Chemistry and Society  
Chemistry 101 (01A/01B)  

Dr. J. L. Kirsch

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Classroom Sessions (GH348): MTWR, 9:00 to 9:50
Laboratory Sessions (GH364): Weds 01A, 1:00 to 4:00 or Thurs 01B, 1:00 to 4:00

Course Goals: 1) to learn the nature and methodologies of science,
2) to understand the nature of chemical change,
3) to become familiar with common elements and compounds, and
4) to recognize the impact of chemistry on society, our lives, and our environment.

Texts: Main Chemistry in Context by Schwartz, Bunce, Silberman, Stanitski, Stratton, Zipp
Supporting Molecules ^ by Atkins
Supporting Chemistry for Changing Times * by Hill

^ Five Copies on Reserve in the Science Library
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Laboratory Manual: Experience The Extraordinary Chemistry of Ordinary Things by Richardson and Chasteen

Other Materials: Note Book for Class Folder for Handouts Laboratory Note Book (wait until class for this one) Safety Glasses (wait until lab for this one)

Grading System: 3 Hourly Exams @ 100 pts each 300 pts
Final Exam @ 100 pts 100 pts
Laboratory 140 pts
Mini Papers (5) 100 pts
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Total Points 640 pts
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<th>Total Pts</th>
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<td>640 pts - 602 pts</td>
<td>100% - 94%</td>
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<td>601 pts - 570 pts</td>
<td>93% - 89%</td>
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<td>569 pts - 550 pts</td>
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<td>549 pts - 525 pts</td>
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<td>524 pts - 499 pts</td>
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<td>498 pts - 480 pts</td>
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<td>479 pts - 448 pts</td>
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<td>447 pts - 429 pts</td>
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**Exam and Paper Dates (Guidelines)**

- **Paper #1 (Due):** February 1
- **Exam # 1:** February 8
- **Paper #2 (Due):** February 22
- **Exam # 2:** March 1
- **Spring Break:** March 12 - 16
- **Paper #3 (Due):** March 22
- **Exam # 3:** March 29
- **Paper #4 (Due):** April 5
- **Paper #5 (Due):** April 26
- **Final Exam:** May 3 (1:00 - 4:00)

**Mini Papers**

About every three weeks you will be required to write a mini paper which should be approximately three or four pages, typed or WP, neatly done, well thought out, and well written. There will be specific assignments and guidelines for each of the five papers. Since there are fewer sentences in a mini paper each sentence is important, try to be efficient, direct, and to the point in your wording. Grading will on clarity of thought and meeting the assignment goals. Of course, a paper is best written as a draft and then rewritten after some digestion time which suggests that you should not wait until the last minute to do the work. Papers will not normally be accepted beyond three days of the due date.
Study Methods

Learning is an extremely personal experience. A method of study that works for one person may not be the best method for another person. There are, however, a number of guiding principles that are common to all good study processes. The following suggested method of study includes these principles.

1. **Attend Classes (this is a class that needs your attendance to do well)!**

   Chemistry builds on itself. The material that is learned today will help in the understanding of the material that will be covered in later classes. Class should be a learning experience not a time were information is gathered to be learned later. Hopefully, it will be easier to learn under the guidance of the instructor than digging the material out of the text on your own.

2. **Be prepared for class and make class time a real learning experience (learning in class is much easier than digging it out on you on)!**

   Leaf through the chapter examining the topics to be covered prior to the chapter material being covered in class lecture. Read the chapter completely. Examine the figures, tables, pictures, and example problems. If there is material that is difficult for you to understand in the chapter, you will now be aware of it, and you can concentrate and be prepared to ask question on the difficult material when it is covered in class lecture. **Attend all classes.** Come to class rested with an alert mind. Take good lecture notes and ask questions if necessary. Make class time a learning experience. If you feel that you are having trouble seek extra help from the instructor.

3. **Keep up and study each day (what you learn today will help you learn tomorrow)!**

   Read through and study **all** of your lecture notes **each** day. After material has been covered in class, reread and study the chapter focusing on the material that was emphasized in class. Work the assigned problems. The purpose of working the problems is not just to get the answer; it is to learn the method of solving the problem and to learn the chemical concepts associated with the problem. In addition to learning chemical concepts and problem solving, it will also be necessary to learn some descriptive chemistry. This means learning the names, symbols and formulas for some of the common elements and compounds.

4. **Disabilities**

   It is the policy and practice of Butler University to make reasonable accommodations for students with properly documented disabilities. Written notification from Student Disability Services is required. If you are eligible to receive an accommodation and would like to request it for this course, please discuss it with me and allow two weeks notice. Otherwise, it is not guaranteed that the accommodation can be received on a timely basis. If you have questions about Student Disability Services, you may wish to contact Michele Atterson, JH 136, ext. 9308.
HEALTH HAZARDS AND THE LABORATORY
In our courses, laboratory attendance is a fundamental component to the understanding of concepts and techniques of performing chemistry. Additionally, the very nature of laboratory involves using chemical reagents, which can pose potential health risks. If you have concerns about your health, please have a discussion with your professor or any chemistry faculty member. Such concerns might include, but are not limited to: any condition that results in an immuno-deficiency; persons considering conception; certain heart conditions; serious allergies; etc. Understand that any information shared will be kept entirely confidential. DO NOT HESITATE TO DISCUSS THIS WITH A CHEMISTRY FACULTY MEMBER AND/OR MICHELE ATTERSON (JH 136, x9308).