

CHEMISTRY 106 SYLLABUS SUMMER 2015

LECTURES:	M, T, W, Th	12:00AM-1:15AM	Fulmer 125
TUTORIAL:	Tu/Th	S1: 8:30-9:20 AM	Fulmer 225
		S2&3: 1:30-14:20PM	Fulmer 125/225
LABORATORY:	Tu/Th	S1: 9:30-11:30AM	Fulmer 324
		S2: 2:30-4:30PM	Fulmer 327
		S3: 2:30 – 4:30PM	Fulmer 330

Instructor: Dr. Louis Scudiero Fulmer 261 335-2669 scudiero@wsu.edu
Office Hours: 1:15 - 2PM M&W

Lab TAs: Lyra Christianson TAs Office hours: Fulmer 318
Victor Murcia
Mirissa Smith

Grader: Adam Huntley

GRADING:	2 exams	280	GRADE RANGES (subject to change)		
	8 quizzes (best 7)	140	900 points	A	730 points C+
	10 laboratory experiments	200	870 points	A-	700 points C
	7 Homework problems sets	100	830 points	B+	670 points C-
	Final Exam	<u>280</u>	800 points	B	630 points D+
	Total points	1000	770 points	B-	600 points D
	Extra credits*	25	Less than 600 points: F		

Exams:	Thursday	June 25	12:00PM-2:30PM	Fulmer 125	Chapters 12-14 & Expts.
	Thursday	July 16	12:00PM-2:30PM	Fulmer 125	Chapters 15-17 & Expts.
Final Exam:	Thursday	July 30	12:00PM-3:30PM	Fulmer 125	Chapters 12-20 & all Expts.

TEXT: *Principles of Chemistry: a Molecular Approach* by Nivaldo J. Tro, Pearson education (2010)
ISBN: 978-0-321-56004-3 or 978-0-558-33061-4 (WSU custom cover). The text and access to the Mastering Chemistry homework site are required. The bookstores have new texts bundled with a Mastering Chemistry access code. Mastering Chemistry access code can also be purchased separately at the bookstores or online

ONLINE HOMEWORK: MasteringChemistry. Gradebook: <https://learn.wsu.edu>

LAB TEXT: *Chemistry 105-106 general Chemistry Laboratory Manual* by WSU Chemistry Department, Star Publishing (2009) is required to complete the laboratory portion of this course.

LABORATORY NOTEBOOK: A duplicating notebook with numbered pages is required. These may be purchased in Fulmer 319A the 1st week of class.

GOGGLES: Required by State Law. (Sold in Fulmer 319A prior to the lab, the 1st and 2nd week of class).

LAB COAT: Students and instructors in the laboratory must wear lab coats at all times. Lab coats may be purchased at the Bookie or during the first laboratory period (June 9th) and in Fulmer 319A prior to the lab.

LECTURES: Lectures must be attended on a regular basis. Quiz and exam questions will be based primarily on lecture material. The text subsections to be covered in each lecture are indicated on the course schedule. You will be expected to have read the text AHEAD of the class period and to have worked all the in-chapter practice problems. The lecture material is designed to supplement and expand upon the material in the text. You are welcome to ask questions during the lecture if a particular point or topic is unclear. I will also be available after the lecture period to answer questions of a more general nature. Due to the time constraints placed on a Summer Session course, we will be covering a lot of material in a very short period of time. You are **strongly** encouraged not to let yourself get behind the lecture material.

EXTRA CREDITS: These can be 'pop-quizzes' (5 min) that are to be worked and turned-in during the lecture period. In-lecture assignments will be unannounced and cannot be made up if you were absent that day. **Always bring a calculator to lecture.** Other assignments will be take home problems due the following day (lecture). They comprise 25 in addition of the 1000 points in this class. *It is likely that more than 25 points worth of *extra credits* will be assigned this summer. Any points obtained in excess of 25 points will become 'bonus points' that may be used to offset points lost in other areas of the course.

CALCULATORS: You are expected to have and to be able to use a simple scientific calculator. Be aware that the use of information stored on a calculator during an exam or quiz is cheating. This will result in a score of zero on that exam/quiz. Advanced graphing calculators possessing a full alphabetic (QWERTY) keypad and/or a text editor may not be used during exams or quizzes. You are responsible for bringing your calculator to all tutorials, lectures, labs and exams.

HOMEWORK: There will be weekly homework assignments administered through the Mastering Chemistry web site: <http://www.masteringchemistry.com>. If you took a Chemistry course at WSU in spring 2015, you should already be registered on the Mastering Chemistry system. If not, you may purchase a Mastering Chemistry access code on the web site above or at the bookstores. Please follow the instructions and use the access code to register for the system.

