

# Glendale Community College

## Chemistry 152: General Chemistry II – Spring 2009



Instructor Info: **Christina Clark**

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**Section 48377** TR 8:30 AM –9:45 AM GCCN D124

Office Hours: Tues 7:00 – 8:20 AM, Thurs 11:30 AM – 12:50 PM, 3:50 PM – 6:00 PM

**Website: www.cclarkchemistry.com click on CHM 152 link**

**Course Description:** A study of the chemical properties of the major groups of elements, equilibrium theory, thermodynamics, electrochemistry, and other selected topics. Completion of CHM152LL (or CHM 154LL) is required to meet the Natural Science requirement.

Official course objectives can be found at <http://www.dist.maricopa.edu/cgi-bin/cpr.pl?trm=20056&crs=chm152&inst=99>

**ADA Policy Statement:** If you have a disability that requires special accommodations, you are strongly urged to contact the Disability Services and Resources (DSR) office at the beginning of the semester (first two weeks) so that reasonable accommodations can be made in a timely manner. The DSR office is located in TDS 100 or contact 623 845 3080. DSR web page <http://web.gccaz.edu/dsr/>

### Prerequisites:

Grade of “C” or better in CHM 151 and CHM 151 LL

### Text & Materials:

*Chemistry* by McMurry & Fay, 5<sup>th</sup> ed. *Custom Edition for GCC and Mastering Chemistry Access*

Non-programmable scientific calculator that can perform exponential and logarithmic functions.

Access to the internet and a printer for lecture notes, Mastering Chemistry, group works, and extra practice problems.

*\*There are several free access computers and printers on the North and Main campuses*

### Attendance & Withdrawal:

Regular attendance is an absolute must. Regular attendance will be taken at the beginning of each lecture. Any student missing more than four lectures may receive a “W” or “F” for the course per GCC policy. You must be on time and stay the full period in order to receive credit for attendance. It is **your** responsibility as the student to drop the course. Don’t assume your instructor will automatically drop you. Students may request the W, or the instructor may assign a W to a student for excessive absences prior to **April 3<sup>rd</sup>**, or for being a no-show (not showing up on the first day of class). Students should know that *after April 3<sup>rd</sup> they must request the W in writing or they will be given the grade of F.* If you receive financial aide, please consult an advisor before requesting a W.

**Excused Absences** - Absences are excused for the following reasons if properly documented in writing: illness such that a medical doctor or ER was visited, death in the immediate family, approved GCC travel, a child that you care for is ill, or transportation to the class was impossible due to a car accident. Absences are not excused if there is no documentation. Notes from parents are not acceptable. For example if you miss a quiz because you were sick and saw a doctor, bring in your doctor’s documentation and you will be allowed to make up the quiz (or it will be prorated). Without documentation a score of zero will be recorded for any missed assignments. It is up to **YOU** to contact me regarding absences and to see if you missed an assignment and to see what we covered in class.

**Late Policy** – Late assignments will be accepted even if the absence was not excused but **ONLY** if the answers have not yet been given out yet. The penalty is 10% per school day late. Nothing will be accepted after one week. If you miss a class you may email homeworks to me. I can also email assignments to you to turn in if possible. It is up to **YOU** to keep in contact with me regarding late assignments. Once the answers have been given (either online or in class) a makeup alternative assignment may be given or the grade may be prorated but only if the absence was excused.

### Workload

Students are expected to spend an average of 9 hours per week attending class sessions, doing assignments, reading, studying and preparing for exams. However note that CHM 152 is a big step up from CHM 151. It is essential that you **NOT** get behind in the course.

