcome Survey if you will not be able to attend laboratory in-person this semester.

In order to adhere to the COVID-19 protocols put in place by the university, the laboratory sessions will be held in-person using a cohort model. Each laboratory section will be divided into two cohorts, Cohort A and Cohort B, for each laboratory section. These cohorts will alternate having lab in-person or online each week. For example, if Cohort A has in-person lab in a given week, Cohort B will have an online lab to complete.

3. REQUIRED TOOLS

Calculator	Your calculator must be capable of scientific calculations, either graphing or nongraphing. You must be familiar with how to input values into your calculator and how to complete scientific functions! Please see the manual for your calculator if you are unsure.
LabFlow	We will be using LabFlow this semester to ensure seamless transition between in-person experiments and virtual experiments. An access code to LabFlow is available for purchase through the bookstore or you can purchase online. This is a <u>mandatory purchase</u> . Please see the “LabFlow Information” page on our Canvas course site 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. These can be purchased in the bookstore or online. This is a <u>mandatory purchase</u> .
Laboratory Notebook	Any type of notebook that will allow you to keep notes during the labs (composition notebooks work quite well). All students will need a lab notebook regardless of whether the labs are taken online or in-person.

4. COVID-19 PROTOCOLS

As we continue to move through the COVID-19 pandemic, a series of protocols have been developed by the university to keep everyone healthy and safe. For our course, the laboratory will be the only in-person experience we have during the semester. Please adhere to the following protocols for these sessions.

Face Coverings	At all UW-Stevens Point campus locations, the wearing of face coverings is mandatory in all buildings, including classrooms, laboratories, studios, and other instructional spaces. Any student with a condition that impacts their use of a face covering should contact the Disability and Assistive Technology Center to discuss accommodations in classes. Please note that unless everyone is wearing a face covering, in-person classes cannot take place. This is university policy and not up to the discretion of individual instructors. Failure to adhere to this requirement could result in formal withdrawal from the course.
Other Guidance	<ul style="list-style-type: none">• Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).• As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.• Maintain a minimum of 6 feet of physical distance from others whenever possible.• Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.• Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.• Please maintain these same healthy practices outside the classroom.

5. COURSE POLICIES AND PROCEDURES: GENERAL

Attendance	Attendance will be recorded at all class meetings so that I am aware of the level of engagement of each student in the course. Attendance does not impact your course grade.
Late Work	Late work will be accepted with a 10%-point penalty per question for Homework. Late work for lab assignments (Reports only) will be accepted with a 4-point deduction.
Make-Up Policy for Laboratory	Due to the nature of this semester, missed in-person labs due to an excusable circumstance (see below) may receive a deadline extension for the report, if necessary, but the lab will be performed online. Missed in-person labs for any other reason (such as oversleeping) will not receive a deadline extension and the lab will be performed online. Please inform your instructor if you are going to miss an in-person lab that you were scheduled to attend.
Make-Up Policy for Quizzes and Exams	The Quizzes, Midterm Exam and Final Exam are scheduled so that you can take these at a time that suits your schedule. If during the allotted time you encounter an excusable circumstance, please inform your instructor immediately so an accommodation can be made.
Excusable Circumstances for Make-Ups	<ul style="list-style-type: none">• UWSP Athletic event• Armed forces related training or drills• 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
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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> . All students are expected to adhere to this policy for all in-person and synchronous online meetings as well as any online discussion boards.

6. COURSE POLICIES AND PROCEDURES: LABORATORY

Schedule and Format	In order to adhere to the COVID-19 protocols for in-person meetings, students will be divided into two cohorts for the semester and attend in-person lab on an alternating weekly schedule. When a cohort is not scheduled to meet in-person, there will be an online (on-demand) laboratory experiment to complete in LabFlow. Cohort assignments and laboratory schedule will be made available on Canvas. An online-only option is available for students who cannot attend the in-person sessions. <u>Please mark the corresponding question in the Welcome Survey if you will not be able to attend laboratory in-person this semester.</u>
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. This means that you should 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.
Laboratory Assignments in LabFlow	All laboratory assignments for Chem 106, regardless of which lab format you choose, will be completed on the web-based program LabFlow. Laboratory videos, pre-lab quizzes and post-lab assignments will all be available through this platform. An additional instructor video will be available on Canvas. An access code can be purchased through the bookstore. All assignments (Pre-lab Quiz and Report together is one assignment) are worth 18 points and the highest 10 scores of all possible will be kept for your final grade. You have two attempts for both the Pre-Lab Quiz and the Post-Lab Report. Laboratory assignments are scored as follows: 6 points for the Pre-Lab Quiz and 12 points for the Report. These point values are different than what you will see on LabFlow; however, your scored percentage will be used to assign final points. All components of the Laboratory Assignment (Pre-lab Quiz and Report) are due at the deadlines listed at the end of the syllabus.
Lab Drawers	Each student attending in-person laboratory sessions 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.

