Moorpark College Chemistry 12 (& Honors)
Spring 2012 – Sections 70914, 71483, & 71578

**Description:** Chemistry 12 is an introductory course in general chemistry designed primarily for students who have had little or no chemistry training. A complete listing of student learning outcomes for this course can be found at moorparkcollege.edu under the academic departments link. This 5-unit course combines 4 hours of lecture with one 3-hour laboratory session per week. A minimum grade of “C” is necessary in order to enroll in Chemistry 1A.

**Enforced Prerequisite:** MATH M01 with grade of C or better

**Instructor:**
- Dr C Steven Joiner
- Email: csjoiner@vcccd.edu
- Office: PS 128
- Phone: (805) 378-1400 ext. 1747
- Office Hours: MW 6-7pm, Tu 9:45-11:45am, Th 9:45-10:45am, or by appt

*Note: All chemistry faculty have 5 office hours per week – feel free to attend any of them!*

**Course Website:** [http://sunny.moorparkcollege.edu/~csjoiner/](http://sunny.moorparkcollege.edu/~csjoiner/)

**Course Meetings:**
- Lecture: Mon / Wed 4:00 pm – 5:50 pm PS 110
- Labs: (71483) Monday 1:00 pm – 3:50 pm PS 107
- (70914 & 71578) Wednesday 1:00 pm – 3:50 pm PS 107

**Honors (Section 70914):** Students enrolled in the honors section will be required to complete an honors project in addition to all other material in the course. The point break-down for this project and the schedule are included later in this syllabus. The honors project is worth a total of 200 points, making the class total worth 1200 points.

**Required Materials:**
- Mastering Chemistry ([www.masteringchemistry.com](http://www.masteringchemistry.com)) with eBook (see handout):
- Chemistry 12 Course Guide for classes taught by Dr. C. Steven Joiner.
- Chemistry 12 Laboratory Manual. Department of Chemistry, Moorpark College
- Scientific calculator with exponents and logarithms (no graphing/programmable)

**Resources:** Students enrolled in this course are encouraged to use The Learning Center, The Math Center, and the Writing Center services to support their efforts in this class. When using these services, you will need to provide your student ID number and my name for tracking and reporting purposes. For further information call The Learning Center (805) 378-1556, the Math Center (805) 378-1400 ext 1775 or the Writing Center (805) 378-1400 ext 1696. There are many additional resources available to you in the college library as well as at the Chemistry Links page on the department website ([http://moorparkcollege.edu/chemistry](http://moorparkcollege.edu/chemistry)). Library resources include the *CRC Handbook of Chemistry and Physics* which will be useful in completing several of the pre-laboratory assignments.
**Grading:** One grade will be assigned for Chemistry 12. The grade will include both lecture and laboratory work. Grades will be assigned on the basis of an overall percentage of total points earned in both lecture and the laboratory. If you fail either the lecture or lab portion of the course, the highest grade you may earn is a “D”.

**Lecture:**
- 3 Lecture Exams (100 points each) 300 points
- 7 Lecture Quizzes (30 points each) 210 points
- 15 Mastering Chemistry Problem Sets (4 pts each) 60 points
- 15 Discussion Board “Weeks” (2 points per week) 30 points
- Final Examination (Cumulative) 200 points

**LECTURE TOTAL:** 800 points

**Lab:**
- 18 Experiments (8 points each) 144 points
- 6 Mini-Reports (2 points each) 12 points
- 11 Workshops (4 points each) 44 points

**LAB TOTAL:** 200 points

**Honors:**
- Honors Project (section 70914 only) 200 points

**COURSE TOTAL POINTS:** 1000 points*

*1200 points total for students enrolled in honors chemistry, section 70914

Grades will be assigned in conjunction with the following scale: 90 % – 100 % (A); 80 % – 89.5 % (B); 70 % – 79.5 % (C); 60 % – 69.5 % (D); below 60 % (F). There are no “W” grades given by the instructor; you must officially drop the course if you stop attending or risk receiving an automatic failure.

No quizzes, exams, workshops, mini-reports or labs are dropped. Each of these focuses on different Chemistry 12 material and it is unreasonable to “throw out scores” just because you don’t know one subject that is a part of this course. Your lowest mastering chemistry assignment and your lowest discussion board week will be dropped. **If you miss any assignment, you will receive a score of zero on that assignment.** Exceptions are made only for verifiable documented emergencies.

