1. COURSE TITLE, NUMBER, AND SECTION:
   General Chemistry I, CHEM 1411-302
   Lecture Mon-Fri       9:30 – 11:30 AM               Room:  S209
   Lab: Mon-Fri              11:40 AM – 1:35 PM       Room : S226

2. INSTRUCTOR INFORMATION
   INSTRUCTOR:   Dr. Lee Jennings
   Email: lee.jennings@blinn.edu  Preferred method of contact.
   Office Hours:   Thur: 9:00 – 9:30 AM and Fri: 9:00 - 9:30 AM
   Office:   S117

3. COURSE DESCRIPTION:
   CHEM 1411 consists of the study of fundamental laws, theories and concepts of chemistry including
   quantitative relationships involving mass and energy, the structure and properties of matter and the
   chemical and physical changes it undergoes as well as the study of solutions. The laboratory component
   involves the application of the basic techniques and methods of chemical experimentation. Twenty class
   hours and twenty laboratory hours per week for four weeks. Credit: Four semester hours.

4. PREREQUISITE:
   MATH 1314 or 1414 with a grade of “C” or higher or an SAT math score of 550 or higher or a ACT math
   score of 22 or higher.

5. CORE CURRICULUM COURSE:
   This is a course in the 42-hour Core Curriculum of Blinn College. As such, students will develop
   proficiency in appropriate intellectual competencies, exemplary educational objectives and general
   perspectives. The URL of the Blinn College core curriculum web site is:
   http://www.blinn.edu/corecurriculum/42hourcore.htm

6. STUDENT LEARNING OUTCOMES:
   After completing this course, you will be able to:
   1. Define the fundamental properties of matter.
   2. Classify matter, compounds, and chemical reactions.
   3. Determine the basic nuclear and electronic structure of atoms.
   4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
   5. Describe the bonding in and the shape of simple molecules and ions.
   7. Write chemical formulas.
   8. Write and balance equations.
   9. Use the rules of nomenclature to name chemical compounds.
   10. Define the types and characteristics of chemical reactions.
   11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
   12. Determine the role of energy in physical changes and chemical reactions.
   13. Convert units of measure and demonstrate dimensional analysis skills.

   Learning Outcomes for Lab
   1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
   2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
3. Conduct basic laboratory experiments with proper laboratory techniques.
4. Make careful and accurate experimental observations.
5. Relate physical observations and measurements to theoretical principles.
6. Interpret laboratory results and experimental data, and reach logical conclusions.
7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
8. Design fundamental experiments involving principles of chemistry.
9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

7. REQUIRED TEXTBOOKS AND MATERIALS:
*General Chemistry 1411 Laboratory* Manual by Beverly Clement, 2nd edition, 2011
Safety glasses with side shields
Non programmable calculator. Scientific or graphing calculator is acceptable.
Homework: Mastering Chemistry, (www.masteringchemistry.com) an online tutorial and homework companion to the textbook. The access code is packaged with the textbook or may be purchased at www.masteringchemistry.com. Course name: CHEM1411JENNINGS.

8. OUTLINE OF THE COURSE CONTENT AND SCHEDULE:
See attached schedule. Schedule is subject to change but changes will be communicated both in class and via email.

9. CIVILITY STATEMENT:
Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others. Civility applies to attire as well as language, behavior, and cell phone usage. Please dress appropriately for the academic classroom and laboratory.

10. CIVILITY NOTIFICATION STATEMENT:
If a student is asked to leave the classroom or have access to the online classroom denied because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor. It is the student’s responsibility to arrange for this conference.

11. COURSE REQUIREMENTS
Homework is a requirement. There will be 4 assignments due during the semester worth 5 points each. Homework collection and grading will be handled by the online Mastering Chemistry website. A code must be purchased in order to access this system. Further instructions and due dates are given at the website: www.masteringchemistry.com.

