

CHEM 2A INTRODUCTION TO CHEMISTRY Fall 2009

Total Number of Units: 5
Hours of Lecture Per Week: 3

Prerequisite: Math 101
Hours of Laboratory Per Week: 3

Hours of Discussion Per Week: 1

Course Instructor: Cliff Gottlieb, Phone: 242-2323. e-mail cgottlieb@shastacollege.edu
web page: <http://www.cliffschemistry.com> and Shasta College Online.

Office Hours: T 1PM – 2PM; W 11AM – 2PM; F 8AM-9AM and at almost any time by appointment to meet your needs in 1412 or in the Science Learning Center, 1626. **Please come and visit**; lots of good stuff happens.

Catalog Course Description: A survey of modern inorganic chemistry suitable for liberal arts, agriculture and nursing students. The basic fundamentals of the metric system, thermodynamics, the atom, bonding and pH are presented. The mole concept provides the basis for discussion for chemical equation writing, gas laws and the concentration of solutions. NOTE: Students must provide those materials which are of continuing value outside of the classroom setting (goggles and calculator).

Governing Principles: I TEACH STUDENTS FIRST with my vehicle being chemistry. I will use a variety of techniques to provide the environment to help you learn about the information, thought processes, and methodologies used in all sciences, particularly chemistry, which will allow you to succeed in this class and future classes. Practical applications will be emphasized. **YOU must WORK for your SUCCESS while we LEARN and have FUN.**

I look at higher education as something more than just asking you to regurgitate facts. I teach students as I do professionals in the private sector. I will illustrate processes of the mind emphasizing thinking and Life Long Learning. I will bring in current events and address relevant issues not in the text. I will show you how to find information on the internet and how to discriminate the reliability of internet sites. I expect students to pay attention and ask thoughtful questions.

I am demanding in that I expect you will read the text, review my notes and do practice problems daily. If you are expecting a class that just requires you to sit like a bump on a log and cram the night before an exam, I HIGHLY RECOMMEND NOT TAKING A CLASS FROM ME!

Materials for the Class: (The text, the solutions manual, and other materials are available in the Science Learning Center.)

General, Organic, and Biological Chemistry, 5th ed. McMurry and Castellion. Publisher: Prentice-Hall
ISBN 0131877488

Personal Response Transmitter (clickers) or similar system

Scientific Calculator

Laboratory Manual for Chem 2A, Gottlieb

Lab Safety Goggles – Must meet ANSI Standard 287.1 1989 (can be purchased from Science Club on 1st day of lab; about \$6)
Recommended but not require – Study Guide and Full Solutions Manual to the text, ISBN 0131877747

Lecture Procedure: You are expected to attend lecture. If you miss 8 lectures you may be dropped from the class unless prior arrangements have been made. Come prepared to ask questions and otherwise participate in class. Participation using PRS will count toward your grade. I will suggest practice problems from the text. I will give quizzes in the discussion class. Graded homework will be done online. You cannot make up homework and quizzes. You may go to another discussion section if you cannot make yours. You will also be required to use the Shasta College Online program which will allow you access to course materials. I will help all of you to use this program.

Methods of Evaluation/Grading Scale: Each of you has the innate ability to earn an "A". I hope that each of you will **work to achieve** an "A"! **All work must be done in black or blue ink or grey pencil!!**

1. Four exams are 100 points each. No make-up exams are permitted.
2. Quizzes will count 10 points each. No make-ups allowed. Every twelve assignments are worth 100 final grade points. The sum of each twelve assignments will count as your grade for this section. It is possible to earn up to 120 points out of 100 points possible. This is like having the opportunity to earn 20 "extra credit" points.
3. Homework at 5 points each is worth 65 points. Homework will be done online using the Shasta College Online program
3. Classroom participation using the personal response system worth 60 points. Typically at least 2 points per lecture for 36 lectures so at least 72 points are possible. No make-up allowed under any circumstances.
4. Lab is worth 100 points. It is the <u>average</u> percent of your lab scores,
5. There may be other required or optional assignments or in class questions worth up to 100 points each.
6. Course grades based on total course points (725 possible): A = 652 points, B = 580, C = 507, D = 435

There is **NO EXTRA CREDIT**. **No make-up or LATE exams, quizzes, or homework are allowed unless you have immediate family or personal health or legal emergencies.** Call me as soon as possible, typically the same day, to notify me of your emergency. If you have health, legal, or sports non-emergencies, you may be able to make arrangements to take an exam, quiz or submit homework early. You must contact me with sufficient lead-time of at least one week to make arrangements. I do not drop exams. **Keep all graded work!!** Your grades will be available to you on Shasta College Online. I will review grades with you just before drop day. Otherwise do not ask me to figure out your grade or I will deduct 5 points from your course total. If you have any corrections or grade questions about any graded material, you must notify me within one calendar week after the material is returned to the class. No adjustments in grades will be made after this time. I reserve the right to create grading policies to cope with atypical situations.

