Course: Preparatory Chemistry


e-text and online tutoring, exercises, homework and quizzes can be found at
http://www.masteringchemistry.com/

Course Code TIRRICHEM103SPRING2014

Please use your RebelMail account when registering for MasteringChemistry.

IMPORTANT COST SAVING TIP!!!!

This semester, CHEM 103 (1001) will be accessing learning exercises, homework and on line quizzes using the
MasteringChemistry website. The campus bookstore is selling a new “Timberlake & Timberlake” 4th edition text bundled
with MasteringChemistry access for $131.35. A used book without MasteringChemistry access has a price of $98.50,
however, with the separate on line purchase of MasteringChemistry, $66.00, you will pay more ($164.50) than you
would for the bundled software/new book combination.

You may purchase both access to 1) the site for homework and on line quizzes, and 2) the eText for a total of $110.00,
but the eTEXT is NOT a course requirement. As an option, any used edition of this book may be used for the course.
The chapters may be numbered differently in the different editions but the contents of each chapter will be essentially the
same. Therefore if you can purchase a used text of “Timberlake & Timberlake” for $30 or less, you can then purchase
access to MasteringChemistry at its online web site and save. Otherwise, purchase of MasteringChemistry and the
eTEXT will be the most cost effective option. The choice is yours.

Lecture: Section 1001: MW 2:30 PM – 3:45 PM CBC A108

Instructor: Dr. Larry Tirri

Office: CHE 218

Office Hours: Open Door Policy Whenever my office door is open, typically between 10 am and 2 pm (see schedule
posted on my office door). Additionally, on W at 12:00 and Th at 1:00 office hours will be held in CHE 109,
the Chemistry Department Learning Center.

Phone: 895-4281

E-mail: Primary larry.tirri@unlv.edu

Course Description & Purpose:

Chemistry 103 (3 credits) is designed for students who wish to qualify for Chemistry 121. Credit is not
allowed for both CHEM 103 and 110. The course does not satisfy the General Education Core Science
Requirement.

Corequisites:

Enrollment in MATH 096 or placement in MATH 124 or higher. Math skills are critical for your success.

Course Web Page:

https://webcampus.unlv.edu/ is the current log in page for Blackboard Learn, the new UNLV WebCampus
course management tool. Students will login using your RebelMail prefix and your initial password is your
date of birth in the MMDDYYYY format. First time users can change your password once you log in. For
assistance, please call the student help line – 895-0761.
Learning Objectives:
The learning objectives of this course include mastery of the following topics/concepts:
* Understand the mechanics of unit conversions and the limitations of measured quantities due to uncertainty
* States of Matter
* Structure of atoms
* Bonding and Molecular Structure
* Formulas and Names of Covalent and Ionic Compounds
* The meaning of chemical formulas and balanced chemical equations
* Chemical calculations - stoichiometry, gases & solutions
* Gas Laws
* Solutions - Qualitative and Quantitative
These topics are covered in Chapters 2-12 in the text.

Additionally, this course begins or expands each student’s learning experiences relative to the established University Undergraduate Learning Outcomes, most significantly, “Intellectual Breadth and Lifelong Learning and Inquiry and Critical Thinking”. (See [http://generaled.unlv.edu/uulo.html](http://generaled.unlv.edu/uulo.html))

Necessities:
- A scientific or graphing calculator will be required, no other electronic device, including cell phones or other devices that can connect with the internet will be allowed.
- An alert state of mind will be most helpful.
- A sense of humor will be appreciated by everyone.

PLEASE TURN OFF YOUR CELLULAR PHONES AND PAGERS DURING CLASS.

Expectations:
1. Students are expected to attend every class.
2. If you are absent from class, regardless of the reason, you will be responsible for the material covered. However, there will be no make up participation activities. Make-up exams may be given under special circumstances. Students absent for an exam will be required to submit a written request for a makeup exam to Dr. Tirri within 2 calendar days of the exam. The written request will provide the reason for the absence and the student will be required to provide documentation upon request. Notification prior to the exam will be appreciated, but will not be considered as a request unless it specifically makes such request in writing (email is acceptable).
3. If you have a documented disability that may require accommodations, you will need to contact the DRC for the coordination of services. The DRC is located in the Student Services Complex (SSC), Room 137, and the contact numbers are: Voice (702) 895-0866, TTY (702) 895-0652, fax (702) 895-0651. For additional information, please visit: [http://studentlife.unlv.edu/disability/](http://studentlife.unlv.edu/disability/).
4. Class participation and questions will be welcome. However, please be courteous and respectful of others during discussions and question / answer sessions. Inappropriate or rude behavior will not be tolerated and that includes texting or surfing the net or talking to other students. You may be asked to leave the classroom.
5. Complete homework assignments and quizzes on time.