Exams are a requirement. There will be 4 exams worth 100 points each about as indicated in the attached schedule. Each of the exams will include all of the material covered through that stage of the course, i.e., all exams are comprehensive. The lowest of the four exam grades will be dropped. Format of the exams will vary. Make up exams will be allowed in exceptional situations at my discretion, but only if taken before the graded exam is returned to the class. The final exam is comprehensive, all multiple-choice and worth 150 points.
Laboratory Experiments are a requirement. The laboratory portion of this course counts for 25% of the total course grade. You will be graded on the lab report that you turn in which will consist of Pre-Lab Questions, In-Lab Guidelines, Post-Lab Report, and Post-Lab questions. One lab may be turned in late for full credit.

Quizzes are a requirement. There will be three quizzes given. Quizzes will be given at the beginning of Lecture. There will be no makeup offered for quizzes.

Eye protection in the laboratory is a requirement. Students are responsible for purchasing appropriate eye protection and wearing eye protection during laboratories. Appropriate eye protection for this class will be safety goggles or OSHA approved safety glasses with side shields.

12. EXAM CALENDAR:
See attached calendar.
The final exam will be given on Monday, July 2, 9:35 – 11:30 AM.

13. CRITERIA FOR GRADING AND DETERMINING FINAL GRADE:
Grades will be calculated in the following manner:
Lecture Points Possible:
  - Exams (4 exams @ 100 pts. ea.) 300 pts.
  - Comprehensive Final  150 pts.
  - Homework (10 @ 2 pts. ea.)    20 pts.
  - Quizzes (3 @ 10 pts each)    30 pts
  - Labs (10 @ 12 pts each)      120 pts
  - Total Course Points         620 pts.

The grading scale will be:
  - Course Grade ≥ 90 % = A
  - Course Grade ≥ 80 % = B
  - Course Grade ≥ 70 % = C
  - Course Grade ≥ 60 % = D
  - Course Grade < 60 % = F

14. BLINN COLLEGE POLICIES:
a. Attendance: The College District believes that class attendance is essential for student success; therefore, students are required to promptly and regularly attend all their classes. Each class meeting builds the foundation for subsequent class meetings. Without full participation and regular class attendance, students shall find themselves at a severe disadvantage for achieving success in college. Class participation shall constitute at least ten percent of the final course grade. It is the responsibility of each faculty member, in consultation with the division chair, to determine how participation is achieved in his or her class. Faculty will require students to regularly attend class and will keep a record of attendance from the first day of class and/or the first day the student’s name appears on the roster through final examinations. If a student has one week’s worth of unexcused absences (2 classes) during the semester, he/she will be sent an e-mail by the College requiring the student to contact his/her instructor and schedule a conference immediately to discuss his/her attendance issues. Should the student accumulate two week’s worth of unexcused absences (4 classes), he/she will be administratively withdrawn from class. There are four forms of excused absence officially recognized by Blinn College: (1) observance of religious holy days: The student should notify his/her instructor(s) not later than the
15th day of the semester concerning the specific date(s) that the student will be absent for any religious holy day(s); (2) representing Blinn College at an official institutional function; (3) official involvement in a high school activity for “dual credit” students; and (4) military service. Other excuses will be considered and may be considered excusable at the instructor’s discretion, with documentation. **Missing lecture or lab or both will count as one absence.**

**b. Dropping:** If a student chooses to drop the course, it is that student’s responsibility to complete a drop order at the Office of Enrollment Services. Failure to do so could result in a grade of F in the course. The last day to withdraw with a “Q” is Friday, Jun 22, 2012.

c. **Honor System:** Blinn College does not tolerate cheating, plagiarism, or other acts of dishonesty. Definitions of these acts and procedures for dealing with them are described in "Scholastic Dishonesty" in the Blinn College Student Handbook, copies of which are available at the information desk in the administration building. All tests will be closed book and notes. All students will remove hats and sunglasses before tests. Plagiarized work will be automatically given a zero and may be reported for disciplinary action.

