Course Syllabus
CHEM 1112
General Chemistry II Laboratory

Course Description:  Kinetics, spectrophotometry, quantitative/qualitative experiments.

Number of Credit Hours:  1 semester hour

Course Prerequisites and Corequisites:  Prerequisites: CHEM 1311/1111. Co-requisite: CHEM 1312.

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 and a service 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. Chemistry core courses only develop the first four core learning objectives: critical thinking, communication, empirical and quantitative, teamwork.

Course Objective:  To provide students with an explanation of the basic concepts, laws and theories of chemistry and to apply them to chemistry problems through a laboratory setting. The student will demonstrate basic laboratory techniques and be able to apply them in a practical chemistry setting.

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)

Outline of Topics (approximate course time):
Lab Safety (10%)
Chemical Safety (10%)
Solution Preparation (10%)
Reaction Kinetics (10%)
Equilibrium (10%)
Acids and Bases (10%)
Advanced Acids and Bases (10%)
Titration (10%)
Thermodynamics (10%)
Redox Reaction (10%)
Class Syllabus
Fall 2021
CHEM 1112
General Chemistry II Laboratory

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Student Hours: MWF 7:30-8:30
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T 1-2
And by appointment
Available in office or through Zoom
Zoom Link: https://sfasu.zoom.us/j/93909376629?pwd=cTQwWVIxYa03VER2b0gzNEpVM1JnZz09

Meeting Code: 939 0937 6629
PassCode: 158547

TEXT AND MATERIALS:

Students are expected to register with Labster and pay for the labs. You will purchase access to Labster by using a Credit or Debit card. A non-programmable, scientific calculator is required for the course. Communication for lab will be sent through SFA email.

Useful information:
1. Labster 101: Getting started with Labster

It is recommended that students go through the Brightspace by D2L to access the labs. During your first attempt to access the lab simulations in D2L, you will be prompted to purchase a license. The labs are placed in a “Simulation” folder in D2L within the “Content” tab.

COURSE REQUIREMENTS:

• Wet Labs – There will be 5 wet laboratories to be completed. Each is worth 15 points. The lowest Wet Lab will be dropped.
• Simulations – There will be 7 experiment simulations to be completed. Each is worth 10 points. The lowest Simulation will be dropped.
• Lab Practical Exam – There will be a Lab Practical given October 1st. There is only one opportunity to perform on the lab practical. The Lab Practical is worth 100 points.
Method of Evaluation: The final grade will be based upon percentage of points obtained in the following:

6 Simulations (10 pts each) - 60 pts  
4 Wet Labs (15 pts each) - 60 pts  
Lab Practical Exam - 100 pts  
Total 220 pts

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

COURSE CALENDAR:
This lab course is for 1 credit and typically requires 300 minutes a week for 7 weeks. Students have weekly reading and simulations to prepare for lab each week. Students are tested over the material via the Lab Practical. Students are expected to prepare prior to each lab (literature and concepts), conduct experiments, and report results. Students have required academic components and deliverables: report sheets for Wet Labs and grades for Simulations. These activities, inclusive of the lab expectations and academic components, average a minimum of 12 hours of work each week.

<table>
<thead>
<tr>
<th>Week start date</th>
<th>Lab Content</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Week 1 Aug 23</td>
<td>Wet Lab: Safety &amp; Using pH Paper</td>
<td>Aug. 27th during lab</td>
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<tr>
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<td>Simulation: Lab Safety</td>
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<td>Simulation: Chemical Safety: Hazard Symbols</td>
<td>Aug. 30th at midnight</td>
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<td>Week 2 Aug 30</td>
<td>Wet Lab: Guided Practice #1</td>
<td>Sept. 3rd during Lab</td>
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<td>Simulation: Solution Preparation: From salt to solution</td>
<td>Sept. 6th at midnight</td>
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<td></td>
<td>Simulation: Reaction Kinetics: The Essentials</td>
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<tr>
<td>Week 3 Sept 6</td>
<td>Wet Lab: Guided Practice #2</td>
<td>Sept. 10th during Lab</td>
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<td>Simulation: Equilibrium</td>
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<td>Simulation: Acids and Bases (Principles): Avoid falling in a lake of acid!</td>
<td>Sept. 13 at midnight</td>
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<td>Week 4 Sept 13</td>
<td>Wet Lab: Titration of an acid with a base</td>
<td>Sept. 17th during Lab</td>
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<td>Simulation: Advanced Acids and Bases</td>
<td>Sept. 20th at midnight</td>
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<tr>
<td>Week 5 Sept 20</td>
<td>Wet Lab: Titration of a base with an acid</td>
<td>Sep. 24th during Lab</td>
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<td>Simulation: Titration: Neutralize an acid lake contamination</td>
<td>Sept. 27th at midnight</td>
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<td>Week 6 Sept 27</td>
<td>Lab Practical</td>
<td>Oct. 1st during Lab</td>
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<tr>
<td>Week 7 Oct 4</td>
<td>Make-up</td>
<td>Oct. 8th during lab</td>
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ATTENDANCE POLICY:
Students must take the Lab Practical and attend at least 4 (of 5) Wet Labs. Students must complete all of the Simulations with at least a score of 5/10. The assignments (Simulations and Wet Labs) and the Lab Practical will be due during the assigned times unless other arrangements are approved by the instructor prior to the due date. There are no make-up activities for notifications given the day of the activity.
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.

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.

Any student found cheating will be subject to the penalties as stated in the Student Code of Conduct handbook (http://www.sfasu.edu/policies/student-code-of-conduct-10.4.pdf); including but not limited to a score of zero on exam, expulsion from the class or expulsion from the University. Please read the complete policy at http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf.

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.

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/.
MENTAL HEALTH:
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
3rd Floor Rusk Building: 936-468-2401

SFASU Human Services Counseling Clinic
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