Course Homepage  http://homepage.smc.edu/scholefield_michelle click on Chem 10

Course Description

Chem 10 is an introductory-level chemistry course with a laboratory component that satisfies the prerequisite for Chem 11. It also serves as a basic chemistry course for allied health majors (such as nursing), and satisfies general education requirements (IGETC Area 5A - Physical Sciences + Lab). Students will be introduced to the principles, laws and nomenclature of physical, inorganic and organic chemistry. An emphasis is placed on the application of these concepts in solving chemical problems. The laboratory component will familiarize students with the proper use of common laboratory equipment and facilities, with an emphasis placed on developing the skills associated with good laboratory techniques and laboratory safety.  The prerequisite for this course is Math 31 or HS Algebra II.

Course Student Learning Outcomes

Upon completion of Chem 10: (1) The student will demonstrate the ability to solve chemical problems using logical procedures based on well-established scientific principles, (2) The student will be able to use chemical theories to explain and predict observable phenomena, using the principles developed in Chem 10, and (3) When conducting an experiment, the student will follow written procedures accurately and safely, demonstrate competence with lab equipment and measuring devices, and record data clearly and precisely.

Required Materials

- Textbook: Introductory Chemistry, by Nivaldo J. Tro, 3rd edition. A customized version of this textbook is sold in the SMC bookstore packaged with a Student Solution Manual. The regular non-customized 3rd edition textbook is also acceptable for this course.
- Class Handouts and Problem Sets: posted online, see the “Course Handouts” link on the course homepage
- Laboratory Manual: posted online, see the “Laboratory Manual” link on the course homepage
- Safety Goggles (not safety glasses)
- TI-30Xa scientific calculator or any approved basic scientific calculator capable of doing scientific notation and logarithms.  **Programmable, graphing and cell phone calculators are not permitted during exams.**
- Laboratory Locker Card (available at the SMC bookstore for $10)
- Laboratory Notebook: a three-ring binder for all your laboratory procedures, prelabs and lab reports

Class Attendance and Participation

Regular attendance at all classes is mandatory in this course.  **Enrolled students who are absent from any lecture or lab without a valid excuse during the first week of the session will be dropped from the course.** Students with excessive, unexcused absences later in the session may also be dropped. Students are expected to come to all classes prepared and on time, stay for the entire period, and bring all required materials (lab documents, handouts, calculator etc.) to the appropriate class in order to fully participate in the course.
Student Conduct

Students should behave in an appropriate manner in the classroom and lab at all times. Be respectful to your classmates and professor by turning off cell phones and all other electronic devices, and by not talking while your professor is speaking. Return from breaks at the stated time. Follow all safety rules in the lab and respect the rules of the Science building: absolutely no food, drink, or gum is allowed inside the classrooms or labs.

Grading and Evaluation

Course grades are calculated from your total points earned on a variety of assessments (exams, labs). There is no extra credit and grades will not be curved. However, the professor reserves the option to lower grade cut-offs as deemed appropriate.

Point breakdown:

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<th>Points</th>
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<tbody>
<tr>
<td>Exams</td>
<td>400</td>
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<tr>
<td>Final Exam</td>
<td>150</td>
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<tr>
<td>Lab Reports</td>
<td>100</td>
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<td><strong>Total</strong></td>
<td><strong>650</strong></td>
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Letter grades are based on your course average:  

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\frac{\text{total points earned}}{650 \text{ points maximum}} \times 100
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
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<tr>
<td>B</td>
<td>78 – 89%</td>
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<tr>
<td>C</td>
<td>64 – 77%</td>
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<tr>
<td>D</td>
<td>50 – 63%</td>
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<td>F</td>
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**Exams:** Six exams (1-½ hours each) will be given on the dates shown on the Course Schedule. They are worth 80 points each. Each exam will only include material covered since the previous exam. The exam format will be a mixture of multiple-choice questions, short answer questions and long problems. Your lowest exam score will be dropped. Exams may be submitted for re-assessment due to grading or scoring errors, but no later than two class days after their return to students.

**Final Exam:** The final exam is a cumulative exam (1-½ hours) and consists of 30 multiple-choice questions only. Detailed information about the final will be provided to students during the last week of class. The final is scheduled from 12:00 – 1:30 PM on Thursday, February 10th, and is mandatory. By department policy final exams are not returned to students, however, you are permitted to review your final with your professor by appointment.

