Chemistry 325 (4 credits)

Organic Chemistry I, Sections 04, 05, 06 Lecture: MWF 12:00-12:50, A121 Science

Labs: C134 Science

**04** T 8:00-10:50; **05** T 14:00-16:50; **06** R 14:00-16:50

**Fall 2016** 

Instructor: Dr. Kathryn A. McGarry
Office: D-131 Science / 715-346-3328

Email: kmcgarry@uwsp.edu

Office Hours: M 16:00-17:00, T 11:00-12:00, W

13:00-14:00, & by appointment

## **Text & Tools:**

## Required

- Smith, J. Organic Chemistry, 3<sup>nd</sup> edition, McGraw-Hill, 2011. (ISBN-13: 978-0-07-337562-5)

- Lab notebook: Bound notebook with pages numbered (you may do this yourself if you choose).
- Lab manual: Available online on the D2L page for this course.
- Safety goggles

## Strongly Recommended

- Smith, J. Study Guide and Solutions Manual for Organic Chemistry, 3<sup>rd</sup> edition. McGraw-Hill, 2011. (ISBN: 978-0-07-729665-0). Available on two-hour reserve at the library.
- Padias, A. B. Making the Connections: A How-To Guide for Organic Chemistry Lab Techniques, 2<sup>nd</sup> edition, Hayden McNeil, 2011. (ISBN-13: 978—7380-4135-3). You may choose another text or websites to complete your prelab assignments.
- Molecular models these are highly recommended for working problems and visualizing three-dimensional concepts. These are optional and available for purchase at the bookstore or online at <a href="https://www.indigo.com">www.indigo.com</a> (organic chemistry molecular model set, ~\$21).

## **Course Outcomes:**

Upon completion of the lecture portion of this course, you should be able to:

- Identify and name simple organic molecules and functional groups.
- Draw organic structures and their important resonance contributors
- Assess organic structures for their acidity, stereochemistry, reactivity, and nucleophilicity/electrophilicity.
- Draw curved arrow mechanisms that accurately reflect the flow of electrons between structures
- Construct energy diagrams
- Predict the major, and in some cases minor, products based on a set of reaction conditions
- Analyze and interpret IR and NMR spectral data to provide the correct structure

#### **Course Goal:**

My goal in this course is for you to develop a chemical intuition regarding organic chemistry. Whether you realize it or not, organic chemistry is a part of your *everyday life*. This is a fascinating field, impacting the world every day with new and different chemical transformations, medicines, and electronic materials. I hope that by the end of this course, you will have an appreciation of this ubiquitous subject.

## **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 organic chemistry purely by memorization. While there are some aspects to be memorized, overall I believe this material is best learnt through *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 organic chemistry.

This course is structured to assist you in staying on top of this material. The text itself is structured with relevant problems at the end of each section and a series of problems at the end of each chapter (with solutions manual) to assist you in practicing and learning. A recommended list of problems that you should complete for each class will be provided to you and unannounced checks of these

homework sets will occur throughout the semester to encourage you to stay on track. Additional problems for you to work will be provided in lecture to ensure you have ample problems to practice. The quizzes are spaced between the exams 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 quizzes and exams. Avoid cramming for exams.

Suggested class preparation and study routine:

- 1. Read relevant sections of the text and study notes thoroughly.
- 2. Take notes in class. (Don't miss class!)
- 3. Re-write and organize notes in conjunction with reading the chapters.
- 4. Work many problems daily.
- 5. Use problem sets as a test of comprehension during the week.
- 6. Flag sections of the reading, your notes, and problems in which you struggled and follow up either with a fellow student or with the instructor in class, during office hours, or set up an appointment.

## **Grading:**

PreQs	16 x 0.5 points	= 8 points
Homework	6 x 2 points	= 12 points
Quizzes	3 x 20 points	= 60 points
Exams	3 x 80 points	= 240  points
Final Exam	150 points	= 150  points
Laboratory Grade	(see lab syllabus for breakdown)	<u>= 150 points</u>
Total		620 points

Tentative Grade Cutoffs: 100-90% = A/A-; 89-80% = B+/B/B-; 79-70% = C+/C/C-; 69-60% = D+/D; 60%-0% = F; Grade cut-offs will not be raised, but may be lowered at the instructor's discretion.

