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Chemistry 30A Lecture Greensheet -- Fall 2004

Objectives: Chemistry 30A is an introductory chemistry course that provides a basic foundation in general chemistry. Practical and consumer applications of chemistry will be emphasized. It is hoped that each student will develop an increased awareness of chemistry in her/his everyday life as well as to learn fundamental chemistry concepts and understandings. This course meets the general education requirements for Physical Sciences for Non-science majors as well as prepares science or undeclared majors for Chemistry 1A. By using modular study units and corresponding laboratories, it is possible to achieve a grade of a C as the minimum grade for all students completing the course.

Books/Materials:

1. Hill, John W., Kolb, Doris. "Chemistry for Changing Times", 9th Edition, Macmillan Publishing Co. Purchase at Spartan Bookstore.
2. Scharberg, Maureen. "Chemistry 30A Laboratory Manual". (REQUIRED) Purchase from SAACS in DH 504.
3. Scharberg, Maureen. "Chemistry 30A Activities, Homework Assignments and Handouts". This packet contains the weekly unit worksheets, homework assignments and HANDOUTS THAT YOU WILL NEED TO BRING TO LECTURE. (REQUIRED) Purchase from SAACS in DH 504.

NOTE: Weekly homework problems and activity sheets are not collected for grading. However, I strongly recommend that you complete the weekly exercises. Answers are posted on the bulletin board across from DH 601 and on my website. If you have problems accessing the answer pdf files on the website, please bring me a CD-RW and I will burn a CD for you.

4. Simple, non-programmable scientific calculator is needed for this class. You cannot use a programmable and/or graphing calculator during a quiz or exam.
5. Additional on-line quiz questions are available at http://chem.prenhall.com/hillkolb.

First Week Activities (August 25-31, 2004):

- Attend your lab section in DH 601 to claim your space. If you miss your lab, you will lose your space and I will instructor-drop you.
- If you decide to drop this class, please let Dr. Scharberg know immediately via e-mail. Each lab section typically has 3-5 students on a waiting list.
- If you want to add this class, you must go to the lab section that you want to add. Only Dr. Scharberg can officially add you to the class. Also, you can only be on one waiting list. Once you are added to a lab section, you will automatically be added to lecture.

- Read this greensheet carefully—it describes all of Chem 30A course policies.

Lectures: Lectures for each section will meet twice a week on Tuesdays and Thursdays from 12:00pm-12:50pm in SCI 142. Lectures will provide the guidelines for what you will need to focus on for each Unit. The contents of each weekly Unit are listed on the last pages of this greensheet. It is very important that you attend all lectures because it will guide your outside studying for this class. Due to the fact that most students only pay attention to the professor's lecture for the first 10 minutes of class, Dr. Scharberg uses a variety of teaching techniques to engage you in learning chemistry.

Textbook: The text is used as a resource for further explanations and problems outside of class. Most students do not learn chemistry by reading textbooks—most are rather boring, but this one has some nice figures and pictures (Dr. Scharberg's humble opinion). Most learn by doing problems and thinking about chemistry.

Laboratory: Laboratory sections meet once a week for 2 hours and 50 minutes in DH 601. The Chemistry 30A Laboratory Greensheet will be distributed to you during your first laboratory meeting.

To pass this course, all labs must be completed and all laboratory reports must be submitted to your laboratory instructor. Please do not schedule appointments during your laboratory period.

Missed laboratory periods may only be made up with permission of the laboratory instructor, and only during the week for that particular experiment. To make-up a lab, you must obtain a signed pink make-up slip. This slip must be signed by your lab instructor or Dr. Scharberg. Please note that your lab instructor will not accept more than one make-up lab unless Dr. Scharberg signs the pink slip. That means, that if you have already made up one lab outside your regularly scheduled lab, you cannot make up a second lab unless Dr. Scharberg signs the pink slip. This make-up request must be fully documented and supported by Dr. Scharberg.

Office Hours: It is recommended and encouraged that the office hours of any instructor involved with Chem 30A (Dr. Scharberg or any lab instructor) be used for individual help. The office hours of all instructors in Chem 30A will be posted in DH 601 and outside DH 516. If you need to contact me outside my office hours, please either e-mail or call me.

