Class Syllabus  
Spring 2019  
CHE 133 002  
General Chemistry I

Name:  Dr. Alyx S. Frantzen  
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Email:  afrantzen@sfasu.edu  
Website:  www.faculty.sfasu.edu/  
Phone:  (936) 468-2338  
Office:  NM 119  
Office Hours:  MW 9:30-11:00 am; T 2:00-2:50 pm; T 3:00-3:50 pm; T 5:00-5:50 pm; by appointment  
Class Hours:  TR:  8:00-9:15am; TR 11:00-12:15 pm; T 2:00-2:50 pm; T 3:00-3:50 pm; T 5:00-5:50 pm; MW 11:00-12:15 pm; R 2:00-4:50 pm

Text and Materials:  
Calculator with scientific notation.

COURSE CALENDAR:  
Material will be covered in the following section order with approximate class time. Exam schedule is tentative.

1  Matter and Measurement (1 lecture)  
2  Atoms, Elements, Molecules, Ions, and Compounds (1.5 lectures)  
3  Chemical Formulas and Equations (1.5 lectures)  
Exam #1 February 10, 2019  

4  Chemical Reactions (3 lectures)  
10 Gases (2 lectures)  
Exam #2 March 10, 2019  

5  Thermochemistry (2 lectures)  
6  Electronic Structure (3 lectures)  
7  Periodic Properties of the Elements (2 lectures)  
8  Basic Concepts of Chemical Bonding (2 lectures)  
Exam #3 April 14, 2019  

9  Molecular Geometry and Bonding Theory (2 lectures)  
11 Liquids and Intermolecular Forces (1 lecture)  
12 Solids and Modern Materials (1 lecture)  
13 Properties of Solutions (1 lecture)  
Exam #4 May 5, 2019  

Comprehensive Final  -  May 14th 8:00-10:00 am
Grading Policy:

4-semester exams (100 points per exam): The exams will be given online through Mastering Chemistry. There will be an in class portion given on Tuesdays during the recitation period. The format of the online portion will be multiple choice. The in class portion will be nomenclature and word problems. You must show all work for credit on a problem.

Final Exam (100 points): The final will be on May 14, 2019, 8:00-10:00 am. The final exam is a comprehensive exam.

Homework (100 points): I will be assigning homework using Mastering Chemistry. You must have a subscription to complete the homework as well as the exams.

Method of Evaluation: The final grade will be based upon percentage of points obtained in the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>100pts</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100pts</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100pts</td>
</tr>
<tr>
<td>Exam 4</td>
<td>100pts</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100pts</td>
</tr>
<tr>
<td>Homework</td>
<td>100pts</td>
</tr>
<tr>
<td>Total</td>
<td>600pts</td>
</tr>
</tbody>
</table>

Grading scale - A= 90 - 100%; B= 80 - 89%; C= 70 - 79%; D= 60 - 69%; F= below 60%

Attendance Policy:

Attendance of class is mandatory. A total of four unexcused absences will result in the student being dropped from the class with a grade of "F". There will be no make-up exams. You are required to attend lecture recitation, Tuesday, 2:00-3:00pm, Math 202.

Academic Integrity (A-9.1):

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism. The University Policy can be found at: http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp

Any student found cheating will be subject to the penalties as stated in the Student Code of Conduct handbook; including but not limited to a score of zero on exam, expulsion from the class or expulsion from the University.
**Withheld Grades Semester Grades Policy (A-54):**
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.
The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Semester Withdrawals:** Last day to withdraw from the course without obtaining WP or WF grade is March 27th.

**Students with Disabilities:**
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Classroom Behavior Policy:**
To ensure a classroom environment conducive to learning, any forms of classroom disruptions will not be tolerated (examples but not limited to – talking, use of cell phones/beepers, sleeping, reading other material, eating/drinking). Students who violate these rules will be asked to leave. Repeat offenders will be subject to disciplinary action in accordance with University policies as described in the Code of Student Conduct. The student code of conduct can be found at: [http://www.sfasu.edu/policies/student-code-of-conduct-10.4.pdf](http://www.sfasu.edu/policies/student-code-of-conduct-10.4.pdf)

**Program Learning Outcomes:**
There are no specific program learning outcomes for this major addressed in this course. This course is a general education core curriculum course.

**General Education Core Curriculum Objectives:**
The Texas Higher Education Coordinating Board has identified six core learning objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills, Teamwork, Personal Responsibility, and Social Responsibility. SFA is committed to the improvement of its general education core curriculum by regular assessment of student performance on these six objectives. Although this chemistry course develops the first four core-learning objectives, it only submits assessment assignments to the University Core Assessment Committee every even spring for the teamwork general education core curriculum requirement. If this is an even spring semester, another, “shell” course has been created to collect student artifacts to meet this state requirement. You will see this course on your D2L list. During the even spring semester, you will receive an assignment in the laboratory portion of the course that fulfills both the requirements of the lab and the needs of Stephen F. Austin State University’s Core Curriculum Assessment Plan with the Texas Higher Education Coordinating Board. When you complete this one assignment, you need to upload the assignment to both the Chemistry dropbox and the Teamwork dropbox. Please note that this only applies to the
specific assignment listed in the matrix below. All other assignments should be submitted according to regular class operations. If you have any questions, please see your instructor or contact the University Assessment Specialist at (936) 468-1267 or jstringfield@sfasu.edu.

The chart below indicates the core objectives addressed by this course, the assignment(s) that will be used to assess the objectives in this course and uploaded to the D2L Teamwork dropbox this semester, and the date the assignment(s) should be uploaded to the D2L Teamwork dropbox. Not every assignment will be submitted for core assessment every semester. Your instructor will notify you which assignment(s) must be submitted for assessment in the D2L Teamwork dropbox.

<table>
<thead>
<tr>
<th>Core Objective</th>
<th>Definition</th>
<th>Date Due in D2L</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO 1 - Critical Thinking Skills</td>
<td>To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.</td>
<td>Skills developed in this course</td>
</tr>
<tr>
<td>CO 2 - Communication Skills</td>
<td>To include effective development, interpretation and expression of ideas though written, oral, and visual communication.</td>
<td>Skills developed in lab</td>
</tr>
<tr>
<td>CO 3 - Empirical and Quantitative Skills</td>
<td>To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.</td>
<td>Skills developed in this course</td>
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<tr>
<td>CO 4 - Teamwork</td>
<td>To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.</td>
<td>Skills developed and assessed in lab every even spring</td>
</tr>
</tbody>
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COURSE OBJECTIVE:
To provide students with an explanation of the basic concepts of chemistry and to apply these concepts to problem solving involving critical thinking.

STUDENT LEARNING OUTCOMES:
Upon completion of this course, the students are expected to
- apply chemistry concepts using critical thinking skills and the scientific method to analyze and evaluate information to reach conclusions within problem sets and lab experiments. (COs 1 & 3)
- use communication skills to demonstrate their interpretation and analysis of scientific data and express their ideas and thoughts to team members. (CO 2)
- apply logic, quantitative reasoning, and pattern recognition to analyze and evaluate numerical data/observable facts to reach conclusions within problem sets and lab experiments. (COs 1 & 3)
- demonstrate the ability to cooperate within groups to gather results of an experiment, analyze data, and draw conclusions using communication skills. (COs 2 & 4)