### Course Web Site

You will need to access the course web site (<http://www.cclarkchemistry.com>) Here you can find the lecture notes, chapter reviews, exam cribs, group works and more. **Blackboard is used for grades only.**

## Assignments and Exams:

**Group Works** - Group Works are assignments completed outside of class. They will be posted on the course web site on the schedule page. You may work in a group of 1 person up to 3 people and turn in one paper for the group, but I must see each person's handwriting on the assignment equally. You may not simply put someone's name at the top of the assignment. You may use your textbook and notes. Group Works are turned in for a grade. All group works during the semester will be averaged and count as 10% of your final grade. Your lowest group work will be dropped. **I suggest you do work with another person on group works and turn in one copy for both of you. But if two people turn in two separate group works that are the same, that is considered cheating because it looks like one person copied the other person.**

**Mastering Chemistry** – Assignments will be given using this online homework system and the average of all the assignments will count as 15% of your grade. If you get 70% or better on the homework assignment you will receive the full 5 points, 50-69% equals 3 points, 40-59 % equals 2 points and zero points under 40%.

**Exams and Final** - Exams are individual effort. Exams will take the entire class period and consist of multiple choice and short answer type questions. You may **NOT** use your book, notes or other material during the exams except a non-programmable, non-graphing calculator. All exams will be averaged and count as 45% of your final grade. The Final Exam will be similar to other exams except it will be comprehensive, only multiple-choice, and it will count as 20% of your final grade. No exams are dropped. Cell phones must be off during exams and put under your desk, not in your pockets.

**Make-up Exams:** For an emergency situation only, one make-up exam will be allowed during the semester with the instructor's permission for an excused absence. The make-up exam must be scheduled *before* the regularly scheduled exam. No make-ups will be allowed after the regularly scheduled exam. It is your responsibility to get in touch with me and schedule a time.

**Quizzes** - Quizzes are unannounced class assignments worked on individually without any external help other than a calculator. You may use the Periodic Table on the wall if needed. All quizzes during the semester will be averaged and count as 10% of your final grade. Your lowest quiz will be dropped.

## Grading:

The final course grade will be evaluated based on the following:

100-90% = A    89-80% = B    79-70% = C    69-60% = D    59-0% = F

Mastering Chemistry	(5 points each assignment)	= 15% of your grade
Group Works	(5 points each)	= 10% of your grade
Quizzes	(10 points each, low dropped)	= 10% of your grade
Exams	(100 points each)	= 45% of your grade
Final Exam	(cumulative, all MC)	= 20% of your grade

*Grades can be viewed on Blackboard but final grades for the semester are available at [www.my.maricopa.edu](http://www.my.maricopa.edu).*

## Additional Information:

\*It is the student's responsibility to know and comply with the policies included in the GCC college catalog and student handbook ([www.gc.maricopa.edu/catalog](http://www.gc.maricopa.edu/catalog)).

\*It is the student's responsibility to know the information contained in the class syllabus.

\*Cell phones and pagers must be turned off during class. This is disrespectful to your fellow students as well as the instructor. Please NO texting during class. If it is truly urgent, please go outside.

Chemistry is a wonderful science to study and can open a world of opportunities to you. Please don't hesitate to ask questions and use the chemistry tutors and help centers to make the learning experience a bit easier.

**Free tutoring is available on Mondays from 9:00 AM – 5:00 PM in PS150.** Additional times will be posted in the PS building and on the GCC Chemistry Department website: [www.gc.maricopa.edu/chemistry](http://www.gc.maricopa.edu/chemistry)

## Chemistry 152 – Spring Schedule – 2009

**This is a tentative schedule and course content may vary from this syllabus  
to meet the needs of this particular class.**

