Chemistry 60 (0305/0306) Course Syllabus
General, Organic, Biological Chemistry Fall 2019

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Office Hours : Tue/Thurs 1:30- 2:50pm

Lecture (0305, 0306)	Tue, Thurs	12:00pm-1:30pm	1999 Bech Hall
Lab lecture (0305)	Tue	8:00am-9:00am	1910 Bech Hall
Lab (0305)	Tue	9:00am-12:00pm	1980 Bech Hall
Lab lecture (0306)	Thurs	8:00am-9:00am	1910 Bech Hall
Lab (0306)	Thurs	9:00am-12:00pm	1948 Bech Hall

This syllabus is to be considered as an agreement. Continued registration in this course means that you agree to the policies and procedures outlined in this syllabus. This syllabus is intended to give the student guidance in what may be covered during the semester and will be followed as closely as possible. However, the instructor reserves the right to modify, supplement and make changes as the course needs arise.

Introduction

Chemistry 60 is a prerequisite for physiology and microbiology courses required for health science programs. It is designed for students who are interested in nursing, dental hygiene, radiology or other healthcare fields, and who have little or no background in chemistry. It will give an overview of basic general, organic and biological chemistry, and most topics will be covered at an introductory level. Studying these topics will aid your reasoning skills, prepare you for other science classes and help you see the importance of chemistry in the health sciences. It will require diligent effort to learn many of the concepts in the course, but your hard work will be rewarded with understanding.

Student Learning Outcomes

1. Recognize and apply the underlying chemical foundations of medicine and life.
2. Correlate microscopic and macroscopic behavior of matter.
3. Solve quantitative problems relating to chemical principles.
4. Safely use basic equipment to observe and measure chemical and physical properties in the laboratory.

The Complete Course Outline can be found through the SRJC Schedule of Classes:
https://portal.santarosa.edu/SRWeb/SR_CourseOutlines.aspx?Semester=20197&CVID=36978

Required materials:

1) Course textbook: Conceptual Chemistry, 5th ed. By Suchocki, John. 2014. Pearson Publishing. ISBN: 9780321804464. Access code to Mastering Chemistry online homework resources. If cheaper options are available elsewhere, you are free to purchase it.
2) Laboratory manual Omrcen, Tatjana. *Chemistry 60 Laboratory Manual, 9th ed*. Arbor Crest Publishing.
3) A college ruled composition notebook to keep a record of your laboratory work.
4) A simple scientific calculator. Graphing calculators are acceptable.
5) Protective eyewear and apron. Both available at the bookstore.

Grading:
Your semester grade is based on four unit exams, laboratory reports, in-class quizzes, seminars and the final exam.

Unit exams	500 points
Final exam	125 points
Labs	200 points
Homework	100 points
Quizzes	75 points
Maximum Possible	1000 points

Online homework will be assigned on Mastering Chemistry on a regular basis to help you prepare for classroom discussion, to monitor your learning and to keep you from falling behind. It is recommend that you start these assignments as soon as they are posted and use them to practice as you follow the lectures. Any work submitted after the deadline will not be graded, but you are still encouraged to complete it as a valuable practice for upcoming exams. Please use this link https://www.pearsonmylabandmastering.com/northamerica/masteringchemistry/ to register. If you belong to Tuesday lab section **0305**, use course ID CHEM60MEPRATHU0305. If you belong to Thursday lab section **0306**, use course ID CHEM60MEPRATHU0306.

Exams: There will be **four midterm exams** (worth 12.5% each) plus a **final exam** (12.5%). Quizzes will be given in class and will not be announced in advance. Each of the four unit exams will be based on materials covered in classroom, laboratory work and other assigned work. Final exam will be comprehensive, multiple choice exam including all topics covered during the semesters.

Laboratory: Your **lab grade** will be based on the following:

- Completing and submitting on time all the required written and/or online pre-lab work. These will vary for each experiment and may also include occasional short lab quizzes, to confirm that you completed all the required reading and pre-lab activities for the scheduled experiment. You will not be able to perform an experiment if you did not complete the required pre-lab work, miss a pre-lab quiz or are late for pre-lab lecture. In that case you will receive "zero" for that experiment.
- In-lab performance, with the emphasis on your active involvement, curiosity, teamwork, and consideration for lab safety and equipment.
- Turning in timely lab report for each experiment that reflects full intellectual involvement with the experiment. Incomplete/unreadable/late reports will not be graded and you will receive "zero" for the experiment, regardless of the actual lab work performed.
- Lab exam

Your active presence in the laboratory is mandatory. You will not be able to participate if you arrive late for pre-lab lecture or show signs of being unprepared. **There will be no make-up labs. One** missed lab may be excused with documented medical or emergency situations. If you miss more than two labs you could be dropped from the course for lack of participation**.** You will not be able to receive a C or better, without obtaining at least 66% in **both** the lecture and lab components of this course.