All students must log into the mastering Chemistry system and enroll in the class: **WSUCHEM106SUMMER2015**. Make certain to enter your WSU Network ID in the space labeled "Student ID". Failure to enter the correct student ID will make it impossible to transfer your homework scores and you will receive no credit for the homework sets you complete. A new homework assignment will be made available each week (no later than 2 PM each Monday). Each assignment must be completed by 5:00PM the following Monday. The due date/time for each assignment will be listed with the assignment on the homework site.

The total from the 7 HWs will be pro-rated to have a maximum of 100 points to count toward the final grade. Quiz and exam questions will be modeled on the homework, so it will be to your advantage to continue to complete the homework even after you have secured your 100 points.

EXAMS: There will be three exams held on Thursdays during the lecture extending into the tutorial periods. The exams will be designed to take 1 hr, but you will have a total of 2 hrs. for each exam. The dates and material covered are listed above and on the course schedule. The exams will consist of 'short answer' and 'calculation' type questions. You are responsible for bringing a calculator and pens/pencils to all exams. A double sided 3"x5" card containing your **HAND-WRITTEN** notes will be allowed. Calculators may not be shared during the exam. Make-up exams will **not** be given. Exams missed due to illness will be excused, with other exams pro-rated to count for more. Excuses other than illness will not be accepted.

TUTORIALS: These are classroom meetings held during the first hour of the laboratory period. Once the requisite material has been covered, the TA will begin the lab. If you show up late for the tutorial and no one is there, then they have started the Lab. This is very important- see below. A tutorial session will be held every Tuesday and Thursday during Summer Session except days of the exams. **Tutorials are never canceled and attendance is mandatory.** All quizzes will be given during the tutorial period. The laboratory instructor will use the tutorial to provide important information about the laboratory experiments, provide information supplemental to the lectures and answer questions.

Pre-laboratory assignments are due at the start of the tutorial: if you do not have the pre-lab completed, you will be required to finish it before you start the lab and you will lose 20 % of the points for that lab. **Students who miss the tutorial will not be allowed into the laboratory.** Bring your text, lab text and a calculator to the tutorial.

QUIZZES: Eight (8) 20-point quizzes will be given during the tutorial sessions as indicated on the course schedule. Note that the first quiz will be held in the first week of classes (**June 11th**). Your seven highest quiz scores will be counted as part of your course point total (the lowest quiz score is dropped) for a possible 140 points from the quizzes. The quizzes will cover lecture, homework and laboratory material. You will be allowed to prepare and use a single 3"x5" card containing your **HAND-WRITTEN** notes. As the lowest quiz grade will be dropped, **no make-up** quizzes will be given.

LABORATORIES: The laboratory must be attended and passed. Failure in the laboratory portion of the course will result in failure of the entire course. Due to the time constraints of the Summer Session, make-up laboratory sessions **cannot** be given. Missed labs will result in zero points for that experiment. Missing more than two labs will result in an F. Most of the laboratory reports have to be turned in during the tutorial (or prior to the exam) one week after the laboratory has been completed. The lab instructor will inform you of the type of report required for each experiment. No credit will be given for an experiment for which a report has not been submitted. Late reports will not be accepted. You are expected to read the experimental procedure and complete the pre-lab assignment prior to the lab session. Students will not be admitted to lab without submitting a completed pre-lab assignment. You will also be required to obtain and wear a lab coat while in the laboratory. A strict dress code will be enforced in the laboratory. **NO SHORTS, SHORT SKIRTS, SANDALS OR OPEN TOED SHOES ARE ALLOWED IN THE LABORATORY!**

ACADEMIC INTEGRITY: Cheating, plagiarism, or any other activity which results in an unfair advantage will not be tolerated. Students repeating this course must rework and rewrite all assignments. Submitting previously graded work, even if your own, is considered cheating. Assisting another student by providing information from your previously graded work or from early exams or quizzes is also considered cheating. Cooperative learning is encouraged, **but all work submitted for grading must be your own.** Identically worded homework answers, lab reports etc. is considered cheating. Use of a cellular phone during any quiz or exam is considered cheating. All instances of cheating will be reported to Student Affairs with the assignment in question receiving no credit. Repeated offenses will result in a failing grade for the course.

ACCOMMODATIONS: Reasonable accommodations are available for students who have a documented disability. Please notify the instructor during the first week of class of any accommodations needed for the course. Late notification may cause the requested accommodations to be unavailable. All accommodations must be approved through the Disability Resource Center (DRC) in Administration Annex 205, 335-1566 in Pullman.

NOTICES:

1. The instructor will make every effort ensure that the grading of laboratory reports is consistent and fair. To this end, the instructor reserves the right to normalize the laboratory scores from the different laboratory instructors to the same average. Any such adjustment will be made at the end of the semester after all scores have been submitted.
2. A gentle reminder: If you are taking this class over, due to having earned a low grade previously, then the grade you earn this semester will only count in your GPA if you earned a "C-" or less previously. If you earned a "C" or higher previously, your new (hopefully better) grade will appear on your transcript, but it will not be used to calculate your GPA.

