Chemistry 10
Introductory General Chemistry

Fall, 2008

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Office Hours: 30 minutes following each lecture period and each lab period

PREREQUISITEx
Adequate background in mathematics through high school algebra (equivalent to Math 31 at SMC)

OBJECTIVES
Chemistry 10 is a preparatory course requiring no previous chemistry background at the high school or college level. The course is designed to provide a solid chemistry foundation for science majors intending to take Chemistry 11 and the subsequent chemistry sequence. The course also serves to fulfill the laboratory science requirement for non-science majors.

Chemistry 10 introduces the general nature of inorganic chemistry, organic chemistry and biochemistry. Among the topics covered are chemical principles and laws; chemical terminology and nomenclature; and chemical calculations. Emphasis is placed on the application of these concepts in solving chemical problems. The laboratory work involves basic lab techniques, materials and equipment, and provides practical reinforcement of chemical theory. Emphasis is placed on developing the skills associated with good laboratory practices and laboratory safety.

MATERIALS and RESOURCES
2) Laboratory Manual: available online from my course homepage.
3) Scientific Calculator capable of scientific notation and logarithms. Programmable, graphing and cell phone calculators are not permitted.
4) Protective safety goggles for lab work. Prescription eyeglasses alone and ordinary safety glasses are not acceptable.
5) Laboratory Locker Card (available at the SMC bookstore for $10).
6) SMC Network Account.
7) Lab coat/lab apron to protect clothing during lab work.
8) Disposable rubber gloves for lab work (nitrile, not latex)
GRADING POLICY

Exams
There will be 5 exams @ 100 points. No make-ups will be permitted under any circumstances. One exam score will be dropped at the end of the course. If an exam is missed, for any reason, that exam will be the one dropped. If all exams are taken, the lowest score will be dropped.

Homework
Chemistry is not a spectator sport. You cannot learn chemistry by passively reading the textbook and listening to the instructor. You learn chemistry by becoming actively involved in it and doing it. One of the most important aspects of active participation in the learning process is problem solving. For each chapter a specific homework assignment will be made. Do not merely look at the worked-out solutions in the solutions manual; make a serious effort to work the problems on your own. The solutions manual should only be used to check yourself after you have finished a problem or to seek help if you become totally frustrated with a problem.

Homework will not be collected. However, the level of learning and corresponding success in the course are related to the time and effort spent in problem solving.

Laboratory Experiments
Chemistry is an experimental science, and laboratory experience is one of the most important aspects of a chemistry course. A total of 12 lab experiments @ 15 points will be performed. One lab score will be dropped at the end of the semester. If a lab is missed, for any reason, that lab will be the one dropped. Full details of the lab work will be presented at the lab orientation session.

Final Exam:
The final exam, worth 200 points, will be comprehensive in nature and is mandatory. Failure to take the final exam will result in an “F” by default.

Summary

\[
\begin{align*}
4 \text{ exams } @ \ 100 \text{ points} & \quad = \ 400 \text{ points} \\
11 \text{ lab experiments } @ \ 15 \text{ points} & \quad = \ 165 \text{ points} \\
\text{final exam } @ \ 200 \text{ points} & \quad = \ 200 \text{ points} \\
\text{Total} & \quad = \ 765 \text{ points}
\end{align*}
\]

Times:

Sections 1318, 1319: Wednesday, December 10, 8:00 – 11:00, Sci 157

Sections 1326, 1327: Wednesday, December 10, 12:00 – 3:00, Sci 157
Grading Scale Table

<table>
<thead>
<tr>
<th>Course Grade</th>
<th>Point Range</th>
<th>Percent of Total Points Possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>688 - 765</td>
<td>90.0 - 100</td>
</tr>
<tr>
<td>B</td>
<td>597 - 687</td>
<td>78.0 - 89.9</td>
</tr>
<tr>
<td>C</td>
<td>459 - 596</td>
<td>60.0 - 77.9</td>
</tr>
<tr>
<td>D</td>
<td>382 - 458</td>
<td>50.0 - 59.9</td>
</tr>
<tr>
<td>F</td>
<td>0 - 381</td>
<td>0 - 49.9</td>
</tr>
</tbody>
</table>

ADDITIONAL COURSE REQUIREMENTS

Attendance

Successful completion of this course requires full participation in all class activities, including lectures and laboratory experiments. Regular attendance is both expected and required. Excessive absences will result in being dropped from the course. Punctuality is also important—plan to arrive in class on time. Remember to allow for parking problems, etc. Students who arrive late not only miss important material, but also disrupt the class.

Withdrawal

Be aware of college regulations and deadlines regarding dropping classes: for tuition refund – end of second week, to avoid a W on transcript – end of third week, for a guaranteed W – end of eighth week, and for a W with instructor grade check and approval – end of twelfth week. If you want to drop the course, it is your responsibility to notify the instructor; otherwise you could inadvertently end up with an "F" on your transcript.

Code of Academic Conduct

The Academic Honor Code of Santa Monica College will be strictly enforced in this course, and academic dishonesty in any form will not be tolerated. This includes, but is not limited to, cheating on exams, changing answers on graded assignments, copying of lab reports, and falsification of lab data.

HOW TO STUDY FOR THIS COURSE

The keys to success in chemistry are motivation, discipline, consistent daily effort (keeping up rather than catching up) and active participation in the learning process. This is a 5 unit course for which you will spend 6.75 hours per week in class. You should expect to spend at least 10 - 12 hours per week on your own outside of class if you want to complete the course successfully, with a good grade and a strong base of knowledge and skills.

The time spent outside of class will be needed to:

☑ read and re-read the textbook
☑ read, organize and re-write your lecture notes
☑ work the exercises and problems in the textbook and lab manual
☑ take the self-assessment quizzes on my website
☑ explore the multitude of chemistry and math resources available on my website
☑ prepare in advance for the lab experiments
☑ complete the lab reports
☑ prepare for the exams

Read the appropriate sections of each chapter before you come to the lecture on those sections. Take good comprehensive notes during lecture. Then, as soon as possible after each lecture, re-read the same sections in the text, along with the notes you took. Have pencil in hand to work on the homework assignments relating to those topics. As you go along, make a list of your questions and bring them to class and to office hours.