Finally, you probably are aware that only you can get your education--no professor can give you an education. **You are responsible for yourself.** I am responsible to help you help yourself. Your success in this class is a reflection of your effort.

CLASSROOM BEHAVIOR/ETIQUETTE: Come to class on time. In class do not socialize, talk, or engage in any behavior that is unrelated to or distracting from the class. Turn off your cell phones and mp 3 players. If you must leave class early, notify me at the beginning of class, sit near the door, and exit quietly. This is a college classroom and you are expected to behave like adults who wish to learn. You will be **warned one time** regarding any inappropriate behavior. Upon the second incident, I will ask you to leave the class for the remainder of the day, schedule a conference with me before you can return, and with a penalty fine of 20 points off your grade. Upon any further inappropriate behavior, the penalty increases to 150 points which is deducted from your grade.

ACADEMIC HONESTY: I will not tolerate cheating which I define to include the one who knowingly gives as well as the one who receives. All work is to be done and submitted individually unless I explicitly say differently. Do not copy others' work. Do not use any one else's clicker. If you cheat, you will receive a 0 for the work involved and a penalty fine of a 150 point deduction from your final course grade. If you have concerns regarding academic honesty, or any aspect of cheating, please see me. In lab you may work together in groups but you must submit your own individual lab report and not copy your partner's.

Discussion:

Each week you must attend one discussion section. During that time, I will answer any of your questions and provide you with more practice problems. At the end of each discussion, there will be a 10 point quiz over the previous week's material. You may attend a different discussion section if you cannot make your regular discussion section.

Lab Procedure:

You will need the lab manual. All lab entries must be in blue or black ink or pencil. Do not use other colors. Every lab will require a write-up which you will submit at the end of class. In your submissions you must clearly record and communicate data and your answers. Lack of clarity will cause grade deductions. No late labs will be accepted without prior approval.

You must attend! Due to lack of space, equipment, and time, make up labs are not permitted. You may be able to attend the other lab section if you must miss your scheduled lab period. Do not come late!! Some labs may end early but do not plan to leave early.

Missed labs are graded as a zero. Any lab not turned in at the end of the lab period must be initialed by your lab instructor. You may attend other lab sections if you cannot attend your regular lab. If you attend a different lab section, have that lab instructor initial your lab and turn it in to your regular lab instructor.

You are responsible for knowing and following the safety rules from the safety handouts and lecture and acting in a safe manner at all times. **VIOLATION OF SAFETY RULES WILL LEAD TO EXPULSION FROM THE CLASS.** If you are not sure, **ASK**. There will be an online Shasta College Online lab safety quiz. You must get 100% on the quiz or you will be removed from the class due to lack of taking safety sufficiently seriously. You get 3 tries.

Lab Evaluation: For my lab sections, labs will be worth 10 points each. If your lab work and lab report indicates high quality work, you will receive a 9.5. Errors, omissions or lower quality work will receive lower grades. Extraordinary work may receive a score of 10. Up to 50% of the total lab points may be deducted from your grade based on your behavior, participation, ability to follow directions, and acting in a safe and professional manner. Other instructors' lab sections will follow the policies of those instructors.

Tentative Lecture and Lab Schedule: I reserve the right to modify this schedule as I deem necessary.