**Exam Protocol:** Students should arrive 10 minutes early on exam days to be assigned their seat. All books and notebooks are to be secured inside a bag, and the bag placed underneath the seat of your desk. All electronic devices (cell phones, Blackberries, iPods, etc.) are to be turned off and should be placed in a closed bag. If any of these devices rings, vibrates, or is found on your person during an exam, you will obtain an automatic zero on that exam. The only items you need to bring with you to an exam are (1) an 882-E scantron form, (2) pens and pencils, (3) a course-approved calculator, and (4) a picture ID card (SMC or other school ID, driver’s license etc.). A Periodic Table, Cheat Sheet and scratch paper will be supplied to you by your professor. Bathroom breaks are not allowed during exams.

**Homework:** Homework is a non-graded component of this course. Recommended assignments include professor-designed worksheets and select end-of-chapter textbook problems. They are posted under the “Course Homework” link on the course homepage. Although homework is neither collected nor graded, it is highly advised that students work on all assignments seriously for several hours each day. They are designed to help reinforce new concepts and develop your problem-solving skills, and similar problems will appear on exams.
Lab Activities: A variety of experiments and exercises will be performed each week in this course. The order and dates of these activities are found on the Course Schedule. The required documents for each lab – procedures, prelab assignments, report forms and exercises – are posted on the course homepage under the “Laboratory Manual” link. Students must print out these documents and bring them to the appropriate classes.

Prelab Assignments: Students are required to submit a prelab assignment for each experiment to be performed. They are designed to ensure that you come to lab fully prepared for the scheduled activity. Questions on the prelabs may be answered after a careful reading of the associated procedure document. Prelabs are due at the very beginning of your laboratory sessions. Late prelabs will not be accepted.

Lab Reports: During the lab you will record your experimental results directly on your lab report form (in ink). The rest of the report (calculations, analyses) will be completed as a take-home assignment (in pencil). The completed report is due the next day at the beginning of class, unless told otherwise. Pages must be stapled and organized. Note that while you will perform experiments and exercises with a partner, each individual student is required to submit their own report.

Lab reports and prelab assignments together are worth a total of 10 points each. A missing or poorly executed prelab will result in a deduction of 1 point from your lab score. Late prelabs will not be accepted. Late reports will be accepted up to one day past due, but absolutely no later. However, a 1 point deduction will be applied to the score of a late report. Your lowest two lab report scores will be dropped.

Make-up Policy: A student who is absent for an exam or lab will receive a zero for the missed assignment(s). Since your lowest exam and lab scores are dropped, absolutely no make-ups will be given. A missed exam or lab will automatically count as your dropped score. Under mitigating circumstances, it is sometimes possible for a student to make up a missed lab with another class, but only if enough notice is given.

Academic Integrity

The SMC Code of Academic Conduct (see link on the course homepage) 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. If such dishonesty is discovered, all students involved will obtain an automatic zero on their assignment, be reported to the campus disciplinarian, and possibly receive an F grade in the course. A zero score obtained due to cheating may not be used as a dropped score by a student, and it will count towards their final grade.

Study Advice and Tutoring

Prepare for each class by pre-reading appropriate sections of the book. This will make it easier for you to spend more time in class listening, learning, and asking questions instead of just copying notes. However, while reading your textbook and notes is important, by itself this will not nearly be sufficient to succeed in Chem 10 (passive learning). To master the course material you will need to regularly work through as many problems as possible (active learning). This is by far the best way to test your understanding of the course content and pinpoint your weak areas. Schedule enough time each day to study, do the recommended homework, and the required lab assignments to avoid falling behind and cramming. The six week session can be grueling, but careful organization of your time can make a huge difference. Also keep in mind that it is always easier to learn a subject that you have even a slight interest in – thus do your best to become interested in chemistry.

Finally, take advantage of all learning resources available to you, such as scheduling office hour visits with your professor, forming study groups with other students, using recommended DVDs or online tools, and working with tutors. The Science Learning Resource Center (Sci 245) provides free chemistry tutoring to SMC students as well as other resources; see Saundra Willis (310-434-4630) to arrange an appointment. The Learning Disabilities Program (Math Complex Room 75, 310-434-4684) also conducts diagnostic testing and offers study strategy classes for students.
Withdrawal Policy

The withdrawal deadlines for the Winter 2011 session at Santa Monica College are as follows:

To avoid a W on your transcript – Monday January 10th
To obtain a guaranteed W – Sunday January 23rd

From January 24th to February 2nd, students can request a “late withdrawal” with professor approval, but only in the event of extenuating circumstances (documentable).