**Exams and Quizzes:** Examinations and quizzes will be administered periodically throughout the semester during the on-site lectures (see schedule for dates). There will be no make-up quizzes or exams. **You are required to take all three exams, seven quizzes, plus the cumulative final examination.** Exceptions will be made on a case-by-case basis in the event of a verifiable documented emergency if you contact the instructor BEFORE the exam (leave a voice mail message in an emergency). You will be tested on your ability to solve problems based on lecture notes and homework problems. **You must bring your OWN charged calculator for each examination and quiz; no borrowing is allowed.** At the end of the semester, a comprehensive final examination will be administered on **Monday December 17, 2012 from 5:00 pm until 7:00 pm.**
**Mastering Chemistry Problem Sets:** Students are required to use Mastering Chemistry to solve weekly problem sets. Each weekly problem set is available starting on Wednesday at 6pm (immediately after lecture) and is due on the following Wednesday at 4pm (immediately before lecture). The first assignment is due Wednesday, August 29, 2012. There will be 16 weekly problem sets worth four points each. Your lowest score will be dropped. This means that the problem sets are worth as much as two quizzes combined (more than ½ of a test)!! To access the Mastering Chemistry software, you will need to purchase a code from the textbook publisher in one of 3 ways:

- **If you purchase a new textbook from the student store,** the access code is included for free! Make sure that you save the insert with your access code. Follow the link from the course webpage and click the “Register Student” button. When prompted, enter the course ID “JOINER2012FALL”.

- **If you purchased a used book from the student store or if you purchased a book from another source,** you will need to purchase an access code for $60.50. The book for our course is “Tro's Introductory Chemistry, 4e”. Follow the link from the course webpage and click the “Register Student” button. When prompted (after paying the fee), enter the course ID “JOINER2012FALL”.

- **You can also purchase the access code with an e-Book.** This gives you access to your textbook from any place that has an internet connection, and saves you from the need to purchase a paper textbook. This costs $110.00 and is the best deal financially. You will have access to the e-Book for 1 year from the date of purchase. The book for our course is “Tro's Introductory Chemistry, 4e”. Follow the link from the course webpage and click the “Register Student” button. When prompted (after paying the fee), enter the course ID “JOINER2012FALL”.

**Weekly Discussion Board Participation:** You can earn 0–2 points per week for your participation in the course discussion board. Each “week” begins on Wednesday at 6pm (immediately after lecture) and ends the following Wednesday at 4pm (immediately before lecture). The first “week” ends on Wednesday, August 29 at 4pm Your lowest weekly score is dropped. Dr. Joiner will also participate in the discussion board and will not answer questions related to course content via email. Submission are evaluated on quality and (to a lesser extent) quantity. Submissions that are more relevant, more detailed, more correct, more precise, and overall more useful to other students in the class will have a greater chance of earning credit. Spelling and accurate use of vocabulary words count as well. As the semester progresses and your mastery of the course material improves, the standards used to judge the quality of discussion board posts becomes more strict, so you should strive to improve the quality of your posts. One submission (either one question OR one answer) is worth at most one point. *Any submission that contains a significant conceptual or vocabulary error cannot earn credit.* Some discussion board questions may be used as exam questions, regardless of their credit worthiness. When you copy part or all of an answer from another source, you must cite the source. (A web link is useful for this.) As is true in any other circumstance, copying someone else's words without giving credit is plagiarism. Plagiarism is an act of significant academic misconduct, and carries appropriate penalties. **Please limit yourself to one question per thread.** If referring to the course guide, textbook, lab manual, or old exams, please clearly identify where the question came from. Example: “Course Guide Page 7, Question 1.4” or “Spring 2010 Exam 2, Question 15”.
**Netiquette:** One problem with interacting with people online is that your facial expressions cannot be read, so certain forms of communication such as sarcasm may come across as mean or rude online. Students are expected to conduct themselves in a respectful manner and adhere to the highest ethical and behavioral standards at all times when using any aspect of the course software. While it is okay to disagree with another student’s opinion, you may not attack the student. A full explanation of proper netiquette is located at this website: [http://www.albion.com/netiquette/corerules.html](http://www.albion.com/netiquette/corerules.html)

**Workshops:** Workshops are due at the start of lab on the date listed on the schedule unless otherwise announced. Workshops are worth four points. One point will be awarded for overall completeness (greater than 75% of problems are solved), and the other 3 points will be awarded for correctness of 3 randomly selected problems. Workshops will be returned before the end of lab and answer keys will be posted on the course website. Consequently, late workshops cannot be accepted. Quiz and exam problems are often inspired by the workshops.