d. **Electronic Device Policy:** All the functions of all personal electronic devices designed for communication and/or entertainment (cell phones, pagers, beepers, iPods, and similar devices) must be turned off and kept out of sight in all Blinn College classrooms and laboratories. Any noncompliance with this policy will be addressed in accordance with the Blinn College civility policy (Administrative Policy).

e. **Problem Resolution:** If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Chemistry Subject Coordinator, Mr. Thomas Jose, H252, thomas.jose@blinn.edu.

f. **Health Concerns:** Eating and drinking are not allowed in classrooms or laboratories.

g. **ADA Statement:** Blinn College is dedicated to providing the least restrictive learning environment for all students. Support services for students with documented disabilities are provided on an individual basis, upon request. Requests for services should be made directly to the Office of Disability Services serving the campus of your choice. For the Bryan campus, the Office of Disability Services (Administration Building) can be reached at (979) 209-7251. Additional information can be found at www.blinn.edu/disability. Accommodation is not retroactive from the time of concluding agreement for accommodation.

h. **Blinn Handbook:** The above requirements and policies are discussed more fully in the Blinn College Student Handbook which, by reference, is incorporated into this information. Blinn College Student Handbook is available online at http://www.blinn.edu/student%20handbook.pdf. Please obtain and read.
### Spring 2012 Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Lab Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Jun</td>
<td>Ch 1/2</td>
<td>Exp 1</td>
</tr>
<tr>
<td>5 Jun</td>
<td>Ch 2/3</td>
<td>Exp 2</td>
</tr>
<tr>
<td>6 Jun</td>
<td>Ch 3</td>
<td>Exp 3</td>
</tr>
<tr>
<td><strong>Unit 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Jun</td>
<td>Ch 3</td>
<td>Unit 1 review</td>
</tr>
<tr>
<td>8 Jun</td>
<td>Ch 4</td>
<td><strong>Unit 1 Exam</strong></td>
</tr>
<tr>
<td>11 Jun</td>
<td>Ch 4</td>
<td>Exp 4</td>
</tr>
<tr>
<td>12 Jun</td>
<td>Ch 5</td>
<td>Exp 5</td>
</tr>
<tr>
<td>13 Jun</td>
<td>Ch 5</td>
<td>Exp 6</td>
</tr>
<tr>
<td><strong>Unit 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Jun</td>
<td>Ch 6</td>
<td><strong>Unit 2 Review</strong></td>
</tr>
<tr>
<td>15 Jun</td>
<td>Ch 6</td>
<td><strong>Unit 2 Exam</strong></td>
</tr>
<tr>
<td>18 Jun</td>
<td>Ch 6</td>
<td>Exp 7</td>
</tr>
<tr>
<td>19 Jun</td>
<td>Ch 7</td>
<td>Exp 8</td>
</tr>
<tr>
<td>20 Jun</td>
<td>Ch 7</td>
<td>Exp 10</td>
</tr>
<tr>
<td><strong>Unit 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Jun</td>
<td>Ch 8</td>
<td><strong>Unit 3 Review</strong></td>
</tr>
<tr>
<td>22 Jun**</td>
<td>Ch 8</td>
<td><strong>Unit 3 Exam</strong></td>
</tr>
<tr>
<td>25 Jun</td>
<td>Ch 8</td>
<td>Exp 11</td>
</tr>
<tr>
<td>26 Jun</td>
<td>Ch 9</td>
<td>Exp 12</td>
</tr>
<tr>
<td>27 Jun</td>
<td>Ch 9</td>
<td>Ch 9</td>
</tr>
<tr>
<td>28 Jun</td>
<td>Ch 18</td>
<td><strong>Unit 4 Exam</strong></td>
</tr>
<tr>
<td>29 Jun</td>
<td>Ch 18</td>
<td>Final Exam Review</td>
</tr>
<tr>
<td>2 July</td>
<td></td>
<td>Final Exam</td>
</tr>
</tbody>
</table>