You must achieve 60% of the points in the lecture (300/500 points) and lab (90/150 points) separately in order to receive a passing grade in this course.

Quiz and exam dates can be found in the Course Calendar at the end of the syllabus.

#### **Course Policies and Procedures for Lecture**

<u>Pre-Lecture Questionnaires (PreQs):</u> Throughout the semester online questionnaires will be provided to assess the understanding of the class. These will help me gauge which areas of content to spend more time on in class. These are intended to be a very quick (<5 min) exercise and may range from 1 to 6 questions. These will occur between lectures and will be available on the D2L course website. You will not be graded on the correctness of your response but you must complete at least 16 PreQs in order to receive the full 8 points. There will be 20 PreQs throughout the semester. You have the opportunity to earn 2 bonus points if you complete all PreQs in the semester.

<u>Homework:</u> You should work all chapter problems from the corresponding chapters in Smith. It is essential that you spend a significant amount of time solving problems outside of class to be able to successfully solve new problems that you will encounter on quizzes or exams. Unannounced checks of the chapter practice problems will occur eight times throughout the semester. You will be expected to hand in your work and each check will count for 2 points. *No make-up or late homework will be accepted.* Please make sure you work the chapter practice problems on separate pages from the lecture notes. The purpose of unannounced checks is to encourage you to keep up with your studies outside of class.

<u>Quizzes</u>: There will be three 20 min quizzes given on the dates in the course calendar, 20 points each. Quizzes are designed to make sure you have grasped the major concepts and you are keeping up with the material. Quizzes will begin at 12:00. If you arrive late, you will have only the time remaining to complete the quiz.

<u>Exams</u>: There will be three 50 min exams given on the dates in the course calendar, 80 points each and one 2 hour final exam on Friday, December 20<sup>th</sup>, 14:45-16:45, worth 150 points. Exams will focus on material covered since the last exam, but cumulative material will often be included. The exams will cover material from lectures, problems, and textbook reading assignments. The final exam will be cumulative. Exams will begin at 12:00. If you arrive late, you will have only the time remaining to complete the exam.

<u>Make-up Policy</u>: If a quiz or exam must be missed due to an excusable circumstance, you are expected to make arrangements for the make-up *prior* to the scheduled quiz or exam. The following are excusable circumstances:

- a. UWSP Athletic event (you must provide written authorization from your coach)
- b. Armed forces related training / drills (you must provide *written* authorization from your supervising officer)
- c. Medical emergency (you must provide written documentation from a physician)
- d. Death in the family (please provide documentation of some type; obituary or service folder is acceptable)
- e. An event related to your religious beliefs in accordance with Chapter 22 of the UWSP Community Rights and Responsibilities (http://www.uwsp.edu/dos/Documents/CommunityRights.pdf) (you must inform me of a conflict of this type within the first three weeks of the course)

Missed quizzes or exams for other reasons (e.g. oversleeping, forgetting, etc) are not valid excuses for missing a scheduled quiz or exam.

<u>Classroom Behavior:</u> UWSP values a safe, honest, respectful, and inviting learning environment. To ensure that each student has the opportunity to succeed, a set of expectations has been developed for all students and instructors known as the <u>Community Rights and Responsibilities Document</u> (http://www.uwsp.edu/dos/Documents/CommunityRights.pdf).

To create this type of environment in our classroom, I believe it is important to set and discuss expectations at the beginning of the course. Below you will find two columns, one for student expectations of the instructor and one for instructor expectations of the students. Please fill in these expectations as we agree on them as a class.

Instructor expectations of the students		
- On-time and prepared for class		
- Respectful of instructor and fellow students		

## **Course Policies and Procedures for Both Lecture and Laboratory**

<u>D2L</u>: D2L is an online course management system that will be used for posting handouts, powerpoint slides, and other relevant course material. You will also access laboratory related items here. You can access D2L from the UWSP homepage. If you cannot access this course once you are in D2L, please let me know *asap*.