Grades are neither bestowed upon students by instructors, nor are they an entitlement, but are entirely *earned* by students. Realize that both objective factors (such as exam scores and problem/homework scores to which numerical values can be assigned) and subjective factors (such as effort, improvement, initiative, honesty, participation, academic growth, etc., which cannot be easily tagged with a number) will be taken into account at the end of the semester when letter grade assignments are made. Borderline cases will be decided after taking into consideration such factors as: *academic growth, classroom participation, initiative, attendance, punctuality, positive attitude and personal initiative*.

Approximate Scale for Letter Grades

A (88-100%) B (77 – 87%) C (66 – 76%) D (56 – 65%) F (Below 56%)

Attendance:
Class attendance is a critical component of the learning process. A large amount of material will be covered in class and you are putting yourself at a disadvantage by missing class. In each class, understanding new concepts is dependent on your grasp of material covered in previous classes. Since the laboratory is very important to this course, missing more than three labs, unexcused, will result in a grade of F. Excused absences require documentation of a serious and compelling reason, for example a doctor's note. **Students missing more than 10% of the lecture and laboratory hours may be dropped from class per district attendance policy**.
http://www.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A83PZ466E31A

Late work: Quizzes and exams will generally not be given late.

Accommodations for Students with Disabilities: If you need disability-related accommodations for this class, such as a note taker, test-taking services, special furniture, etc., please provide the Authorization for Academic Accommodations Letter from the Disability Resources Department (DRD) to me as soon as possible. Please fill out any paperwork necessary for testing accommodations in advance of the exam, and keep me informed of what you need. If you have not received authorization from DRD, contact the office directly. It is located on the third floor of Bertolini Student Center East Wing (527-4278).

Course Content and Format
This course will cover 12 chapters from the textbook and 14 laboratory experiments and activities. Lecture material will be coupled with practical laboratory experience to develop the ability to analyze and communicate scientific concepts and data in both qualitative and quantitative manners. Each week will involve reviewing chapter materials, doing assigned homework, preparing for laboratory and writing laboratory reports.

Make-up Policy
There will be no early or late exams. All exams will be given at the scheduled time and make-up exams are not possible. Missed exams due to medical and family emergencies will be addressed on an individual basis; however, **valid documentation must be provided**. There are no make-up labs.

Classroom Policies
All students are expected to know the Student Conduct Code (http://www.santarosa.edu/for_students/rules-regulations/scs/section1.shtml) and adhere to it in this

class. Inappropriate behavior in the classroom will result in a referral to the Vice President of Student Services for disciplinary due process. Each student is expected to be considerate and polite to fellow students and instructor. Please turn off all potentially disruptive electronic devices before start of class.

Academic Integrity
Students are expected to complete all assignments, lab reports and examinations with total honesty. Although working together on these assignments is encouraged, each student must do his/her own work and use his/her own words. **Copying another student's work or laboratory assignments is considered cheating and both students will receive a ZERO for the assignment.** Students who violate the district standards of academic honesty by engaging in cheating, plagiarism, impersonation, mis-representation of facts or committing other acts of dishonesty will be dismissed and a grade of "F" will be assigned, regardless of their level of performance up to that point in the semester.
Please read the college policy/procedure on academic integrity at:
http://www.boarddocs.com/ca/santarosa/Board.nsf/goto?open&id=A63TMC78051C

Drops, Withdrawals, and Incompletes
Please be aware, it is the students' responsibility to drop any course that they do not intend to complete and accept a grade. Last date to drop this course without a 'W' is 9/8/2019, last day to drop with 'W' is 11/17/2019. The instructor may drop any student enrolled in a course that is not present or has not made prior arrangements with the instructor by the first class roll call. Incompletes will only be assigned to students with medical or family emergencies, which will not allow the completion of the course. Incompletes will be addressed on an individual basis. The student must have a passing grade at the time of requesting an incomplete.