Policy:
1. This course will be composed of lectures, homework (see assignments in online Mastering Chemistry), and on-line quizzes accessible through Mastering Chemistry, three – semester exams, and a final exam. See the tentative class calendar.
2. Generally, quizzes will be worth 10 points each and cover the concepts discussed in class. There will be no make-up quizzes given. The highest ten quiz scores will be used when computing quiz averages, and normalized to 100%, potentially contributing up to 100 points earned toward your semester point total.
3. Each of the three semester exams [100 points each] will be timed for about 70 minutes. Should the dates for the exams change, however unlikely, ample notice will be given. A make up exam may be given only for special circumstances and when requested in writing (see above).
4. The three exam scores and quiz average will contribute up to 400 points [approx. 61.6%] toward your point total.
5. Points earned for Learning Exercises and Homework Assignments on the Mastering Chemistry website and any homework assignments submitted in class will be totaled and normalized to 100 points [15.4%] and contribute up to 100 points toward your total points earned for the semester.

6. The topics covered in this course form the foundation for future topics. Thus all of the material is cumulative and each exam may have questions for which you will need to draw upon information covered by previous chapters or exams. The final exam will be cumulative, covering the entire course. You must take the final exam to pass this course. It will contribute 150 points [23%] toward your point total.

7. Homework Assignment and quiz scores will be posted in MasteringChemistry. Exam scores will be posted in UNLV WebCampus. Since I will be keeping exams on file, after each exam you may come to my office to view your exam and go over questions and problems. At that time I will discuss with you your scores and grade estimate. I will NOT post mid semester grades in MyUNLV since I will be meeting with each student.

8. I will arrange for 10 minute meetings with students on an appointment basis. A schedule for appointments will be posted outside my office so you can stop by and sign up in any available time slot that fits with your time schedule. Special appointments can be arranged outside of the posted appointment slots for those students having class or work conflicts.

9. Your Final Course Grade will be a letter grade (no S/F grade). Your final grade score will be based upon total points earned (650). The following grading scale will be used as a starting point to assign letter grades. The grading scale will never be raised but at my discretion may be lowered (to the advantage of the class) at the end of the semester.

<table>
<thead>
<tr>
<th>Points</th>
<th>650.0 -</th>
<th>591.5 -</th>
<th>578.5 -</th>
<th>565.4 -</th>
<th>565.4 -</th>
<th>519.9 -</th>
<th>506.9 -</th>
<th>493.9 -</th>
<th>484.4 -</th>
<th>435.4 -</th>
<th>422.4 -</th>
<th>370.4 –</th>
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<tr>
<td>%</td>
<td>100-</td>
<td>91.00</td>
<td>89.00</td>
<td>88.99</td>
<td>88.99</td>
<td>86.99</td>
<td>80.00</td>
<td>79.99</td>
<td>77.99</td>
<td>75.99</td>
<td>68.99</td>
<td>66.99</td>
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<tr>
<td>Grade</td>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D+</td>
<td>D</td>
<td>F</td>
<td></td>
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</table>

10. The “15 minute rule” will prevail. If for any reason your instructor cannot make a class or appointment and you have waited 15 minutes, then you may assume that the class or appointment has been cancelled and will be rescheduled at a later time.

11. You must register in the WebCampus part of the class, because grades, supplemental assignments, announcements and discussions will be posted on the site. Registering for WebCampus will be covered during the first and second class of the semester.

12. You must also register in the Mastering Chemistry online program at the following web address: [http://www.masteringchemistry.com/](http://www.masteringchemistry.com/) to complete and submit homework and quizzes.

13. Cellular phones and pagers must be turned to OFF or SILENT while in class and not be used in class for surfing, texting or any other purpose.