### Attendance

For lecture: Absences from lecture will not result in any direct penalties for students. You are not required to inform me of an absence that is not quiz or exam related. It is your responsibility to collect missed material (e.g. lecture notes, assignments, announcements) from students who did attend.

Laboratory: Students are required to attend all laboratory sessions and will only be allowed one unexcused absence for the semester. Showing up late to lab will be considered an unexcused absence, even if you complete the experiment. Absences *may* be excused at the instructor's discretion. In order for an absence from laboratory to count as excused 1) the student must contact the instructor as soon as they know they will miss the lab period and 2) the student must complete the missed experiment at another scheduled laboratory time that is approved by the instructor. A student who has three or more unexcused absences for the semester will receive a failing grade in Chem 325.

<u>Grading:</u> I will not discuss grades on the day I return a quiz or exam. Please look over your quiz/exam along with the answer key carefully. If you have questions concerning the grading, please make an appointment to discuss. I reserve the right to re-grade the entire quiz/exam.

<u>Disabilities:</u> Any student who anticipates they may need an accommodation based on the impact of a disability (including mental health, chronic or temporary medical condition) should contact the Disability and Assistive Technology Center (DATC) at 715-346-3365 or at datctr@uwsp.edu to seek further assistance. Students currently registered with the DATC should provide their Notice of Accommodation letter to me during office hours, electronically via email, or after class as soon as possible so that I can work with DATC to make the necessary arrangements.

<u>Academic Integrity:</u> Academic Standards will be rigorously enforced as outlined in Chapter 14 of the UWSP Community Rights and Responsibilities (http://www.uwsp.edu/dos/Documents/CommunityRights.pdf). 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.

#### **Student Resources**

The Tutoring-Learning Center: LRC 018, M-R 8:00-20:00, F 8:00-16:30, 715-346-3568

http://www.uwsp.edu/tlc

Drop-in Math & Science Tutoring: DUC 205, M-Th 18:00-21:00 Drop-in Chemistry Tutoring: DUC 205, M-Th 11:00-14:00

University Counseling Center: 3<sup>rd</sup> floor Delzell Hall, M-F 8:00-16:30, 715-346-3553

http://www.uwsp.edu/counseling

<u>Emergency Information</u>: Provides information on how to respond to various emergency situations. http://www.uwsp.edu/rmgt/Pages/em/procedures/default.aspx

## **Lecture Course Calendar**

	Monday		Wednesday		Friday
		9/7	Syllabus/Intro Structure, Bonding (Ch. 1)	9/9	Structure, Bonding (Ch. 1)
9/12	Structure, Bonding (Ch. 1)	9/14	Acids and Bases (Ch. 2)	9/16	Acids and Bases (Ch. 2)
9/19	Acids and Bases (Ch. 2) <b>Quiz 1</b>	9/21	Functional Groups (Ch. 3)	9/23	Functional Groups (Ch. 3)
9/26	IR (Ch. 13.5-13.8)	9/28	IR (Ch. 13.5-13.8)	9/30	EXAM 1 (Ch. 1-3, 13)
10/3	Alkanes (Ch. 4)	10/5	Alkanes (Ch. 4)	10/7	Alkanes (Ch. 4)
10/10	Stereochemistry (Ch. 5)	10/12	Stereochemistry (Ch. 5)	10/14	Stereochemistry (Ch. 5)
10/17	Stereochemistry (Ch. 5) <b>Quiz 2</b>	10/19	Organic Reactions (Ch. 6)	10/21	Organic Reactions (Ch. 6)
10/24	Organic Reactions (Ch. 6)	10/26	NMR (Ch. 14)	10/28	EXAM 2 (Ch. 4-6)
10/31	NMR (Ch. 14)	11/2	Substitution (Ch. 7)	11/4	Substitution (Ch. 7)
11/7	Substitution (Ch. 7)	11/9	Substitution (Ch. 7)	11/11	Elimination (Ch. 8)
11/14	Elimination (Ch. 8) <b>Quiz 3</b>	11/16	Elimination (Ch. 8)	11/18	Elimination (Ch. 8)
11/21	Alcohol Reactions (Ch. 9)	11/23	Alcohol Reactions (Ch. 9)	11/25	Thanksgiving Break No Class
11/28	Alcohol Reactions (Ch. 9)	11/30	Alkene Reactions (Ch. 10)	12/2	EXAM 3 (Ch. 7-9, 14)
12/5	Alkene Reactions (Ch. 10)	12/7	Alkene Reactions (Ch. 10)	12/9	Alkene Reactions (Ch. 10)
12/12	Radical Reactions (Ch. 15)	12/14	Radical Reactions (Ch. 15)		
Tuesday 12/20 FINAL EXAM (Ch. 1-11) 14:45-16:45					

