General Chemistry Laboratory CHE 1111
Laboratory
Summer I, 2021

Instructor: Dr. A.S. Frantzen  
Office: M 119
Phone: 468-2338  
e-mail: afrantzen@sfasu.edu
Office Hours: M and R, 10:00-11:00am; other times by appointment;

Instructor: Dr. J. B. Gary  
Office: M 116
Phone: (936) 468-2189  
e-mail: garyjb@sfasu.edu
Office Hours: T and W, 10:00-11:00am; other times by appointment;

CATALOG DESCRIPTION: Laboratory techniques and applications. Spectroscopy, quantitative experiments.

CO-REQUISITES: CHEM 1311

REQUIRED TEXTS AND OTHER MATERIALS: All required material will be posted on D2L.
Scientific Calculator


COURSE GOALS: Students will be exposed to basic laboratory skills via a Virtual Laboratory. Data will be collected and analyzed.

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. General Chemistry is a general education core curriculum course and fulfills the Teamwork general education core curriculum requirement. 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 this 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 General 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>Course Assignment Title</th>
<th>Date Due in LiveText</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></td>
<td>Not assessed 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></td>
<td>Not assessed in this course</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></td>
<td>Not assessed in this course</td>
</tr>
<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>Assessed in lab</td>
<td>See lab syllabus</td>
</tr>
<tr>
<td>CO 5 - Personal Responsibility</td>
<td>To include the ability to connect choices, actions and consequences to ethical decision-making.</td>
<td></td>
<td>Not assessed in this course</td>
</tr>
<tr>
<td>CO 6 - Social Responsibility</td>
<td>To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities.</td>
<td></td>
<td>Not assessed in this course</td>
</tr>
</tbody>
</table>

**STUDENT OUTCOME OBJECTIVES:**

Upon completion of this course students will:

- Understand and apply method and appropriate technology to the study of natural sciences.
- Recognize scientific and quantitative methods and the differences between these approaches and other methods of inquiry and to communicate findings, analyses, and interpretation both orally and in writing.
- Demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies.
- Demonstrate knowledge of the interdependence of science and technology and their influence on, and contribution to, modern culture.

**HOUR JUSTIFICATION:** This course is for 1 credit and spans 6 weeks. The course contains extensive content requiring students to prepare pre-laboratory purposes and procedure. Students have to prepare for laboratory by completing weekly pre-laboratory reading assignment and worksheets. Students are tested over the material via weekly laboratory reports, a comprehensive final exam, and/or weekly quizzes. These activities average at a minimum 4 hours of work each week to prepare outside of time spent engaging with the content.

**COURSE REQUIREMENTS:** Grading is on a 150 point scale. Each assignment experiment counts 10 points. The 2 lowest grades will be dropped. There will be 14 ‘lab assignments.’ Most will be associated with the Virtual Lab. The final exam is worth 30 points. The final exam is due on June 24, 2021. Failure to take the final will result in a failing grade for the course.

**COURSE CONTENT:** Please see attached schedule
**METHOD OF EVALUATION:**
Grading scale -  
A ≥ 135; B ≥ 120; C ≥ 105; D ≥ 90; F = below 90

**MAKE-UP/ATTENDANCE POLICY:** There will be no make-ups in this class. You need to make sure you are keeping up with the assignments and completing them by the due dates.

**ACADEMIC HONESTY POLICY:** 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 assignment, expulsion from the class or expulsion from the University. The University Policy can be found at: http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf.

**SEMESTER WITHDRAWALS:** Last day to withdraw from the course without obtaining WP or WF grade is June 20, 2021.

**ACADEMIC DISABILITIES POLICY:** Students with Disabilities—To obtain disability related accommodations and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, 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.

Instructor reserves the right to change the syllabus at any time.

**Online Lab**
All of the experiments we will be doing will be associated with the Virtual Laboratory Program you will find on D2L. You will be provided with instructions of how to access the Virtual Laboratory Program.

You will see the schedule for the assignments in the following table. The labs will open on given dates and then are due on given dates. Please make sure that you keep up with this schedule. After the first week, the labs will open on Friday and be due the following Friday. It is important that you keep up with these assignments. On the calendar, it also states what is due for the assignment; either uploading an assignment to Dropbox or a quiz. Please make sure you know which is due.