Week of	Chapter	Do all in Chapter problems and Suggested End of Chapter Problems (evens)	Lab experiment
8/17	1 & 2	Ch 1 16 – 50; 54 - 62	Check in/ Safety.
8/24	2 & 3	Ch 2 30 – 106	Lab 1
8/31	3 & 4	Ch 3 30 – 54; 60 – 96; 102, 110	Lab 2
9/8	4	Ch 4 32 – 98	Lab 3
9/14	Exam 1(9/16) & 5	Exam 1 covers Chapters 1 – 4	Lab 4
9/21	5 & 6	Ch 5 28 – 34;38,40,44,48 – 58;60c,62 – 66;70 – 74; 76 – 98;104 – 110	Lab 5
9/28	6	Ch 6 28 – 84, 88 – 98, 102	Lab 6
10/5	7	Ch 7 18 – 52, 62, 68 – 78, 84	Lab 7
10/12	7 & Exam 2 (10/16)	Exam 2 covers Chapters 5 - 7	Lab 8
10/19	8	Ch 8 22 – 110, 116	Lab 9
10/26	8 & 9	Ch 9 32 – 106	Lab 10
11/2	9 & 10	Ch 10 32 – 52, 58, 64 – 76, 82, 86 – 94, 98 – 106	Lab 11
11/9	10 & Exam 3 (11/11) & 11	Exam 3 covers Chapters 8 – 10(except 10.15)	Lab 12
11/16	11	Ch 11 18 – 64, 68 – 78, 68 – 78, 82-86	Lab 13
11/23	12	Ch 12 18 – 72	Lab14
11/30	12 & 13	Ch 13 24 – 86	Lab15
12/7	13 & Exam 4		Lab16;check out
12/14		Pick up exams and review performance	

Room 1626

The Science Learning Center offers a comfortable study environment and a variety of resources to assist students in any of the Science classes. There are computer programs and filmstrips that cover specific topics, old tests to look at, microscopes and slides to use and tutors to offer help.

Tutors can help you to initiate good study habits and procedures to maximize your study time. They can also help to clarify any confusing concepts. The tutoring is free and is done by students who have already successfully completed the course, often with the same instructor. When there is interest, we run study groups that are led by tutors.

OTHER RESOURCES AVAILABLE

XEROX MACHINE A copy machine is available in the computer area of the Learning Center for .10 per copy.

COFFEE CLUB Coffee is always brewing for Coffee Club Members. To join, there is a 4.50 per month charge or pay .50 by the cup. Occasionally, there is also Hot Chocolate for .15 per packet. Such a deal!

OFFICE SUPPLIES For your use, we have a paper cutter, stapler, scissors, and tape. Colored pencils are also available.

STUDYING IN THE SLC There are three different study environments available

GENERAL AREA This is a quiet area with plenty of room to spread out.

STUDY GROUP AREA We have a special area, separated from the rest of the Center by a partition, where groups like to study together.

SILENT AREA For those students who don't like distraction but want to make use of the Learning Center, this is a perfect spot. It is not quiet, but SILENT.

The SCIENCE LEARNING CENTER is a friendly, helpful, encouraging environment which can become your home away from home.

ADDING A CLASS

Students may add a full-term class through the fourth week of the term.* After the first two class meetings, approval of the instructor is required to add the class, which includes both the signature of the instructor and the first date of attendance. **IT IS THE STUDENT'S RESPONSIBILITY** to pick up the form from the Admissions and Records Office and take it to the instructor for approval. The student must then return the form to the Admissions and Records Office or Extended Education Center for processing before the add is finalized.

DROPPING A CLASS WITHOUT RECORD

Students may drop a class, and have no notation appear on their transcripts, through the fourth week* or 30% of the term for classes less than a semester in length. **IT IS THE STUDENT'S RESPONSIBILITY TO DROP CLASS (ES)**. The necessary forms are available from Admissions and Records, Extended Education Centers, or by mail. If a student intends to drop a class and stops attending but fails to file the necessary forms, a failing letter grade may be assigned by the instructor.

WITHDRAWING FROM A CLASS WITH A "W" GRADE

Students may withdraw from a class after the official "drop" date and up through the fourteenth week or 75% of the term for classes less than a semester in length. The notation "W's" will appear on the student's transcript and will not be used in calculations of grade point average. Excessive "W" shall, however, be used as factors in probation and dismissal procedures. **IT IS THE STUDENT'S RESPONSIBILITY TO OBTAIN FORMS AND SUBMIT THE NECESSARY PAPERWORK TO WITHDRAW FROM A CLASS**. Forms are available from Admissions and Records, Extended Education Centers, or by mail. Students who have not dropped or withdrawn from a class before the end of the fourteenth week or 75% of the term will be assigned a course grade.

ATTENDANCE

Students are expected to attend all class meetings. A student who fails to attend the first meeting of a course without notifying the instructor may be dropped from the class. In addition, an instructor may drop a student during the first 30% of the term for excessive absences. Nevertheless, **IT IS ALWAYS THE STUDENT'S RESPONSIBILITY TO OFFICIALLY DROP OR WITHDRAW** from the class. Students who fail to file the necessary forms, even though they stop attending class