Organic Chemistry / CHEM 325 / McGarry / Full Course Calendar for Lecture and Laboratory

	Monday		Wednesday		Friday		Tuesday/Thursday Lab
		9/7	Syllabus/Intro Structure, Bonding (Ch. 1)	9/9	Structure, Bonding (Ch. 1)	9/6 9/8	Check-in
9/12	Structure, Bonding (Ch. 1)	9/14	Acids and Bases (Ch. 2)	9/16	Acids and Bases (Ch. 2)	9/13 9/15	Exp1. Distillation Prelab Quiz
9/19	Acids and Bases (Ch. 2) <b>Quiz 1</b>	9/21	Functional Groups (Ch. 3)	9/23	Functional Groups (Ch. 3)	9/20 9/22	Exp1. Distillation, continued NBcheck, Exp1 Postlab
9/26	IR (Ch. 13.5-13.8)	9/28	IR (Ch. 13.5-13.8)	9/30	EXAM 1 (Ch. 1-3, 13)	9/27 9/29	Exp2. Organic Structures, IR, and Functional Groups <i>LabHandout</i>
10/3	Alkanes (Ch. 4)	10/5	Alkanes (Ch. 4)	10/7	Alkanes (Ch. 4)	10/4 10/6	Exp3. Extraction and Crystallization  Prelab Quiz
10/10	Stereochemistry (Ch. 5)	10/12	Stereochemistry (Ch. 5)	10/14	Stereochemistry (Ch. 5)	10/11 10/13	Exp3. Extraction, continued NBcheck, Exp3 Postlab
10/17	Stereochemistry (Ch. 5) <b>Quiz 2</b>	10/19	Organic Reactions (Ch. 6)	10/21	Organic Reactions (Ch. 6)	10/18 10/20	Exp4. Isolation of Essential Oils from Spices Prelab Quiz
10/24	Organic Reactions (Ch. 6)	10/26	NMR (Ch. 14)	10/28	EXAM 2 (Ch. 4-6)	10/25 10/27	Exp4. Isolation, continued
10/31	NMR (Ch. 14)	11/2	Substitution (Ch. 7)	11/4	Substitution (Ch. 7)	11/1 11/3	Exp5. NMR Activity/Lab Practical Planning NBcheck, Exp4 Report, Lab Handout
11/7	Substitution (Ch. 7)	11/9	Substitution (Ch. 7)	11/11	Elimination (Ch. 8)	11/8 11/10	Exp6. Lab Practical
11/14	Elimination (Ch. 8) <b>Quiz 3</b>	11/16	Elimination (Ch. 8)	11/18	Elimination (Ch. 8)	11/15 11/17	Exp6. Lab Practical, continued
11/21	Alcohol Reactions (Ch. 9)	11/23	Alcohol Reactions (Ch. 9)	11/25	Thanksgiving Break No Class	11/22 11/24	No Class
11/28	Alcohol Reactions (Ch. 9)	11/30	Alkene Reactions (Ch. 10)	12/2	EXAM 3 (Ch. 7-9, 14)	11/30 12/1	Exp6. Lab Practical, continued
12/5	Alkene Reactions (Ch. 10)	12/7	Alkene Reactions (Ch. 10)	12/9	Alkene Reactions (Ch. 10)	12/6 12/8	Exp7. Substitution Reaction Prelab Quiz, NBcheck, Exp6 Report
12/12	Radical Reactions (Ch. 15)	12/14	Radical Reactions (Ch. 15)			12/13 12/15	Exp7. Substitution, continued NBcheck, Exp8 Postlab Check-out

