Preparation for Chemistry

Instructor: Dr. Tracy Terry  Office A102a  tjterry@unm.edu
Lecture: Th 10:30-11:45 am in Academics 127
Tutoring Hours: M/Tu 2 pm – 4 pm (STEM Center)  Wed 1pm – 4pm (Office A102a)

Course Description
This course is designed to prepare students to succeed in physical science courses through extensive use of online algebra homework (ALEKS) as well as in-class practice with problem solving and study skills.

REQUIRED Resources
• ALEKS access code. This code will last through Chem121/122 if taken in sequence.
• Calculator with log/antilog and exponential functions
• Internet Access: Blackboard Learn and UNM email address must be checked regularly.

Recommended Resources
• 1 in 3-ring binder for lecture print outs and notes, and pen/pencil for note-taking.
• ALEKS notebook: record important concepts and problems you need to get help with, problems you need to repeat.
• Chemistry: A Molecular Approach by Nivaldo Tro, 3rd Ed. This text will be used in Spring 2016 for Chem121. It is not a bad idea to go ahead and purchase a copy. There are also copies on reserve in the UNM-V library and STEM Center.

Additional Resources at UNM-VC
• Instructor – contact through STEM Center tutoring hours, office hours, or email
• The Learning Center
  o Individual tutoring from advanced students
  o Study group meeting space
  o Computers
• The STEM Center
  o Individual tutoring from instructors and advanced students
  o Laptops
  o Textbooks

Reminder: When using tutors, it is the students’ responsibility to make sure they understand well enough to complete the problems on their own.

Equal Access
If you have a documented disability, please provide your instructor with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner.
Quantifiable Student Course Objectives:

1. Understand and apply the Scientific Method to answer questions and test hypotheses.
2. Use the metric system to describe physical measurements.
3. Apply algebraic rules to solve mathematical word problems using unit conversions.
4. Apply algebraic rules to solve problems in Scientific Notation.
5. Develop study skills related to studying physical science textbooks and apply them to new topics.
   a. Read and take notes effectively on new topics.
   b. Practice sample problems from the textbook.
   c. Use the textbook provided study guides.
6. Develop exam preparation skills and apply them to new topics.
   a. Identify important topics.
   b. Create study guides.
   c. Create exam ‘cheat sheets’ (3x5” index cards of notes)

Global Course Objectives:

1. Increased confidence in applied math and science courses.
2. Become more effective at applying scientific concepts and principles to problem solving in the natural world.

Grading

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>ALEKS – 30% Final Assessment Level, 20% Homework Completion Level</td>
</tr>
<tr>
<td>30%</td>
<td>Classroom Quizzes</td>
</tr>
<tr>
<td>20%</td>
<td>Cumulative Final Exam</td>
</tr>
</tbody>
</table>

Grades: >80% = Credit, <80% = No Credit

Where to get help

• Ask questions in class. During lecture, ask the instructor, during activities ask your teammates, the instructor, or the tutor.
• Attend office hours and STEM Center hours held by the instructor. The instructor is your #1 source for course information.
• Visit tutoring centers. Both the Learning Resource Center and the STEM Center are located down the hall from the library and have chemistry tutors available. You may make appointments with specific tutors.
• Email the instructor at tjterry@unm.edu. If you do not receive a reply within 48 hours, send a reminder email. Your original email could have gotten lost.

General Campus Policy Reminder

Academic Honesty

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.
Course Expectations
• You are expected to bring a scientific calculator, pen/pencil, and paper to each class.
• If you miss lecture, watch classroom capture and ask another student for help filling in the notes.
• If you miss a quiz, you MUST make arrangements to make it up before the next class session. The questions on make-up quizzes will not be the same and may be more difficult than the regular quiz.
• Classroom behavior is expected to be professional and respectful of other students and the instructor:
  o Arrive on time
  o Do not distract your classmates or the instructor away from the material
  o Actively participate in discussions and working groups
• Attendance in lecture is mandatory. You may be dropped from the course without notice for >1 unexcused absences. Contact the instructor if you must miss a class. (No excuses necessary.)
• Students are responsible for all assignments regardless of attendance. You may submit an assignment via email or to the Academic Affairs Office on the due date for full credit.
• The UNM Blackboard Learn system will be used for class announcements, handouts, and assignments. Keep your contact information up to date and check the course page often.
• NO CELL PHONES MAY BE USED DURING QUIZZES OR EXAMS. Phone or tablet (ie, iPad) use, for any reason, during quizzes or exams will be considered cheating and you will receive zero credit for the entire assignment.

ALEKS Homework
• Computers with updated internet browsers and plug-ins are advised.
• The Learning Center and the STEM Center have computers that will be updated throughout the semester.
  o If you have trouble with these computers, notify your instructor immediately.
• Keep your home computers/laptops updated. Check the system requirements through the ALEKS website.
• Take notes on problems that you have trouble with. Get help from your instructor, tutors, or classmates.

Quizzes
• If you miss a quiz, you MUST make arrangements with the instructor to make it up before the next class session. The questions on make-up quizzes will not be the same and may be more difficult than the regular quiz.
• You are expected to bring a calculator with log/anitlog/exponential functions for each quiz.
Cheating on quizzes is taken very seriously and results in automatic and immediate failure of the course.
<table>
<thead>
<tr>
<th>WEEK</th>
<th>CHEM 115 Classroom Topics</th>
<th>ALEKS Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Oct 15</td>
<td><strong>Introduction</strong>: Syllabus, Expectations ALEKS</td>
<td>Log in and take placement inventory during class.</td>
</tr>
<tr>
<td>10 Oct 22</td>
<td>Problem Solving – Dissecting word problems &amp; Unit conversions</td>
<td></td>
</tr>
<tr>
<td>11 Oct 29</td>
<td><strong>Problem Solving Quiz</strong> Thinking Scientifically – The Scientific Method</td>
<td></td>
</tr>
<tr>
<td>12 Nov 05</td>
<td><strong>Scientific Method Quiz</strong> Textbook – Reading the textbook actively</td>
<td>Continue to work through the ALEKS assignments as indicated online in the ALEKS system.</td>
</tr>
<tr>
<td>13 Nov 12</td>
<td><strong>Textbook Quiz: Section TBD</strong> Taking Exams – The index card</td>
<td></td>
</tr>
<tr>
<td>14 Nov 19</td>
<td><strong>Index Card Quiz: Section TBD</strong> Word Problems Revisited</td>
<td></td>
</tr>
<tr>
<td>15 Nov 26</td>
<td><strong>Thanksgiving – no class</strong></td>
<td></td>
</tr>
<tr>
<td>16 Dec 03</td>
<td><strong>Word Problems Quiz</strong> Review</td>
<td><strong>Final Exam TBD</strong></td>
</tr>
</tbody>
</table>

Dates are subject to change. Any changes will be discussed in class and posted onto Blackboard Learn with a revised schedule. Sign in to ALEKS for online homework assignments and due dates.