**Lecture and Lab Attendance:** Consistent attendance is best for all students concerned, especially in a course that entails laboratory work. As such, attendance will be taken during each laboratory period. If a student wishes to drop the course, he or she must withdraw; it is not my responsibility to drop any student, although a student may be dropped at the instructor’s discretion if a significant number of lectures or labs are missed. Students who have not dropped this class and have stopped attending will be assigned a letter grade of “F”.

**Laboratory Procedure:** Safety is of the utmost importance. You must always comply with the safety rules found in the safety section of your laboratory manual along with any listed experimental procedure cautions. Failure to obey these rules will result in your dismissal from this class. Moreover, safety glasses are **MANDATORY** at all times in the lab unless otherwise stated by the instructor. If you have not acquired safety glasses by the second week of class, you will not be allowed in the lab until you have them. Attendance is also required for the lab. **If you miss more than 3 labs, your grade will be lowered significantly.** Arrangements to make up labs are not guaranteed but are possible if done quickly. Moreover, attendance and successful completion of the laboratory component is required; otherwise, the highest grade you will receive is a “D”.

**Be Prepared for the Laboratory:** Read the theory and procedures for each experiment before class and answer any pre-laboratory questions (where appropriate). In order to receive credit for the laboratory, you must obtain the instructor’s initials on your report at the end of your session, before you depart. Due dates will be announced in lab.

**IMPORTANT NOTE ABOUT SCHOLASTIC DISHONESTY:** Anyone found cheating will receive an “F” grade and will be recommended to the Dean for further disciplinary action.
Students with Disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact ACCESS as soon as possible to arrange for these accommodations. Authorization, based on verification of disability, is required before any disability accommodation will be made in this class. The phone number for ACCESS is (805) 378-1461 and they are located in the building just to the right of the Campus Center.

Other Contact Information
Chemistry Department Chair – Robert Keil
Dean of Physical Sciences – Lisa Miller
Physical Sciences Division Office – AC 232; Phone: (805) 378-1400 ext. 1572

Reading Assignments by Topic
Topic 1 – Chapter 1: Sections 1 – 5
Topic 2 – Chapter 2: Sections 1 – 10
Topic 3 – Chapter 3, Sections 1 – 12
Topic 4 – Chapter 4, Sections 1 – 9
Topic 5 – Chapter 5, Sections 1 – 11
Topic 6 – Chapter 7, Sections 1 – 10 and Chapter 16, Sections 3 & 5
Topic 7 – Chapter 6, Sections 1 – 9
Topic 8 – Chapter 8, Sections 1 – 6
Topic 9 – Chapter 9, Sections 1 – 9
Topic 10 – Chapter 10, Sections 1 – 8
Topic 11 – Chapter 11, Sections 1 – 10
Topic 12 – Chapter 12, Sections 1 – 8
Topic 13 – Chapter 13, Sections 1 – 10
Topic 14 – Chapter 14, Sections 1 – 11

Disclaimer: This syllabus is a guide for what is expected in sections 70914, 71483, and 71578 of Chem 12 and Chem 12 Honors for Fall 2012. Alterations at the instructor’s discretion may be necessary.
Dear Student:
In this course you will be using MasteringChemistry®, an online tutorial and homework program that accompanies your textbook. If you have joined a MasteringChemistry course before and can still log in:
Save time by following the guide for joining another course by following the guide for joining another course (available from www.masteringchemistry.com > Tours & Training > Getting Started) instead of this page.

What You Need:
✓✓ ✓✓ A valid email address
✓✓ ✓✓ A student access code
(Comes in the Student Access Code Card/Kit that may have been packaged with your new textbook or that may be available separately in your school’s bookstore. Otherwise, you can purchase access online at www.masteringchemistry.com.)
✓✓ ✓✓ The ZIP code for your school: 93021
✓✓ ✓✓ A Course ID: JOINER2012FALL (Provided by your instructor)
✓✓ ✓✓ Your Student ID Number (900XXXXXX)

1. Register
   • Go to www.masteringchemistry.com and click Students under Register.
   • To register using the student access code inside the MasteringChemistry Student Access Code Card/Kit, select Yes, I have an access code. Click Continue.
     –OR– Purchase access online: Select No, I need to purchase access online now. Select your textbook, whether you want access to the eText, and click Continue. Follow the on-screen instructions to purchase access using a credit card. The purchase path includes registration, but the process is a bit different from the steps printed here.
   • License Agreement and Privacy Policy: Click I Accept to indicate that you have read and agree to the license agreement and privacy policy.
   • Select the appropriate option under “Do you have a Pearson Education account?” Continue to give the requested information until you complete the process. The Confirmation & Summary page confirms your registration. This information will also be emailed to you for your records. You can either click Log In Now or return to www.masteringchemistry.com later.