## **Chemistry 325 Laboratory**

Organic Chemistry I Laboratory, Sections 04, 05, 06 Lecture: MWF 12:00-12:50, A121 Science

**Labs: C134 Science** 

**04** T 8:00-10:50; **05** T 14:00-16:50; **06** R 14:00-16:50

## **Fall 2016**

Instructor: Dr. Kathryn A. McGarry
Office: D-131 Science / 715-346-3328

Email: kmcgarry@uwsp.edu

Office Hours: M 16:00-17:00, T 11:00-12:00, W

13:00-14:00, & by appointment

### **Text & Tools:**

## Required

- Smith, J. Organic Chemistry, 3<sup>nd</sup> edition, McGraw-Hill, 2011. (ISBN-13: 978-0-07-337562-5)
- Lab notebook: Bound notebook with pages numbered (you may do this yourself if you choose).
- Lab manual: Available online on the D2L page for this course.
- Safety goggles

## Strongly Recommended

- Smith, J. *Study Guide and Solutions Manual for Organic Chemistry*, 3<sup>rd</sup> edition. McGraw-Hill, 2011. (ISBN: 978-0-07-729665-0). Available on two-hour reserve at the library.
- Padias, A. B. Making the Connections: A How-To Guide for Organic Chemistry Lab Techniques, 2<sup>nd</sup> edition, Hayden McNeil, 2011. (ISBN-13: 978—7380-4135-3). You may choose another text or websites to complete your prelab assignments.
- Molecular models these are highly recommended for working problems and visualizing three-dimensional concepts. These are optional and available for purchase at the bookstore or online at www.indigo.com (organic chemistry molecular model set, ~\$21).

## **Course Outcomes:**

Upon completion of the laboratory portion of this course, you should be able to:

- Safely perform common organic lab techniques
- Identify the appropriate glassware/equipment needed to carry out those techniques
- Collect, properly document and analyze spectral data
- Keep a complete laboratory notebook and effectively communicate scientific results

## **Course Goal:**

At the most basic level, the organic chemistry laboratory course will enhance your skills in observing, documenting, and problem solving. Whatever career path you choose, be it medicine, scientific research, or a field outside of the sciences, you will need these skills to be successful. The goal in this course is for you to cultivate these skills and to learn laboratory methods and techniques that are specific to the field of organic chemistry.

## **Grading:**

Laboratory grade will comprise 150 points of your CHEM 325 course grade. (Please see lecture syllabus for course grade breakdown and grade cutoffs.) The breakdown of laboratory assignments is as follows:

Prelab Quiz	4 x 10 points	= 40 points
Notebook Checks	5 x 5 points	= 25 points
Postlab Write-Ups	5 x 10, 1 x 5 points	= 55 points
Reports	2 x 15 points	= 30 points
Total		150 points

You must achieve 60% of the points in the lecture (300/500 points) and lab (90/150 points) separately in order to receive a passing grade in this course.

## **Course Policies and Procedures for Laboratory**

<u>General Laboratory Safety:</u> Safety in the laboratory is very important. Organic chemicals are often flammable and hazardous. Please follow the requirements below while you are in the lab:

- 1. Safety goggles must be worn over the eyes at all times. Goggles are provided for you in your equipment drawer.
- 2. Clothing that is worn should cover your entire torso and protect your feet. Shorts, short sleeve shirts or blouses, sandals, etc. permit the possibility of chemicals coming into contact with your bare skin. Remember to wear closed-toe shoes and either wear "covering" clothing or purchase a lab apron or lab coat. Use gloves when advised or whenever you feel you need them.
- 3. Come to class prepared and ask questions.
- 4. You may not work in the laboratory outside of the normal class without permission.
- 5. Keep your work area and common work areas clean.
- 6. Report all accidents and spills, however minor. All powders must be disposed in hazardous or non-hazardous waste containers; loose powder in the trash is unacceptable.
- 7. Neither food nor drinks are allowed in the laboratory. The use of gum is prohibited in the laboratory.
- 8. Headphones and cellphones are not to be used in the laboratory. If you must use your phone (texting include) secure the work area and leave the lab.
- 9. Any woman who is pregnant or thinking of becoming pregnant should consult with her doctor before participating in this class.