Quizzes and Exams: There will be a total of 11 unit quizzes, a midterm (100 points), and a final examination (225 points). A simple scientific calculator (non-programming and/or non-graphing) may be used for all examinations, when necessary. Clean periodic tables will be provided to you for all quizzes and exams. You can use the back of the Periodic Table as scratch paper.

A. Laboratory Safety Quiz (20 points): During the first weeks of lab, you will receive

safety instruction and take a safety quiz. You must pass the safety quiz with a score of 80% or better to remain in the class. If you fail the safety quiz the first time, you must arrange to take it again with your lab instructor or Dr. Scharberg before the salt/sand experiment. If you fail to pass the safety quiz a second time, you will be instructor-dropped from the class.

B. Weekly Unit Quizzes (590 points): The Unit Quizzes will consist mainly of multiple choice questions which emphasize the objectives of the Units. For Units 2-7 and 9-12 quizzes, there will be twenty 2-point questions for that specific unit, and five 2-point questions from the previous unit. For example, Unit 2 quiz will consist of twenty questions from Week 2 material and five questions from Week 1 material. You will need a No. 2 pencil for the Units Tests. Unit 1 quiz will consist of twenty questions. These quizzes will be administered during the first 30 minutes of your scheduled laboratory period. See the attached schedule and the laboratory greensheet. The material for Unit 8 and Unit 14 will be covered on the midterm and final exam, respectedly.

Note: You may not take unit quizzes outside of your regular scheduled laboratory time without written permission using a pink laboratory make-up permission slip. Failure to comply will affect your final grade.

Academic Conduct during Quizzes in DH 601:

- All notes should be placed on the floor.
- All backpacks on the floor and zipped up.
- No talking or whispering during the quiz.
- No sharing calculators or Periodic Tables.
- DO NOT WRITE ON THE QUIZZES!
- Failure to comply with these conduct rules will result in your lab instructor giving you zero points for the quiz.
- Willful conveying of quiz information and/or taking quizzes will result in failing Chem 30A.
- All incidences of academic misconduct will be reported to Judicial Affairs.

Special Unit 13 Quiz: Due to the Fall 2004 calendar, Unit 13 quiz will be a take-home quiz that will be distributed to you (along with a scantron) at the beginning of lecture on Tuesday, December 7. No quizzes will be distributed outside lecture after class. To receive a Unit 13 quiz score, you must turn in your bubbled-in scantron at the beginning of lecture on Thursday, December 9. You may work with your Chem 30A friends on this quiz. No make-up quizzes will be given.

C. Midterm (100 points): A 50-minute midterm examination will be given IN LABORATORY OCTOBER 25-29. This exam will review the fundamental concepts of Units 1 through 8. The midterm will be 1/3 multiple choice, 1/3 short answer, and 1/3 problem solving. I will provide a review sheet.

D. Final Examination (225 points): The final exam is Monday, December 13, 2004 from 9:45am to 12noon in SCI 142. There will be a seating chart for this exam and it will be your responsibility to make sure you sit in your assigned seat.

SHORT ESSAY (25 points): A 1-2 essay (typed, double space) describing how this course will help you understand the chemistry in your everyday life and/or career. Also, you may find a current newspaper article that involves chemistry and then write a 1-2 page essay on how the material presented in Chem 30A helped you understand your selected article. YOUR ESSAY IS DUE AT THE BEGINNING CLASS ON TUESDAY, NOVEMBER 30. NO LATE PAPERS WILL BE ACCEPTED. PLEASE DO NOT SLIDE ESSAYS UNDER MY OFFICE DOOR AT ANY TIME—I WILL NOT ACCEPT THEM. All essays must have a Turnitin.com receipt attached to them to be considered for full credit. See Miscellaneous Course Information for how to register with Turnitin.com.

EXTRA CREDIT LECTURE QUIZZES: There will be 5-7 five point quizzes given unannounced in lecture. They will be graded and count as extra credit towards your final grade. There will be no make-up lecture quizzes.