Tentative schedule for Chem 60:

Week	Day	Date	Lecture Topics	Lab
1	M	8/19/2019		
	T	8/20/2019	Course Intro; Ch 1	Intro to lab; lab safety
	W	8/21/2019		
	Th	8/22/2019	Ch 1	Intro to lab; lab safety
2	M	8/26/2019		
	T	8/27/2019	Ch 2	Exp1: Measurements
	W	8/28/2019		
	Th	8/29/2019	Ch 2	Exp1: Measurements
3	M	9/2/2019	**Labor Day Holiday**	
	T	9/3/2019	Ch 2	Lab TBA
	W	9/4/2019		
	Th	9/5/2019	Ch 3	Lab TBA
4	M	9/9/2019	First Census Day	
	M	9/9/2019		
	T	9/10/2019	Ch 3	Exp2: Separating a Heterogeneous Mixture
	W	9/11/2019		
	Th	9/12/2019	Ch 3/ Review	Exp2: Separating a Heterogeneous Mixture
5	M	9/16/2019		
	T	9/17/2019	**Exam 1**	Exp3: Identifying a Pure Substance

	W	9/18/2019		
	Th	9/19/2019	Ch 4	Exp3: Identifying a Pure Substance
6	M	9/23/2019		
	T	9/24/2019	Ch 4	Exp4: TLC of Vegetable Pigment
	W	9/25/2019		
	Th	9/26/2019	Ch 5/6	Exp4: TLC of Vegetable Pigment
7	M	9/30/2019		
	T	10/1/2019	Ch 6	Exp5: Ionic and Molecular Compounds
	W	10/2/2019		
	Th	10/3/2019	Ch 6	Exp5: Ionic and Molecular Compounds
8	M	10/7/2019		
	T	10/8/2019	Ch 12 (12.1-12.2)	Dry Lab 1: Lewis Structures
	W	10/9/2019		
	Th	10/10/2019	**Exam 2**	Dry Lab 1: Lewis Structures
9	M	10/14/2019		
	T	10/15/2019	Ch 7	Exp6: How much Energy is in my Food?
	W	10/16/2019		
	Th	10/17/2019	Ch 7	Exp6: How much Energy is in my Food?
10	M	10/21/2019	Midterm progress indicators posted in student portal	
	M	10/21/2019		
	T	10/22/2019	Ch 7	Exp7: Observing and Describing Chemical Reactions
	W	10/23/2019		
	Th	10/24/2019	Ch 8	Exp7: Observing and Describing Chemical Reactions
11	M	10/28/2019		
	T	10/29/2019	Ch 8	Exp8: Synthesis of Acetaminophen
	W	10/30/2019		
	Th	10/31/2019	Ch 9	Exp8: Synthesis of Acetaminophen
12	M	11/4/2019		
	T	11/5/2019	**Exam 3**	Exp9: Determining Soln. Concentration By Evaporation
	W	11/6/2019		
	Th	11/7/2019	Ch 10	Exp9: Determining Soln. Concentration By Evaporation
13	M	11/11/2019	**Veteran's Day Holiday**	

	T	11/12/2019	**PD Flex Day (no classes)**	
	W	11/13/2019		
	Th	11/14/2019	Ch 10	Exp10: How Much Sugar is in my Drink?
14	M	11/18/2019		
	T	11/19/2019	Ch 12	Exp10: How Much Sugar is in my Drink?
	W	11/20/2019		
	Th	11/21/2019	Ch 12	Exp11: Extraction of Caffeine From Tea
15	M	11/25/2019		
	T	11/26/2019	Ch 13	Exp11: Extraction of Caffeine From Tea
	W	11/27/2019		
	Th	11/28/2019	**Thanksgiving Day Holiday**	
16	M	12/2/2019		
	T	12/3/2019	Ch 13	Exp12: Acids, Bases and Buffers
	W	12/4/2019		
	Th	12/5/2019	Ch 13	Exp12: Acids, Bases and Buffers
17	M	12/9/2019		
	T	12/10/2019	**Exam 4**	Dry Lab 2: Label Reading
	W	12/11/2019		
	Th	12/12/2019	Review	Dry Lab 2: Label Reading
18	M	12/16/2019		
	T	12/17/2019		
	W	12/18/2019		
	Th	12/19/2019	**FINAL**	**10 am to 12:45 pm**
	F	12/20/2019		
	Fr	1/3/2020	Final Grade Rosters Due	
	Sa	1/4/2020	Fall semester processing finalized	
12/21/18-1/12/19			Semester Break	