<u>Lockers</u>: On the first day of lab, each student checks into a glassware drawer and becomes responsible for the drawer contents from the day of check-in until locker check-out at the end of the semester. The drawers will be unlocked at the beginning of each lab meeting, and it is the student's responsibility to make sure his/her drawer is locked at the end of each lab.

<u>Pre-lab Quiz:</u> There will be four in-class, 15-minute pre-lab quizzes throughout the semester. These quizzes will be *open notebook*. No other materials will be allowed to be used for these quizzes. Each quiz will be worth 10 points and will begin promptly at the beginning of the laboratory period. Should you arrive late, you will have only the time remaining to complete the quiz. These quizzes will cover material from the pre-lab assignment and notebook preparation for the current lab experiment.

<u>Postlab Write-Ups:</u> After each experiment, you will complete a postlab write-up. Most of these will consist of a number of questions and a written section worth 10 points each (one will be 5 points). For two of the experiments you will submit a formal lab report worth 15 points each. Postlab write-ups and lab reports will be due at the following lab meeting. Postlab write-ups and lab reports should be completed on the computer using 12-point Times New Roman font, 1.5 spacing, and 1" margins on all sides, unless otherwise instructed. Full guidelines for the formal lab reports will be provided in the laboratory handouts.

<u>Laboratory Notebook:</u> You will be expected to maintain a proper and complete notebook throughout the lab course (complete guidelines can be found in the "Keeping a Detailed and Complete Laboratory Notebook" handout). After each completed experiment, laboratory notebooks will be collected and checked for accuracy and completion. These checks will be worth 5 points each. Notebooks will be due at the end of the designated lab period unless stated otherwise. I will do my best to grade and return these to you as quickly as possible.

<u>Late Work</u>: I hope that you will avoid turning in an assignment late. If you must turn in work late, it will be accepted with a 10% grade point penalty up until I have returned the graded assignment to the class. Work handed in past that point will not be accepted. In general, late laboratory notebooks will not be accepted unless you have received prior permission from me.

<u>Make-up Policy</u>: If a lab class will be missed due to an excusable circumstance, you are expected to make arrangements for the make-up *prior* to the scheduled lab. The following are excusable circumstances:

- a. UWSP Athletic event (you must provide written authorization from your coach)
- b. Armed forces related training / drills (you must provide *written* authorization from your supervising officer)
- c. Medical emergency (you must provide written documentation from a physician)
- d. Death in the family (please provide documentation of some type; obituary or service folder is acceptable)
- e. An event related to your religious beliefs in accordance with Chapter 22 of the UWSP Community Rights and Responsibilities (http://www.uwsp.edu/centers/Pages/policies.aspx) (you must inform me of a conflict of this type within the first two weeks of the course)

Missed labs for other reasons (e.g. oversleeping, forgetting, etc) are not valid excuses for missing a scheduled lab class.

<u>Laboratory Behavior:</u> UWSP values a safe, honest, respectful, and inviting learning environment. To ensure that each student has the opportunity to succeed, a set of expectations has been developed for all students and instructors known as the <u>Community Rights and Responsibilities Document</u> (http://www.uwsp.edu/dos/Documents/CommunityRights.pdf). I believe mutual respect between students and instructors creates the best learning environment for everyone. Organic 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. To assist in your awareness and to prevent the transfer of chemicals, the use of headphones and cellphones are not permitted in the laboratory as stated in the safety guidelines. You are expected to comply with the safety regulations outlined in the syllabus and the experiment handouts. Anyone found not in compliance may incur a 2 point deduction from their laboratory notebook grade for the experiment.

