Chemistry 30A Lecture Greensheet - Spring 2013

Student and Course Learning Objectives: General Education Course
This course meets the SJSU’s Core General Education requirements for Physical Sciences for Non-science majors as well as prepares science or undeclared majors for Chemistry 1A (recommended Chem 30A final course grade of “B” or better for success in Chem 1A). By completing this course, students should be able to:
1. Use the methods of science and knowledge derived from current scientific inquiry in physical science to question existing explanations.
   - Course activities that will meet this requirement are all of the laboratory experiments that begin with a question or statement relating to the purpose/objective of the lab and questions at the end of the lab to probe your understanding of your data and the relationship to the concepts studied. In addition, there will be class discussions of how scientific discoveries such as the atom and renewable energy resources were derived from scientific inquiry.
2. Demonstrate ways in which science influences and is influenced by complex societies, including political and moral issues.
   - The influence of science will be addressed in lectures where these relationships can be made, such as in medicine and healthcare, environmental issues or the technological advances used to discover the structure of the atom. You will also have the opportunity to write one essay on a topic to be determined later in the course.
3. Use the methods of science, in which quantitative, analytical reasoning techniques are used.
   - Many of the labs and concepts require the use of quantitative and analytical reasoning techniques. For example, most of the labs require students to make observations, take measurements and use equations involving measured variables. In terms of reactions you will discover how balanced equations symbolically represent atoms and particles and a connection will be made to what you observe macroscopically.

Content
Physical Science (B1) Courses focus on:
• laws of thermodynamics
• structure of matter
• interaction of matter and energy
• behavior of physical systems
• systems of classification
• physical processes of the natural environment
All general education courses are required to address issues of diversity and assess students’ written work.
   The ISBN number is 13:978-0-321-75083-9 and there is also another ISBN number #
   Please note that this is not the International Edition.
2. Study Guide for the text –Susan McMurry- Very Highly Recommended
   The ISBN number for the study guide is: 10: 0-321-77616-X and there is another ISBN
20. CASH ONLY     (This is located in the basement of DH)
4. Class notes (on-line) . These are power points on my faculty page on the SJSU
website.

Textbook: The text is used as a resource for further explanations and problems outside of class.
There will be assigned problems from the text that you should do if you expect to pass this class.
The answers to most of the problems are in the study guide. These homework sets are not to be
handed in but are to be used to enhance your understanding of the material.

Diversity: Issues of diversity shall be incorporated when addressing historical issues of
physics and chemistry.

Writing: The minimum writing requirement is 1500 words for this course. Your writing
will be assessed for grammar, clarity, conciseness, and coherence. Writing assignments
will include writing an essay about a topic related to current events in chemistry, written
lab reports, homework assignments and short answer questions on exams.

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 by myself. Since there are many labs and students it becomes difficult to keep track of you if
you do not attend your scheduled lab. So, lab switching is greatly discouraged and may be done
only if you have a compelling excuse (a medical emergency with appropriate documentation).
ALSO, ALL STUDENTS MUST RECEIVE SAFETY INSTRUCTIONS AND PASS A
SAFETY QUIZ.

Office Hours: It is recommended and encouraged that the office hours of any instructor involved
with Chem 30A (E. Chichester or any lab instructor) be used for individual help. The office hours
of all instructors in Chem 30A will be posted outside DH 611. If you need to contact me at a time
other than during my office hours, please call me. Make sure that you know your lab
instructor’s office hours. They will let you know the times and day(s) during the first two
weeks of class. Write this information into your lab manual or somewhere easily accessible to
you.
Incompletes: An incomplete will only be given under very specific circumstances. These circumstances include 1) you have completed at least 2/3 of the course points with a grade of C or better. 2) the reason that you cannot complete the course is due to an extreme emergency that requires documentation. Students that wish to receive an incomplete and have not fulfilled the above requirements will receive a grade appropriate to their totals. If you decide not to finish the class and do not take the final then a grade of WU will be issued. This is equivalent to an F but you may be able to repeat the class. Check the catalog and your advisor for specific details.

Assessment of Learning Objectives

Examinations: There will be a total of 3 quizzes (50 points each), a midterm (150 points), and a final examination (250 points). A simple scientific calculator may be used for all examinations, when necessary (programmable calculators not allowed). Cell phones are not allowed.