Week	Tuesday	Thursday
1	Jan 20 <sup>th</sup> Introduction & Syllabus Chapter 12 - rates	Jan 22 <sup>nd</sup> Chapter 12 – rate expressions, rate laws <i>Bring a scientific calculator to class from now on.</i>
2	Jan 27 <sup>th</sup> Chapter 12 – 1 <sup>st</sup> and 2 <sup>nd</sup> order <i>Mastering Chemistry Introduction due by noon</i>	Jan 29 <sup>th</sup> Chapter 12 – rate laws and mechanisms
3	Feb 3 <sup>rd</sup> Chapter 12 - Arrhenius	Feb 5 <sup>th</sup> Chapter 22 – Nuclear reactions, particles, radioactivity
4	Feb 10 <sup>th</sup> Kinetics, stability, fission	Feb 12 <sup>th</sup> Chapter 22 – Fusion, transmutation
5	<b>Feb 17<sup>th</sup> EXAM I over Chapters 12 and 22</b> <i>Mastering Chemistry Ch. 12 &amp; 22 due by noon</i>	Feb 19 <sup>th</sup> Chapter 13 – Equilibrium, K expressions
6	Feb 24 <sup>th</sup> Chapter 13 – K calculations, Q	Feb 26 <sup>th</sup> Chapter 13 – Le Chatelier’s Principle Catalysis
7	Mar 3 <sup>rd</sup> Chapter 13 - Catalysis Chapter 14 – Acids, bases, strength	Mar 5 <sup>th</sup> Chapter 14 – Kw, pH, pOH
8	Mar 10 <sup>th</sup> Chapter 14 - pH of strong acids, weak acids, Ka	Mar 12 <sup>th</sup> Chapter 14 – Kb, salts
9	<b>Mar 17<sup>th</sup> No Classes – Spring Break</b>	<b>Mar 19<sup>th</sup> No Classes – Spring Break</b>
10	<b>Mar 24<sup>th</sup> EXAM II over Chapters 13 and 14</b> <i>Mastering Chemistry Ch. 13 &amp; 24 due by noon</i>	Mar 26 <sup>th</sup> Chapter 15 – Common ion
11	Mar 31 <sup>st</sup> Chapter 15 - Buffers	April 2 <sup>nd</sup> Chapter 15 - Titrations
12	April 7 <sup>st</sup> Chapter 15 - Titrations	April 9 <sup>th</sup> Chapter 15 – Solubility, K <sub>sp</sub>
13	April 14 <sup>th</sup> Chapter 16 – Enthalpy and Entropy	April 16 <sup>h</sup> Chapter 16 – ΔH and ΔS
14	April 21 <sup>st</sup> Chapter 16 – Thermo calculations	April 23 <sup>rd</sup> Chapter 16 – Gibb’s Free Energy
15	<b>April 28<sup>th</sup> EXAM III over Chapters 15 and 16</b> <i>Mastering Chemistry Ch. 15 &amp; 16 due by noon</i>	April 30 <sup>th</sup> Chapter 17 - Galvanic Cells, EMF, E° <sub>red</sub> table
16	May 5 <sup>th</sup> Chapter 17 - Nernst	May 7 <sup>th</sup> Chapter 17 – EMF and K
17	<b>May 12<sup>th</sup> FINAL EXAM 8:00 AM – 9:50 AM</b> <b>GCCN-D124</b> <b>*Exam is cumulative.</b> <i>Mastering Chemistry Ch. 17 due by noon</i>	

# ACADEMIC INTEGRITY

**Strict compliance with the Glendale Community College Honor Code is required.  
Anyone caught cheating will receive a zero for the grade upon first offense.  
Repeat offenders will receive an “F” for the course (See GCC Student Handbook).**

Submitting work as one’s own which has been done either all or part by another is defined as CHEATING. Students found cheating will receive an “F” for the course.

“CHEATING” includes but is not limited to the following:

1. The possession or use of unauthorized materials such as crib notes or unauthorized copies of exam material.
2. Copying from another person’s quiz or exam or allowing another person to copy one’s examination material whether the exam was in class or take-home (All involved will receive a zero for all work).
3. Using a calculator or computer that contains stored information that can be used while taking a quiz or exam.
4. The possession and/or use at the students work area of a personal communications device during exams or quizzes.
5. Submitting a false report for work that was not actually done.
6. Modifying or attempting to modify an answer on an exam after it has been returned and then claiming it was graded incorrectly.
7. Using any type of electronic device to communicate answers or questions with any other individual whether enrolled or not.

The student’s behavior in any interpersonal relationships with the instructor, the stockroom technician, the student workers and fellow students must be civil, mature, responsible and ethical. Rudeness, classroom disruption, offensive language or behavior, or abuse cannot be tolerated and will result in censure according to the terms of the student behavior code.

**We hope that each student will support this policy and realize the importance of honesty and integrity in his or her academic effort!**

I, \_\_\_\_\_ (printed name) have received, read, and understand the CHM152 syllabus. I also have read, understand and will follow the academic integrity policy for GCC and this class.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date