## Course Policies and Procedures for Both Lecture and Laboratory

#### Attendance

For lecture: Absences from lecture will not result in any direct penalties for students. It is your responsibility to collect missed material (e.g. lecture notes, assignments, announcements) from students who did attend.

Laboratory: Students are required to attend all laboratory sessions and will only be allowed one unexcused absence for the semester. Showing up late to lab will be considered an unexcused absence, even if you complete the experiment. Absences *may* be excused at the instructor's discretion. In order for an absence from laboratory to count as excused 1) the student must contact the instructor as soon as they know they will miss the lab period and 2) the student must complete the missed experiment at another scheduled laboratory time that is approved by the instructor. A student that has more than one unexcused absence for the semester will receive a failing grade in the course (4 credits).

<u>D2L</u>: D2L is an online course management system that will be used for posting handouts, powerpoint slides, and other relevant course material. You will also access laboratory related items here. You can access D2L from the UWSP homepage. If you cannot access this course once you are in D2L, please let me know *asap*.

<u>Grading:</u> I will not discuss grades on the day I return a quiz or exam. Please look over your quiz/exam along with the answer key carefully. If you have questions concerning the grading, please make an appointment to discuss. I reserve the right to re-grade the entire quiz/exam.

<u>Disabilities:</u> Any student who anticipates they may need an accommodation based on the impact of a disability (including mental health, chronic or temporary medical condition) should contact the Disability and Assistive Technology Center (DATC) at 715-346-3365 or at <u>datctr@uwsp.edu</u> to seek further assistance. Students currently registered with the DATC should provide their Notice of Accommodation letter to me during office hours, electronically via email, or after class as soon as possible so that I can work with DATC to make the necessary arrangements.

<u>Academic Integrity:</u> Academic Standards will be rigorously enforced as outlined in Chapter 14 of the UWSP Community Rights and Responsibilities (http://www.uwsp.edu/centers/Pages/policies.aspx). A violation of this policy will result in a zero for the work involved or an F in the course and may result in further disciplinary action, depending on the nature of the infraction.

#### **Student Resources**

The Tutoring-Learning Center: LRC 018, M-R 8:00-20:00, F 8:00-16:30, 715-346-3568

http://www.uwsp.edu/tlc

Drop-in Math & Science Tutoring: DUC 205, M-Th 18:00-21:00 Drop-in Chemistry Tutoring: DUC 205, M-Th 11:00-14:00

<u>University Counseling Center</u>: 3<sup>rd</sup> floor Delzell Hall, M-F 8:00-16:30, 715-346-3553 http://www.uwsp.edu/counseling

<u>Emergency Information</u>: Provides information on how to respond to various emergency situations. http://www.uwsp.edu/rmgt/Pages/em/procedures/default.aspx

# CHEM 325 Laboratory Course Calendar

Tuesday	Thursday	Schedule	Assignments Due
9/6	9/8	Check-in	
9/13	9/15	Exp 1. Distillation	Prelab Quiz
9/20	9/22	Exp 1. Distillation, continued	
9/27	9/29	Exp 2. Molecular Structure and IR	Molecular Structure and IR Handout Notebooks Collected
10/4	10/6	Exp 3. Extraction and Crystallization	Prelab Quiz
10/11	10/13	Exp 3. Extraction, continued	
10/18	10/20	Exp 4. Isolation of Essential Oils from Spices	Prelab Quiz Notebooks Collected
10/25	10/27	Exp 4. Isolation, continued	
11/1	11/3	Exp 5. NMR Activity/Lab Practical Planning	Isolation Report Notebooks Collected Lab Practical Procedure (end of lab)
11/8	11/10	Exp 6. Lab Practical	NMR Handout
11/15	11/17	Exp 6. Lab Practical, continued	
11/22	11/24	No Class	
11/30	12/1	Exp 6. Lab Practical, continued	
12/6	12/8	Exp 7. Substitution Reaction	Prelab Quiz Notebooks Collected Lab Practical Report
12/13	12/15	Exp 7. Substitution, continued Check-out	Notebooks Collected