2. Log In
   • Go to www.masteringchemistry.com.
   • Enter your Login Name and Password that you specified during registration and click Log In.

3. Join Your Instructor’s Online Course and/or Open Self-Study Resources
Upon first login, you’ll be asked to do one or more of the following:
   • Join a Course by entering the MasteringChemistry Course ID provided by your instructor (JOINER2012FALL). You will be asked to enter your Student ID number (follow on-screen instructions).
   • Explore the Study Area or Launch Your eText, if these resources are available for your textbook.

To Access MasteringChemistry Again Later
Simply go to www.masteringchemistry.com, enter your Login Name and Password, and click Log In.
After you have joined a course: You can open any assignments from the Assignments Due Soon area or from the Assignments page. For self-study, click eText or Study Area, if these options are available.

Support
Access Customer Support at http://www.masteringchemistry.com/support, where you will find:
   • System Requirements
   • Answers to Frequently Asked Questions
   • Registration Tips & Tricks video
   • Additional contact information for Customer Support, including Live Chat
## Chemistry 12 Sections 70914, 71483, & 71578 Lecture Schedule Fall 2012

### Dr C Steven Joiner

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<th>Wednesday Lecture</th>
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<td>8/20 - 8/22</td>
<td>Introduction &amp; Topic 1 (Scientific Method)</td>
<td>Topic 2 (Units) &amp; <strong>Calculator Test</strong></td>
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<tr>
<td>8/27 - 8/29</td>
<td>Topic 2 (Units) &amp; Topic 3 (Matter &amp; Energy)</td>
<td>Topic 3 (Matter &amp; Energy) &amp; Topic 4 (Atoms &amp; Elements)</td>
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<tr>
<td>9/3 - 9/5</td>
<td><strong>No Lecture - Labor Day</strong></td>
<td>Topic 4 &amp; Topic 5 (Molecules &amp; Compounds)</td>
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<tr>
<td>9/10 - 9/12</td>
<td><strong>Quiz #1 (Topics 1 - 4) / Topic 5 &amp; Topic 6</strong></td>
<td>Topic 6 (Chemical Reactions)</td>
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<td>9/17 - 9/19</td>
<td><strong>Exam #1 (Topics 1 - 5)</strong></td>
<td>Topic 6 (Chemical Reactions)</td>
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<tr>
<td>9/24 - 9/26</td>
<td>Topic 6 (Chemical Reactions) &amp; 7 (Chemical Composition)</td>
<td>Topic 7 (Chemical Composition)</td>
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<tr>
<td>10/1 - 10/3</td>
<td><strong>Quiz #2 (Topic 6) / Topic 8 (Stoichiometry)</strong></td>
<td>Topic 8 (Stoichiometry)</td>
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<tr>
<td>10/8 - 10/10</td>
<td><strong>Quiz #3 (Topics 7 &amp; 8) / Topic 9 (Quantum Mechanics)</strong></td>
<td>Topic 9 (Quantum Mechanics)</td>
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<tr>
<td>10/15 - 10/17</td>
<td>Topic 9 (Quantum Mechanics)</td>
<td>Topic 9 (Quantum Mechanics)</td>
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<tr>
<td>10/22 - 10/24</td>
<td>Topic 10 (Chemical Bonding)</td>
<td><strong>Exam #2 (Topics 6 - 9)</strong></td>
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<td>10/29 - 10/31</td>
<td>Topic 10 (Chemical Bonding)</td>
<td>Topic 10 (Chemical Bonding) &amp; Topic 11 (Gases)</td>
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<td>11/5 - 11/7</td>
<td>Topic 11 (Gases)</td>
<td><strong>Quiz #4 (Topic 10) / Topic 11 (Gases)</strong></td>
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<tr>
<td>11/12 - 11/14</td>
<td><strong>No Lecture - Veterans' Day</strong></td>
<td>Topic 12 (Liquids &amp; Solids)</td>
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<td>11/19 - 11/21</td>