Quizzes: The Quizzes will consist mainly of multiple choice questions. You will need a No. 2 pencil for the quizzes. These quizzes will be administered during the first 30 minutes of your scheduled laboratory period. See the attached schedule and the laboratory greensheet. DO NOT WRITE DIRECTLY ON THE QUIZ FORM. USE SCRATCH PAPER.

Note: You may not take unit quizzes outside of your regularly scheduled laboratory time without written permission from your instructor. Your regular lab instructor and the make-up lab instructor must sign your permission slip. Failure to comply will affect your final grade.

Midterm (150 points): The midterm examination will be given IN LAB (SEE SCHEDULE). YOU WILL WRITE DIRECTLY ON THIS EXAM FORM.

Final Examination (250 points): FINAL EXAM: There are two different sections of Chem 30A for the Spring 2013 semester. You MUST attend the Final that is scheduled for your particular lecture time. If you are registered for the TTH 0930 lecture (section 1) then your final will be held at 0945 – Noon on Friday, May 17, 2012 in Sci 142. If you are registered for the T,TH 1030 lecture (Section 12) then your final will be held on Tuesday, May 21, 2012 from 0945 until Noon in Sci 164. For the final you will need to bring a student ID card, scantron form 882-E or 882-ES as well as a #2 pencil and a non-programmable calculator. I will have the handouts and scratch paper. I will give you instructions that you must follow precisely so that your final may be graded correctly. PLAN AHEAD FOR YOUR FINAL. CHECK YOUR SCHEDULE AND MAKE SURE THAT OTHER EXAMS, WORK SCHEDULE, ETC., DO NOT OVERLAP. DO NOT WRITE DIRECTLY ON THE FINAL EXAM.
ESSAY (50 points): Sign up for a topic in lab. The lab instructor will have a sign-up booklet. **Make sure to write down your topic once you select a topic in lab.** Do this by the third week of the semester (follow the instructions of the lab instructor). You will need to access my website and read the questions, and then answer the questions about the essay that you have chosen. Instructions will be given on the website. Investigate this topic and write a minimum of four pages and no more than six pages. The paper may not be hand-written. You will need to submit your paper to turnitin.com. The password will be given in the lab – **ask your lab instructor.** Papers not submitted to turnitin.com will have a 10 point deduction. Do not submit your paper in to turnitin.com the morning that the paper is due. This must be done by the night before at the latest in order to be accepted. The instructions for this are on the website for chemistry 30A. The detailed instructions will be provided in the lecture and/or lab class. YOUR ESSAY IS DUE AT THE BEGINNING of the LECTURE CLASS ON THURSDAY, April 18th. Papers are to be placed into a folder according to topic. Wait for me to get to the lecture room and place the folders on the lectern and tables in front of the class before you turn in your papers. You may hand in your paper earlier to your lab instructor during your lab. **LATE PAPERS MAY BE ACCEPTED,** however for each day late 10 points will be deducted. A LATE PAPER IS ONE THAT IS HANDED IN AT THE END OF THE LECTURE. DO NOT WALK INTO THE LECTURE ROOM MID-WAY THROUGH THE LECTURE, WHILE I AM LECTURING, AND PLACE YOUR PAPER ON THE TABLE, THIS IS ALSO A LATE PAPER. After 5 days (school-days) late, the paper will not be accepted because it has no point value remaining. **DO NOT SLIDE LATE ESSAYS UNDER MY OFFICE DOOR.** Papers have been lost in this manner. Any late paper must be handed in to me after lecture or handed in to any of the lab instructors. You may hand in the paper to any of the lab instructors at the beginning of any of the labs, but try not to do this as papers get lost this way. Make sure to ask the lab instructor to record the time and day that he/she received the late paper. Do not turn in a late paper in to the chem. office. Therefore, after April 24th your paper has no value remaining. **If you have other deadlines this week or exams etc. then plan ahead and hand in the paper a week early just to be safe.**
## Criteria for Determining Final Grade

