

CCS CHEMISTRY 2010-2011

Course Description

This college-prep chemistry course will cover a variety of topics vital to understanding the nature of matter and its behavior. The knowledge of these disciplines is essential for a Biblical understanding of both the universe we live in, and its Creator. Course topics include but are not limited to atomic theory, chemical bonding and nomenclature, chemical reactions, stoichiometry, phases of matter, solutions, chemical kinetics, and electrolytes, as well as overviews of nuclear, organic, and biological chemistry. Labs reflecting and emphasizing these lessons will be an integral part of the course. Classes will meet for three 50-minute periods and one 90-minute block period each week. Regular class periods will consist of lecture and problem-solving sessions; block period classes will be spent in laboratory work and discussion.

Instructor Information

Mr. Daniel Kim
Email: danielkim@ccs-rams.org
Office Hours: By appointment

Textbooks

- Zumdahl, Zumdahl, & DeCoste. *World of Chemistry*, Houghton Mifflin 2002. ISBN 0-618-13496-4
- Lab notebook, at least 100 pages, must have carbon copies, spiral bound ISBN-10: 1930882742 or ISBN-13: 978-1930882744

Materials

- 3-ring binder (may be shared with another class) with dividers
- Spiral notebook (chemistry only)
- 8 1/2" x 11" loose-leaf binder paper
- Writing utensils: pencils (mechanical), pens (blue or black ink only), eraser and/or white-out
- ANSI Z87.1 Chem-Splash goggles (buy from school)
- Lab coat
- Chemical-safe gloves (neoprene or nitrile)
- Scientific calculator (TI-30XII highly recommended; programmable calculator unnecessary)

Grading

Quarter grades:

- 35% Labs (written lab reports and lab conduct)
- 35% Exams (quizzes, chapter tests and midterm)
- 30% Other (homework, in-class assignments, notes, class participation)

Semester grades:

- First Quarter: 45%
- Second Quarter: 45%
- Final Exam: 10%

<u>Percentage</u>	<u>Grade</u>	<u>Percentage</u>	<u>Grade</u>
97-100%	A+	77-79%	C+
93-96%	A	73-76%	C
90-92%	A-	70-72%	C-
87-89%	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
		50-59%	F

Class Administration

- 1) **Rules:**
 - i. Do not do anything that prevents other students from learning.
 - ii. Respect others, the facilities, and yourself.
- 2) **Disciplinary Policy:**
 - First Violation: Student warned verbally
 - Second Violation: Fifteen minute writing assignment
 - Third Violation: Fifteen minute writing assignment and call home
 - Fourth Violation: Disciplinary referral to administration
- 3) **Attendance:** Attendance is required. In the case of an absence, it is the student's responsibility to get notes and/or make up assignments. Make up tests will be given three days after an excused absence.
- 4) **Homework:** There will be homework assigned every week, consisting of reading, book problems, and hand-outs. Answers must be submitted online before class begins. Work must be shown neatly and turned in at the beginning of class in order to get full credit for the assignment; any work turned in after class begins will be considered late. Homework must be done on 8 ½" x 11" loose-leaf binder paper.
- 5) **Late/Missing Assignments:** Students are responsible for keeping track of due dates on their own. If a student does not have an assignment on the day that it is due, he will be required to fill out a Missing Assignment Form (see sample). Any late work will be docked 10% (one grade down) for every day that it is overdue. Three or more missing assignments will result in a call home.
- 6) **Binder/Notebook:** A spiral notebook or loose-leaf paper in a binder is required for taking notes during lectures. All notes should be done in the format explained in class. A binder should be used to organize all handouts (there will be lots of them!) and returned work. Notes and binder organization will be checked and graded periodically.
- 7) **Participation:** All students are expected to be involved in discussions and activities, ask questions, and otherwise contribute to the class. This includes bringing the required materials (e.g. textbook, writing utensils, calculator) and being ready to learn at the start of each class. During problem-solving sessions in class, students should work quietly unless directed to collaborate.
- 8) **Labs:** There will be at least one lab experiment almost every week. Written lab reports will be due on the day of the following lab unless otherwise stated. All labs will be done in pairs unless otherwise stated; however, all lab reports must be done individually. **All students are expected to adhere to SAFETY rules for lab.** The first minor violation will result in a verbal warning. The second minor violation will require the student to give up three lunch periods to study lab safety. The third minor violation will result in the loss of all lab privileges for the following lab, and immediate 10% retraction of the grade for the current lab. Any major violation will result in immediate ejection from the lab and loss of all lab privileges for the following lab, and immediate 30% retraction of the grade for the current lab.
- 9) **Exams:** For every major unit, there will be a test covering only those chapters. There will also be one midterm and one final given each semester; these are cumulative (midterms cover the entire quarter and finals cover the entire semester). All tests will be announced at least three days before. Unannounced quizzes on reading will also be given to gauge comprehension and to give you an idea of what kinds of questions will be on the tests.

Chemistry Study Groups

Studying chemistry in groups helps you to learn better! While you should definitely not copy from your classmates, it is often beneficial to have people you can consult about problem-solving strategies. Make sure you get the phone numbers or screen names of a couple of people in your class. Help each other out. Get together before tests. Just remember that there are no group exams.

Missing Assignment Form

Completing assignments on time is YOUR RESPONSIBILITY as a student.

Name: _____

Date: _____ Class: _____

Missing Assignment Type/Name (e.g. Lab #5 – Flame Tests):

I do not have my assignment today because:

- _____ I did the assignment, but forgot to bring it to class
- _____ I chose not to do the assignment
- _____ I forgot to do the assignment
- _____ I did not have the appropriate materials (text, notes, lab book, etc.)
- _____ I did not understand the assignment.
- _____ Other – please explain below:

I plan to:

- _____ Complete the assignment by the next class meeting for a 90% maximum.
- _____ Complete the assignment by _____, with the understanding that a failure to turn in the assignment before it is returned to the class will result in a 70% maximum.
- _____ Not complete the assignment at all, resulting in a 25% maximum.
- _____ See Mr. Kim during lunchtime or after school to get help completing it. I understand that there is no point penalty associated with this option.
- _____ Other – please explain below:

Signature: _____

August 02, 2010

Dear CCS Chemistry Parent,

I'm looking forward to teaching your child chemistry this year! I hope that this will be an enjoyable learning experience for both your child and you – ask your child about what he is learning once in a while! While the labs and dramatic demos will be exciting, chemistry is a challenging subject for many students. Please do not be alarmed if your child struggles initially. I will be happy to go over any concepts or math with your child outside of class time.

You can keep track of your child's overall grades by checking Powerschool.

Please do not hesitate to contact me if you have any questions or concerns. I can be reached most easily by email, at danielkim@ccs-rams.org. Best wishes to you for a pleasant, successful and rewarding year.

Sincerely,

Daniel Kim
AP Chemistry Instructor

(please sign and return to Mr. Kim ASAP)

I have read the syllabus for CCS Chemistry 2010-2011.

The best way to contact me is by:

Email: _____

Phone: () - _____

Student's Name (please print)

Parent's Name (please print)

Parent's Signature