<td><strong>Quiz #5 (Topic 11) / Topic 12 (Liquids &amp; Solids)</strong></td>
<td>Topic 13 (Solutions)</td>
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<tr>
<td>11/26 - 11/28</td>
<td><strong>Quiz #6 (Topic 12) / Topic 13 (Solutions)</strong></td>
<td>Topic 14 (Acids &amp; Bases)</td>
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<tr>
<td>12/3 - 12/5</td>
<td><strong>Exam #3 (Topics 10-13)</strong></td>
<td>Topic 14 (Acids &amp; Bases)</td>
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<tr>
<td>12/10 - 12/12</td>
<td><strong>Quiz #7 (Topic 14)</strong></td>
<td><strong>No Lecture - Study for Final Exam!</strong></td>
</tr>
<tr>
<td><strong>FINAL</strong></td>
<td><strong>Final Exam (Topics 1 - 14) --- Monday, December 17, 2012 5:00 pm - 7:00 pm</strong></td>
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<tr>
<td>Dates</td>
<td>Monday Laboratory</td>
<td>Wednesday Laboratory</td>
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<tr>
<td>8/20 - 8/22</td>
<td>Safety / Check-In / Expt #13</td>
<td>Safety / Check-In / Expt #13</td>
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<tr>
<td>8/27 - 8/29</td>
<td>Experiment #2 / Workshop #1</td>
<td>Experiment #2 / Workshop #1</td>
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<tr>
<td>9/3 - 9/5</td>
<td><strong>No Lab - Labor Day</strong></td>
<td>Experiment #3 / Workshop #2</td>
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<tr>
<td>9/10 - 9/12</td>
<td>Experiment #3 / Workshop #2</td>
<td>Experiment #1&amp;16 / Workshop #3&amp;5</td>
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<tr>
<td>9/17 - 9/19</td>
<td>Experiment #1&amp;16 / Workshop #3&amp;5</td>
<td>Experiment #19</td>
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<td>9/24 - 9/26</td>
<td>Experiment #19</td>
<td>Experiment #6 / Workshop #4 (Skip Synthesis &amp; Decomp)</td>
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<tr>
<td>10/1 - 10/3</td>
<td>Experiment #6 / Workshop #4 (Skip Synthesis &amp; Decomp)</td>
<td>Experiment #7&amp;8 / Workshop #7</td>
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<tr>
<td>10/8 - 10/10</td>
<td>Experiment #7&amp;8 / Workshop #7</td>
<td><strong>Only Honors Lab Meets Today</strong></td>
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<td>10/15 - 10/17</td>
<td>Experiment #20 / Workshop #8</td>
<td>Experiment #20 / Workshop #8</td>
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<tr>
<td>10/22 - 10/24</td>
<td>Mini-Rept #1 Due/Expt #4&amp;15/Wkshp #6</td>
<td>Mini-Rept #1 Due/Expt #4&amp;15/Wkshp #6</td>
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<tr>
<td>10/29 - 10/31</td>
<td>Mini-Report #2 Due / Experiment #14</td>
<td>Mini-Report #2 Due / Experiment #14</td>
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<tr>
<td>11/5 - 11/7</td>
<td>Experiment #10</td>
<td>Experiment #10</td>
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<tr>
<td>11/12 - 11/14</td>
<td><strong>No Lab - Veterans' Day</strong></td>
<td>Experiment #11 / Workshop #9</td>
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<tr>
<td>11/19 - 11/21</td>
<td>Experiment #11 / Workshop #9</td>
<td>Mini-Report #3 Due / Experiment #5</td>
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<tr>
<td>11/26 - 11/28</td>
<td>Mini-Report #3 Due / Experiment #5</td>
<td>Mini-Rept #4 Due / Expt #12 / Wkshp #10</td>
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<tr>
<td>12/3 - 12/5</td>
<td>Mini-Rept #4 Due / Expt #12 / Wkshp #10</td>
<td>Mini-Rept #5 Due / Expt #9 / Wkshop #11</td>
</tr>
<tr>
<td>12/10 - 12/12</td>
<td>Mini-Rept #5 Due / Expt #9 / Wkshop #11</td>
<td><strong>No Lab - Study for Final Exam</strong></td>
</tr>
<tr>
<td><strong>FINAL</strong></td>
<td>*<strong>Mini-Report #6 Due at Final Exam (Monday, December 17)</strong></td>
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