Tips for Success:

1. Attend ALL lectures. Take all quizzes and exams. Complete all homework assignments on time.

2. **KEEP UP** with the concepts presented in class. Study as often as possible, at least several times each week. A typical rule of thumb is to devote two hours of study for each hour of lecture. **CHEMISTRY IS CUMULATIVE!** The concepts we learn this week will build on those we covered in past weeks. If you did not understand the concept the first time it is covered, you need to put in additional effort to learn it, either on your own, or come in for additional help during office hours. Unlike other courses, you can’t skip over concepts, if you don’t learn the concept now, you will have continued difficulty with future concepts and doing well on future exams. Don’t be afraid to ask for help. It is available for the asking. To not know or understand something is ok, because you can get help and learn it. BUT to not ask for help, especially when it is offered, is just plain foolish. If you get stuck, get help! Bring your notes or attempted work on solving practice problems with you and together we will get you back on track. Get help ASAP, do not wait until a day or two before an exam to ask for help. Help may not be available at that time.

3. The purpose of the online exercise problems and homework is to allow you to practice the kinds of questions that will help you gauge your understanding of the concepts covered in lecture. The assigned problems are the minimum number of problems that you should work in order to master the course concepts. You may find that some exam questions may be similar to these problems while some questions will be worded differently, although cover the same topics and concepts.

4. Check out the textbook web page found at [http://www.masteringchemistry.com/](http://www.masteringchemistry.com/) if you purchased access to the e-text, otherwise work with your printed text.
5. If possible, study with others outside of class. Form a study group, there is great strength in numbers. Working with others can be very helpful if each member of the group takes a turn to explain a concept. To explain a concept, you must first understand the concept. Explaining concepts helps the person doing the explaining by re-enforcing their own understanding. In addition, groups are welcome during office hours. If many students in the class are having difficulty, it would be more appropriate to review the concept during lecture or during a special group study session outside of scheduled lectures.

6. You may find studying with a tutor to be helpful. One on one attention may work better for you than working with a group. You can meet with tutors at the Chemistry Department Learning Center in CHE 109 (free). The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex, #22 on the current UNLV map. Students may learn more about tutoring services by calling (702) 895-3177 or visiting the tutoring web site at: http://academicsuccess.unlv.edu/tutoring/.

Academic Dishonesty:

Cheating will not be tolerated in this course. See the policies and other information regarding student conduct located at: http://studentconduct.unlv.edu/.

Lecture:

As stated above, attendance at lectures is essential and expected. You are responsible for all announcements and concepts covered in lecture including information not covered in the textbook or lecture notes, but presented during class lectures. During lecture, concepts will be presented, and animations/movie clips and demonstrations may be shown. You will be provided an opportunity to begin to practice your new skills both individually and perhaps through some group activities. To get the most out of lecture, read the chapters and/or suggested pages in your text before coming to lecture. Study tip: After lecture, read the text again along with your notes and work the relevant end of chapter problems and those assigned in Mastering Chemistry.

Homework Problems:

A list of assigned homework problems will be found within the Mastering Chemistry Program Web Site.

Office Hours:

Generally whenever my office door is open, typically between 10 am and 2 pm.

OPEN DOOR POLICY  If my office door is open, stop by and ask if I am available for questions. Generally I will be available immediately or within a few minutes to complete the task at hand. Additionally, on W at 12:00 and Th at 1:00 office hours will be held in CHE 109, the Chemistry Department Learning Center. Although a recitation section is not officially scheduled, you may consider office hours and visits to the Learning Center in CHE 109 to be a recitation section. Office hours are for your benefit. It is a time where you can seek help, discuss concepts, develop better understanding of topics.

Privacy Issues:

In compliance with FERPA (Family Educational Rights and Privacy Act see www.unlv.edu/registrar/ferpa ) grades, quiz and exam scores, and class standings will only be discussed with students during face to face meetings. Students may be asked to provide photo identification, i.e., UNLV ID or other government issued photo ID. Please do not request such information to be shared by telephone or email. Friends of students, parents or guardians requesting such information or a meeting will be referred to the above web page.