Chemistry 106 Laboratories	Summer 2015	Report due
Tuesday, June 9 th	Lab#1: Introduction to Qualitative Analysis	Thursday, June 11 th
Thursday, June 11 th	Quiz 1 Lab #2: Qualitative Analysis of Cations	Tuesday, June 16 th
Tuesday, June 16 th	Lab #2: Qualitative Analysis of Cations	Thursday, June 18 th
Thursday, June 18 th	Quiz 2 Lab #3: Qualitative Analysis of Anions	Tuesday, June 23 rd
Tuesday, June 23 rd	Quiz 3 Lab #3: Qualitative Analysis of Anions	Thursday, June 25 th
Thursday, June 25th	Exam I (Fulmer 125 –noon to 2PM) + Lab Lab #3: Qualitative Analysis of Anions	Tuesday, June 30 th
Tuesday, June 30 th	Lab #4: Qualitative Analysis of Cation Unknowns	Thursday, July 2 nd
Thursday, July 2 nd	Quiz 4 Lab #5: Qualitative Analysis of Anion Unknowns	Tuesday, July 7 th
Tuesday, July 7 th	Lab #6: Qualitative Analysis of an Unknown Salt	Thursday, July 9 th
Thursday, July 9 th	Quiz 5 Lab #7: Colorimetric Determination of Concentration	Tuesday, July 14 th
Tuesday, July 14 th	Quiz 6 Lab #8: Determination of a Rate Law and E _a	Thursday, July 16 th
Thursday, July 16th	Exam II (Fulmer 125 –noon to 2PM)	
Tuesday, July 21 st	Lab #9: Determination of the K _a Values of a Weak Acid	Thursday, July 23 rd
Thursday, July 23 rd	Quiz 7 Lab #10: Voltaic Cells and Reduction Potentials	Tuesday, July 28 th
Tuesday, July 28 th	Quiz 8 and Review for final exam	
Thursday, July 30 th	Final Exam –Fulmer 125 Noon to 3 PM	

CHEMISTRY 106 SUMMER 2015 TENTATIVE SCHEDULE

week 1	6/08 Lecture: Ch. 12.1 - 3	6/09 Lecture: Ch. 12.4 – 12.5 tutorial: introduction Lab #1	6/10 Lecture: Ch. 12.6 – 13.1	6/11 Lecture: Ch. 13.2 – 13.3 tutorial: <i>Quiz #1</i> Lab #2
week 2	6/15 Lecture: Ch. 13.4 – 13.5 <i>(HW1 due)</i>	6/16 Lecture: Ch. 13.6 – 13.7 Lab#2	6/17 Lecture: Ch. 14.1 – 14.3	6/18 Lecture: Ch. 14.4 - 14.6 tutorial: <i>Quiz #2</i> Lab#3
week 3	6/22 Lecture: Ch. 14.7 - 15.2 <i>(HW2 due)</i>	6/23 Lecture: Ch. 15.3 – 15.5 Lab#3 tutorial: <i>Quiz #3</i>	6/24 Lecture: Ch. 15.6 – 15.7	6/25 Lecture: Exam I –Chap. 12 – 14 Lab#3
week 4	6/29 Lecture: Ch. 15.8 – 15.9 <i>(HW3 due)</i>	6/30 Lecture: Ch. 16.1 - 16.3 Lab#4	7/01 Lecture: Ch. 16.4 – 16.5	7/02 Lecture: Ch. 16.6 – 16.7 tutorial: <i>Quiz #4</i> Lab #5
week 5	7/06 Lecture: Ch. 17.1 – 17.3 <i>(HW4 due)</i>	7/07 Lecture: Ch. 17.4 – 17.5 tutorial: Lab #6	7/08 Lecture: Ch. 17.6 – 17.7	7/09 Lecture: Ch. 17.8 - 17.9 tutorial: <i>Quiz #5</i> Lab #7
week 6	7/13 Lecture: Ch. 18.1 - 18.3 <i>(HW5 due)</i>	7/14 Lecture: Ch. 18.4 – 18.6 tutorial: <i>Quiz #6</i> Lab #8	7/15 Lecture: Ch. 18.7 – 18.8	7/16 Lecture: Exam II – Chap. 15 -17
week 7	7/20 Lecture: Ch. 18.9 – 19.2 <i>(HW6 due)</i>	7/21 Lecture: Ch. 19.3 – 19.5 Tutorial: <i>Quiz #7</i> Lab #9	7/22 Lecture: Ch. 19.6 – 19.8	7/23 Lecture: Ch. 19.9 – 20.3 Tutorial Lab #10
week 8	7/27 Lecture: Ch. 20.4 – 20.6	7/28 Lecture: Ch. 20.7 – 20.9 tutorial: <i>Quiz #8 + Review</i>	7/29 Lecture: Review Ch. 12 - 20 <i>(HW7 due)</i>	7/30 Lecture: Final Exam