Criteria for Determining Final Course Grade

	Total Possible Points
11 Unit Quizzes + Safety Quiz	610
Midterm + Unit 8 Test	100
Essay	25
Laboratory	525
Lab Evaluation (subjective)	80 (done by lab instructor)
Final + Unit 14 Test	225
TOTAL POINTS:	1565 points

Final Course Grade Distribution (approximate point range)

Percentage	Total Point Range	Grade
Above 97%	> 1518	A+
92.0 – 96.9%	1440 - 1517	A
88.0 – 91.9%	1377 – 1439	A-
84.0 – 87.9%	1315 – 1376	B+
79.0 – 83.9%	1236 – 1314	B
74.0 – 78.9%	1158 – 1235	B-
70.0 – 73.9%	1096 – 1157	C+
64.0 – 69.9%	1002 – 1095	C
60.0 – 63.9%	939 – 1001	C-
57.0 – 59.9%	892 – 938	D+
53.0 – 56.9%	829 – 891	D
50.1 -52.9%	783 – 828	D-

Below 50.0%	< 782	F

Other Grades:

- Incomplete (I): Satisfactory completion of 75% of Chem 30A coursework. "I" grades are given due to unforeseen, but justified circumstances that prevent a student from completing a courses. More details are in the 2004-2006 SJSU Catalog on p. 437.
- Withdrawal (W): If you drop a class after the drop deadline and obtain the approval of the Director of Academic Services, a student will receive a "W". It is not used in calculating GPAs.
- Withdrawal Unauthorized (WU): Unofficial withdrawal from the course. "WU" are given when a student did not officially withdrawal from or drop the courses and thus failed to complete the course requirements. For calculating GPAs, "WU" is equivalent to a "F".

Chem 30A Final Course Grades: No Chem 30A final course grades will be posted or e-mailed, due to Family Privacy Laws. If you want your final course grade before it is posted on MySJSU.edu, please give me a self-addressed and stamped postcard at the end of the semester or at the final exam.

DISABLED STUDENTS: Any student with a pre-existing disability requiring an accommodation (as documented by the Disability Resource Center) should make this need known to the instructor during the first two weeks of classes. Every effort will be made to accommodate your needs.

STUDENT CODE OF CONDUCT: You should be familiar with new Student Code of Conduct and Academic Integrity Policy which can be found at http://sa.sjsu.edu/judical_affairs/index.html. Please review Section 1.0 (Definitions of Academic Dishonesty) which includes Section 1.1 Cheating and Section 1.2 Plagiarism. This document will be reviewed in the laboratory sections. If you have any questions regarding plagiarism, the library has an excellent on-line tutorial that can be found at http://tutorials.sjlibrary.org/plagiarism/index.htm.

EMERGENCIES AND EVACUATIONS: If you hear a continuously sounding alarm, or are told to evacuate by Emergency Coordinators (colored badge identification), walk quickly to the nearest stairway (end of each hall). Take your personal belongings as you may not be allowed to immediately return. Follow instructions of Emergency Coordinators. Be quiet so you can hear. Once outside, move away from the building. Do not return to the building unless the Police or Emergency Coordinators announce that you may.

MISCELLANEOUS, BUT IMPORTANT COURSE INFORMATION:

Turnitin.com: For your two written laboratory reports (Density and Conductivity) and your end-of-semester essay, you will need to submit them electronically to Turnitin.com and obtain a receipt number that you will attach to your report. Here are the instructors for logging into Turnitin.com.

1. Go to http://www.turnitin.com.
2. Create your user profile (click on the link in the upper right hand corner). Your user type is "student".
3. Enroll in class. You will be able to follow a setup wizard to get started.
    a. The class is "Chem 30A"
    b. The class id number is: 1142647.
    c. The class enrollment password is "chem30a" (all lowercase, and one word).
4. Follow the instructions for submitting your essay to Turnitin.com.

NOTES: If your essay or lab reports do not have a Turnitin.com report attached to it, you will receive no points for this assignment. If you register before September 10, Dr. Scharberg will give you 5 extra credit points.

Use of cell phones during lectures and laboratories: Cell phones must be turned off or placed in "polite" mode during lectures. If your cell phone rings out loud during lecture, I might answer it. If it rings out loud during laboratories, your lab instructor might answer it.

Academic Advising: Although you may not be majoring in one of the degree programs within the College of Science, it is very important that you meet with your academic advisor at least once during the semester to discuss your academic plan of study. Meeting with your advisor assures that you are on track for your accomplishing your academic goals at SJSU. If you are undeclared or undecided, Dr. Scharberg suggests meeting with an advisor in a college that you are somewhat interested in. If you have any questions or concerns regarding academic advising here at SJSU, please contact Dr. Scharberg.