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<tr>
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<th>Total Possible Points</th>
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<tr>
<td>*3 Quizzes</td>
<td>150</td>
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<tr>
<td>Midterm</td>
<td>150</td>
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<td>Laboratory Reports + Safety Quiz</td>
<td>500</td>
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<td>Lab Evaluation (subjective)</td>
<td>50 (done by lab instructor)</td>
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<td>Final</td>
<td>250</td>
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<td>Essay</td>
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### Final Grade (approximate range)

- **A-** to **A+**: 89 – 100%
- **B-** to **B+**: 78 – 89%
- **C-** to **C+**: 64 – 78%
- **D-** to **D+**: 55 - 64%
- **F**: less than 55%
- **Inc**: See above for requirements
- **WU**: Improper Withdrawal
- **W**: Official drop through Records Office only

## Accommodations for Disabilities

If you need adaptations or accommodations because of a disability, or if you have emergency medical information to share with me, or if you need to make special arrangements in the case that the building must be evacuated, please make an appointment with me as soon as possible, or see me during my office hours.

## Academic Dishonesty

You should be familiar with the section of the SJSU Catalog entitled "Policy on Academic Dishonesty" in the current Catalog. Also, you should be aware of the fact that incidents of academic dishonesty may be placed in Department and/or University files. Plagiarism, word-for-word copying of another person's words without proper attribution (quotation marks and a clear literature reference), is a particularly serious form of academic dishonesty.

## 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 or exit (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 return.
Additional Information: As you can see, many points are given for the lab reports and if you complete them thoroughly and correctly answered and hand them in on time then you should receive most of the points for these reports. It is your responsibility to do this and to also study for the quizzes and exams. Keep track of your scores throughout the semester. Your lab instructor will work with you on this.

In order to do well on the quizzes it is a minimum requirement that you attend lecture and all of the labs and be there on time. You also need to read all of the reading assignments in the text and do the assigned problems in the text and the study guide. Anything less than this will result in lower scores on your exams. There is tutoring on campus and any of the TAs will help you during their office hours.
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<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
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<tbody>
<tr>
<td>Jan 21</td>
<td>22</td>
<td>23</td>
<td>24 Intro, matter Chap 1</td>
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<td>Jan/ Feb 28</td>
<td>29 Chap 1 Matter, Energy</td>
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<td>31 Chap 2 Measurements</td>
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<td>5 Chap 2 Conversions</td>
<td>6</td>
<td>7 Chap 3 Atomic Theory</td>
<td>8</td>
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<td>13</td>
<td>14 Chap 3 Atomic Theory</td>
<td>15</td>
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<tr>
<td>Mar 18</td>
<td>19 Chap 3 Periodic Table</td>
<td>20</td>
<td>21 Chap 4 Ionic Compounds</td>
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<tr>
<td>Mar 25</td>
<td>26 Chap 4 Ionic Compounds</td>
<td>27</td>
<td>28 Chap 5 Molecular Cpds</td>
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<td>Mar 4</td>
<td>5 Chap 5 Molecular Cpds</td>
<td>6</td>
<td>7 Chap 6 Chemical Reactions</td>
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<td>14 Chap 6 Chemical React.</td>
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<tr>
<td>Mar 18</td>
<td>19 Chap 6 Ionic equations</td>
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<td>21 Chap 6 Stoichiometry</td>
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<tr>
<td>Mar 25 SPRING BREAK</td>
<td>26 SPRING BREAK</td>
<td>27 SPRING BREAK</td>
<td>28 SPRING BREAK</td>
<td>29 SPRING BREAK</td>
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<td>Apr 1 Cesar Chavez Day</td>
<td>2 Chap. 7 &amp; Notes Energy &amp; Oxygen</td>
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<td>4 Energy &amp; Oxygen</td>
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<tr>
<td>Apr 8</td>
<td>9 Chap 8 Water, Liquids</td>
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<td>11 Chap 8 Water</td>
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<td>Apr 15</td>
<td>16 Chap 10 Acids</td>
<td>17</td>
<td>18 Ch 10- Acids ESSAY DUE</td>
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<td>Apr 22</td>
<td>23 Chap 10 pH, Acids, Bases</td>
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<td>Apr 29</td>
<td>30 Chap 9 Solutions</td>
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<td>2 Chap 11 Nuclear Chem</td>
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<td>9 REVIEW</td>
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<td>Apr 13</td>
<td>14 No Classes Study Day</td>
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