Religious Holidays Policy:

Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes, February 4, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. This policy shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship on the instructor or the university that could not reasonably been avoided. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=4&navoid=164.
# Tentative Class Calendar Spring 2014

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Text Chpt</th>
<th>Chapter Titles</th>
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<tbody>
<tr>
<td>1</td>
<td>20-Jan</td>
<td>MLK Recess</td>
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<tr>
<td></td>
<td>22-Jan</td>
<td>1</td>
<td>Introduction, Syllabus, iClickers, Element Symbols p 95</td>
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<tr>
<td>2</td>
<td>27-Jan</td>
<td>2</td>
<td>Measurements</td>
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<tr>
<td></td>
<td>29-Jan</td>
<td>2</td>
<td>Measurements</td>
</tr>
<tr>
<td>3</td>
<td>3-Feb</td>
<td>2 &amp; 3</td>
<td>Measurements / Matter &amp; Energy</td>
</tr>
<tr>
<td></td>
<td>5-Feb</td>
<td>3</td>
<td>Matter &amp; Energy</td>
</tr>
<tr>
<td>4</td>
<td>10-Feb</td>
<td>3 &amp; 4</td>
<td>Matter &amp; Energy / Atoms &amp; Elements</td>
</tr>
<tr>
<td>12-Feb</td>
<td>4 &amp; 5</td>
<td>Atoms &amp; Elements / Electronic Structure</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>17-Feb</td>
<td>Presidents Day Recess</td>
<td></td>
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<tr>
<td></td>
<td>19-Feb</td>
<td>Exam 1</td>
<td>Chapters 1, 2, 3, 4</td>
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<tr>
<td>6</td>
<td>24-Feb</td>
<td>5</td>
<td>Electronic Structure &amp; Periodic Trends</td>
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<tr>
<td></td>
<td>26-Feb</td>
<td>5 &amp; 6</td>
<td>Electronic Structure / Names &amp; Formulas</td>
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<tr>
<td>7</td>
<td>3-Mar</td>
<td>6</td>
<td>Names and Formulas</td>
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<td></td>
<td>5-Mar</td>
<td>7</td>
<td>Chemical Quantities</td>
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<tr>
<td>8</td>
<td>10-Mar</td>
<td>7</td>
<td>Chemical Quantities</td>
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<tr>
<td></td>
<td>12-Mar</td>
<td>7 &amp; 8</td>
<td>Chemical Quantities &amp; Chemical Reactions (Mid-Semester)</td>
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<tr>
<td>9</td>
<td>24-Mar</td>
<td>8</td>
<td>Chemical Reactions</td>
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<tr>
<td></td>
<td>26-Mar</td>
<td>Exam 2</td>
<td>Chapters 5, 6, 7</td>
</tr>
<tr>
<td>10</td>
<td>31-Mar</td>
<td>8 &amp; 9</td>
<td>Chemical Reactions &amp; Chemical Quantities in Reactions</td>
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<tr>
<td></td>
<td>2-Apr</td>
<td>9</td>
<td>Chemical Quantities in Reactions</td>
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<tr>
<td>11</td>
<td>7-Apr</td>
<td>9</td>
<td>Chemical Quantities in Reactions</td>
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<td></td>
<td>9-Apr</td>
<td>10</td>
<td>Molecular Structure: Solids &amp; Liquids</td>
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<tr>
<td>12</td>
<td>14-Apr</td>
<td>10</td>
<td>Molecular Structure: Solids &amp; Liquids</td>
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<tr>
<td></td>
<td>16-Apr</td>
<td>10 &amp; 11</td>
<td>Molecular Structure: Solids &amp; Liquids &amp; Gases</td>
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<tr>
<td>13</td>
<td>21-Apr</td>
<td>11</td>
<td>Gases</td>
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<tr>
<td></td>
<td>23-Apr</td>
<td>11</td>
<td>Gases</td>
</tr>
<tr>
<td>14</td>
<td>28-Apr</td>
<td>11 &amp; 12</td>
<td>Gases &amp; Solutions</td>
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<tr>
<td></td>
<td>30-Apr</td>
<td>Exam 3</td>
<td>Chapters 8, 9, 10, 11</td>
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<tr>
<td>15</td>
<td>5-May</td>
<td>12</td>
<td>Solutions</td>
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<tr>
<td></td>
<td>7-May</td>
<td>12</td>
<td>Solutions &amp; Final Review (Comprehensive)</td>
</tr>
<tr>
<td>15-May</td>
<td>Section 001 MW</td>
<td>Final Exam 3:10 - 5:10 PM</td>
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Mar 14: Mid-Semester  
Mar 17 – 22: Spring Break

Class Calendar Schedule is subject to change as needed.

Apr 4: Final day to drop or withdraw from classes without a refund or change from credit to audit, except for modular classes. Drops and withdrawals will not be allowed after this date even with instructor approval.

Final exam schedule can be found at  