For each lab, you will find a set of written directions, with data tables and calculations to perform. These instructions can be found on D2L. You will find the schedule of labs on the next page that gives when you should finish the assignments. For each, you will need to download to Dropbox or do a quiz, both of which can be found on D2L. When we ask you to submit an assignment to Dropbox, the best way to do that is to do the assignment, scan it, and upload a PDF. We understand if you must use an alternate method, but the PDF is the easiest for us to work with and grade.

For the Quizzes, they will consist of questions/calculations that are associated with the specific lab experiment. We have these set to be graded by D2L, but we go through and review all submissions to make sure that they are graded correctly. Please understand that this take additional time.

We have DUE DATES for every assignment. Please keep up with the assignments and submissions. If you fall behind, it becomes very difficult to catch up. You can work ahead if you want; we will, hopefully, have all the quizzes/dropboxes ready to go. The Final Exam will open on D2L at noon on June 23, 2021 and must be completed by midnight on June 24, 2021.

**ZOOM Information:**
Dr. Frantzen: https://sfasu.zoom.us/j/9734125921?pwd=ME11NEdNWUF0dVJCb2VILzVBaVRldz09
Meeting ID: 973 412 5921
Passcode: 382230

CHE 1111
Summer I, 2021
Drs. Frantzen, Gary
ZOOM Information:
Dr. Gary:
https://sfasu.zoom.us/j/95203697230?pwd=UWNkbGxwMmhxcmZNVUVpVGgzWXc1Zz09
Meeting ID: 952 0369 7230
Passcode: 696720
## Course Content:

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Activity</th>
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</thead>
</table>
| **May** | | **ZOOM Introduction, Invitation will be on D2L**  
Assignment Opens: Significant Figures Dry Lab, can be found on D2L |
| 17 | | Due by midnight: Assignment for Sig. Fig. Dry Lab, upload to Dropbox, Sig. Fig. |
| 20 | | Assignment Opens: Dimensional Analysis Dry Lab, can be found on D2L  
Assignment Opens: Counting Atom/Molecules/Protons/Neutrons/Electrons |
| 28 | | Due by midnight: Assignment for Dimensional Analysis Dry Lab, upload to Dropbox, Dimensional Analysis  
Assignment for Counting Atom/Molecules/Protons/Neutrons/Electrons, found on D2L under Course Tools, Quizzes |
| 28 | | Assignment Opens: Writing Names/Formulas  
Assignment Opens: Precipitation Reactions  
Assignment Opens: Concentrations |
| **June** | | Due by midnight: Assignment for Names/Formulas, upload to Dropbox, Names/Formulas  
Due by midnight: Assignment for Precipitation Reactions, upload to Dropbox, Prec. Rxns.  
Due by midnight: Assignment for Concentrations; Course Tools, Quizzes |
| 4 | | Assignment Opens: Predicting Equivalence Points  
Assignment Opens: Nomenclature Dry Lab  
Assignment Opens: Acid/Base Titration |
| 11 | | Due by midnight: Assignment for Predicting Equivalence Points, Course Tools, Quizzes  
Due by midnight: Assignment for Acid/Base, Course Tools, Quizzes  
Due by midnight: Assignment for Nomenclature Dry Lab, upload to Dropbox, Nom. |
| 11 | | Assignment Opens: Gas Laws  
Assignment Opens: Ideal vs. Real Gases  
Assignment Opens: Specific Heat of Al |
| 18 | | Due by midnight: Assignment for Gas Laws  
Due by Midnight: Assignment for Ideal vs. Real Gases; Course Tools, Quizzes  
Due by Midnight: Assignment for Specific Heat; Course Tools, Quizzes |
| 18 | | Assignment Opens: Hess’ Law  
Assignment Opens: Heat of Combustion/Heat of Reactions |
| 23 | | Final Opens: 12:00pm, Noon |
| 24 | | Due by Midnight: Final Exam; Course Tools, Quizzes  
Due by Midnight: Assignment for Hess’ Law; Course Tools, Quizzes  
Due by Midnight: Assignment for Heat of Combustion/Heat of Reactions; Course Tools, Quizzes |
SFASU values students’ mental health and the role it plays in academic and overall student success. SFA provides a variety of resources to support students mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**
SFASU Counseling Services  
[www.sfasu.edu/counselingservices](http://www.sfasu.edu/counselingservices)  
3rd Floor Rusk Building  
936-468-2401

SFASU Human Services Counseling Clinic  
[www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)  
Human Services Room 202  
936-468-1041

**Crisis Resources:**
Burke 24-hour crisis line 1(800) 392-8343  
Suicide Prevention Lifeline 1(800) 273-TALK (8255)  
Crisis Text Line: Text HELLO to 741-741