Resources for Chem 30A Help:

- Dr. Scharberg (all aspects of Chem 30A).
- Lab Instructors (Chem 30A labs and to some extent, the lecture material).
- SAACS – Student Affiliates of the American Chemical Society): This student club located in DH 504 has tutors available at selected times. If a tutor has completed Chem 1A with a "C" or better, they should be OK as a Chem 30A tutor.
- LARC – Learning Assistance Resource Center: This Center is located at the Student Resource Center located at th 10th Street Garage. They offer tutors for a variety of classes offered at SJSU.
- ASPIRE: Project ASPIRE is also located at the Student Resource Center. Services are limited to low income, first generation college students or students with disabilities.
- Counseling Services: If test anxiety is a concern for you, they have services that can help you develop strategies for dealing with test anxiety.
- Private tutors: Private tutors usually cost money. You might find flyers posted in SAACS or in the hallways where chemistry courses are taught.
- If you find yourself having a difficult time finishing quizzes even though you are spending a lot of time studying, you might consider meeting with an advisor in the Disability Resource Center. They might be able to test you to determine if you have a learning disability.

Chem 30A

Lecture Schedule

Fall 2004

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AUG	23	24,	25 First Day	26 Discuss Greensheet	27
SEP	30	31 Unit 1 Intro to Chem	1	2 Unit 1 Principles of Chem	3
TEMBER	6 Labor Day	7 Unit 2 Elements		9 Unit 2 Compounds	10
BER	13	14 Unit 3 Scientific Measures	15	16 Unit 3: SI Units, Conversions	17
	20	21 Unit 4 Atomic Theory	22	23 Unit 4 Subatomic Particles	24
	27	28 Unit 5 Nuclear Chemistry	29	30 Unit 5 Nuclear Chemistry	29
OCT	4	5 Unit 6 Chemical Bonding	6	7 Unit 6 Chemical Bonding	8
OBE	11	12 Unit 7 Chemical Formula	13	14 Unit 7 Nomenclature	15
R	18	19 Unit 8 Chemical Equations	20	21 Unit 8 Mole Problems	22
	25	26 Unit 9 Oxygen - Reactions	27	28 Unit 9 Oxygen - Reactions	29
NOV	1	2 Unit 10 Hydrogen-Reactions	3	4 Unit 10 Hydrogen-Reactions	5
EMB	8	9 Unit 11 Water	10	11 Unit 11 Water	12
ER	15	16 Unit 12 Solutions	17	18 Unit 12 Solutions	19
	22	23 Unit 13 In-lecture lab	24	25 Thanksgiving	26 Holiday
DEC	29	30 Unit 13 pH, Acids, Bases	1	2 Unit 13 pH, Acids, Bases	3
EMB	6 Unit 14 Organic Funct. Groups	7	8	9 Unit 14 Polymer Chemistry	10
ER	13 CHEM 30A FINAL EXAM	14	15	16	17

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AUG	23	24	25 Confirm lab space →	26 Confirm lab space	27 Confirm lab space →
SEP	30	1 Week 1 Safety Quiz Check In	2 →	3	4 →
TEMBER	6 Labor Day	7 Week 2 Sand/Salt, Unit 1 Quiz	8 →	9	10 →
	13	14 Week 3 Densities Unit 2 Quiz	15 →	16	17 →
	20	21 Week 4 Plastics, Antifreeze Unit 3 Quiz	22 →	23	24 →
OCTOBER	27	28 Week 5 Epsom Salts Unit 4 Quiz	29 →	30	1 →
	4	5 Week 6 Nuclear Chemistry Unit 5 Quiz	6 →	7	8 →
	11	12 Week 7 Observe Chemical Rxns Unit 6 Quiz	13 →	14	15 →
	18	19 Week 8 Precipitation;Unit 7 Quiz	20 →	21	22 →
	25	26 Week 9 Oxygen Demo Midterm.	27 →	28	29 →
NOV	1	2 Week 10 H_2 Demo, Activity Series; Unit 9 Quiz	3 →	4	5 →
EMB	8	9 Week 11 Soap Scum Unit 10 Quiz	10 →	11	12 →
ER	15	18 Week 12 Solutions Unit 11 Quiz	19 →	20	21 →
	22	23 No Labs (In-Lecture Lab)	24 No Labs	25 Thanksgiving	26 Holiday
DEC	29	30 Week 14 Vinegar Titration Unit 13 Qz, Check Out	1 →	2	3 →
	6	7 No Labs	8 No Labs	9 No Labs	10 No Labs