7. LABORATORY ASSIGNMENT DETAILS

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

- Pre-Lab
 - Completion of the Pre-Lab Quiz on LabFlow is worth 6 points of the assignment.
 - The Pre-Lab Quiz for the experiment should be completed on LabFlow after watching the relevant videos available on LabFlow or on Canvas and PRIOR to in-person lab.
 - You have two attempts to complete the Pre-Lab quiz on LabFlow.
 - Your laboratory notebook should be set up (see next section) PRIOR to in-person lab.

- Post-Lab
 - Completion of the Report on LabFlow is worth 12 points of the assignment.
 - The Report consists of two parts:
 - 1) Inputting values and text in the LabFlow Report for the experiment
 - 2) Uploading your notebook pages to the LabFlow Report
 - Notebook pages MUST be included for ALL students and ALL experiments
 - Notebook page images but be clearly readable – zero points will be awarded for notebook pages that cannot be clearly read.
 - The Post-Lab Report should be completed after you have conducted the lab in person.
 - You have two attempts to complete the Post-Lab Report.
 - Try the first attempt well in advance of the deadline! After submitting, go through the answers, make corrections, and try again.
 - If you would like to meet with me regarding your first Lab-Report attempt, you must come having reviewed the attempt and have an explanation/correction of each question marked wrong.

- Complete Assignments
 - Complete assignments are worth 18 points each.
 - The point values for the quiz and report are different than what you will see on LabFlow; however, your scored percentage will be used to assign final points.
 - For all labs, the complete assignment (Pre-Lab Prep and Post-Lab Report) *must be completed* by the final deadline.
 - Late labs (Reports only) will be accepted up to one week late and will incur a 4-point deduction.
 - The two lowest scores of all labs will be dropped from the final grade.

Keep in mind that our laboratory is scheduled for THREE HOURS during the week. Additionally, you should expect to spend another hour on lab work outside of the lab.

Often our experiments may not take the full time. Please make sure that you manage your time during the week to complete the laboratory assignment.

8. LABORATORY NOTEBOOK DETAILS

Why keep a lab notebook?

Keeping a lab notebook is an essential skill in science. Laboratory notebooks are used to create a complete, accurate, and permanent record of what a scientist did and what they observed in the laboratory or in the field. A good laboratory notebook should be able to be followed and repeated by someone with equivalent technical training to achieve the same results. In the real world, laboratory notebooks play an important role in establishing inventorship!

What should my lab notebook look like?

- Any notebook paper will do (either lined or graphing paper). You can have a bound notebook (this is more in line with actual laboratory notebooks) or use loose-leaf paper.
- All entries must be made in **black or blue ink**.
- Any mistakes should be crossed out with one line (~~like this~~). Do not scribble anything out!
- All efforts should be made to make your work legible. Ask yourself, would you be able to read your handwriting and recreate the work a year later? Do your best to answer yes to this question!
- Your lab notebook should contain complete information in all of the sections outlined below.

Organization of Your Lab Notebook

For each experiment, you should have the following on a notebook page.

1. **Experiment Info: Name, Lab Section, Title, Date:** At the top of the first page of an experiment, write your name, your lab section (Mon 2pm, Tues 11am, Wed 2pm, or Thurs 2pm), title of the experiment, and the date. This should be completed prior to starting the lab.
2. **Experiment Details: Purpose, Flow Chart:** Following the experiment info, you should provide a statement of purpose for the experiment (what are you trying to achieve?) and a brief flow chart or description of what you will do in the lab (or would do in the lab for those of you online-only!). This description should provide details of each step in the experiment in the order you will perform them. You may also want to include details such as the type and size of glassware you will use. This should be completed prior to starting the lab.
3. **Data Tables:** Prior to collecting data, you will want to have your data tables set up. Include appropriate titles, column headings (with units). This should be complete prior to starting the lab.
4. **Results:** During the lab, record any data that is important to the experiment here using the data tables you have written. Clearly complete your calculations for the lab in this section.
5. **Conclusion:** At a minimum, your conclusion should contain the following statements:
 - Was the objective/purpose of the experiment achieved?
 - Briefly summarize the data that allowed you to determine the answer to the question above.
 - State any errors that occurred in the experiment or suggestions for improvements to the experiment.

Note that sections 1-3 should be completed PRIOR to starting the lab.

Post-Lab

Complete the post-lab assignment for each experiment by inputting your answers into the Report on LabFlow and upload an image of your notebook pages with each assignment.