Course Title: General Inorganic Chemistry Lab II
Spring 2020
Jan 13, 2020 – May 09, 2020

Instructor: Dr. Yuemin Liu
Section # and CRN: P51 26884
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Office Phone: 936-261-3123
Email Address: yeliu@pvamu.edu
Office Hours: W 9:00 am– 10:30 pm or by appointment
Mode of Instruction: Face-to-Face
Course Location: Room 201 New Science Building
Class Days & Times: W 11:00 am – 12:50 pm
Catalog Description: CHEM 1021 General Inorganic Chemistry Laboratory II: 1 semester hours.

For students majoring or minoring in chemistry. A general laboratory course covering aspects of volumetric and gravimetric analysis, qualitative analysis, determination of chemical and physical properties, and chemical synthesis. http://catalog.pvamu.edu/

Prerequisites: 
Co-requisites:

Required Texts: Modular Laboratory Program in Chemistry Lab Manuals Supplied by Department

Recommended Texts: PVAMU Library: phone: (936) 261-1500; web: http://www.tamu.edu/pvamu/library/

Student Learning Outcomes:

<table>
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<tr>
<th>Upon successful completion of this course, students will be able to:</th>
<th>Program Learning Outcome #</th>
<th>Core Curriculum Outcome Alignment</th>
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<tbody>
<tr>
<td>1 Recognize and apply the basics of scientific approach and methods.</td>
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<td>2 Identify the structure of atoms and molecules and the nature of chemical bonds between atoms.</td>
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<td>3 Analyze and evaluate the properties of acids, bases, salts and buffers.</td>
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<td>4 Recognize oxidation-reduction reaction and formulate the reaction mechanisms.</td>
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<td>5 Evaluate solution equilibrium and the role of pH values.</td>
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<td>6 Identify radiation and evaluate its effect on cells and organs.</td>
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Formulate the relationship and calculate P, V, n and T using gas laws

Recognize the principle of nuclear radiation and its application
analyze and evaluate the chemical principles and approach in the case study

Major Course Requirements

Method of Determining Final Course Grade

<table>
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<tr>
<th>Course Grade Requirement</th>
<th>Value</th>
<th>Total</th>
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<tbody>
<tr>
<td>1) Experiments Only</td>
<td>100pts x 10</td>
<td>1000</td>
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Laboratory Experiments: Each student is required to: follow the safety guidelines for a safe laboratory experience; pay close attention to the instructor; wear safety goggles/glasses (available in lab) while in class; read the experimental procedure and do the prelab prior to coming to the class; clean work area and place all items in the designated storage area prior to leaving the laboratory class; report broken or missed equipment to the instructor. Number of lab complete subjected to change.

Total: 1700 points (subject to change at the discretion of the instructor or as time permits and includes non-experiment grade)

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<tr>
<th>Instrument</th>
<th>Value (points or percentages)</th>
<th>Total</th>
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<tbody>
<tr>
<td>Lab preparation/Dress &amp; Pre-Labs</td>
<td>9 assignments at 100 points each and Final Exam</td>
<td>1000</td>
</tr>
<tr>
<td>Lab performance and on-time report/Data Sheets</td>
<td>9 assignments at 100 points each</td>
<td>900</td>
</tr>
<tr>
<td>Class Total:</td>
<td></td>
<td>1900</td>
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</tbody>
</table>

Grade Determination:
A = 100 - 90%
B = 89 - 80%
C = 79 - 70%
D = 69 - 60%
F = below 60%

Description

Course Procedures or Additional Instructor Policies
Taskstream
Taskstream is a tool that Prairie View A&M University uses for assessment purposes. One of your assignments may be considered an "artifact," an item of coursework that serves as evidence that course objectives are met. More information will be provided during the semester, but for general information, you can visit Taskstream via the link in eCourses.
Exam Policy
Exams should be taken as scheduled. Makeup examinations will be allowed if and only if a verifiable, university approved document is submitted immediately after the exam. All exams will be counted or included in the final class total. Only Scratch paper and ACS approved Periodic Table will be provided to students. There should be no expectation of a formula sheet for in class exams. Formulas are only provided during final exams and during in class exams at the discretion of the instructor. Students must be able to recall formulas need at the time of an exam. Students need to bring Calculator. No cell phones are permitted during exams as calculators. The provision of Scantron (blue or green color) and Pencils (No. 2) are the responsibility of each student. Students with excused absences will be allowed to take make-up exams within a limited period of time and at a time designated by instructor. If an exam is missed and the instructor is not notified in a reasonable time frame a zero will be recorded.

Fall Semester Calendar

Lab #2: Topic 2-PROP 377: Determining Molar Volume of Oxygen
Lab #3: Topic 3-STRC 434: Writing Lewis Symbols and Lewis Structures
   Assignment (s): Lab report due next class day
Lab #4: Topic 4-PROP 391: Solutions
   Assignment (s): Lab report due next class day
Lab #5: Topic 5-KINE 505: Studying the Rate of the Reaction of Potassium Permanganate and Oxalic Acid
   Assignment (s): Lab report due next class day
Lab #6: Topic 6-EQUIL 404: Studying Chemical Equilibria and Apply Le Chatelier’s Principle Using Micro Scale Techniques
   Assignment (s): Lab report due next class day
Lab #7: Topic 7-ANAL 466: Standardizing a Sodium Hydroxide Solution and Using Analyze Vinegar
   Assignment (s): Lab report due next class day
Lab #8: Topic 8-ELEC 450: Studying Electrochemical Half-Cells and Half-Reactions
   Assignment (s): Lab report due next class day
Lab #9: Topic 9-SYNT 439: Synthesizing Aspirin
   Assignment (s): Lab report due next class day
Lab #10: Final Exam

Note: Make labs should at no time be an expectation. Given the shortness of the semester, none will be offered. We will do a lab every other day to allow for preparation and grading.
Lab report due next class day. 10 point late penalty if not turned in at the beginning of class. Anyone arriving more than 10 minutes late and no my signature on reports will have 10 points deducted from the lab grade and 15 minutes or more after the lab has begun will not be allowed entry.

Student Support and Success

John B. Coleman Library
The library and its partners have as their mission "to provide resources and instructional material in support of the evolving curriculum, as a partner in Prairie View A&M University's mission of teaching, research, and service" and to support the University's core values of "access and quality, diversity, leadership, relevance, and social responsibility" through emphasis on ten key areas of service. It maintains library collections and access both on campus, online, and through local agreements to further the educational goals of students and faculty.

Center for Academic Support
The Center for Academic Support (CAS) offers Tutoring via peer tutoring. The services include workshops (i.e., Save My Semester, Recalculate Your Route), seminars (i.e., Tools You Can Use: TI-84), group review sessions (i.e., College Algebra Topic Reviews, GRE Preparation), group study opportunities (i.e., TSIA, HESI, Study Break, Exam Cram), and test-taking strategies (How to take Notes, Study Buddy, 5 Day Study Guide). The Tutoring Center is a nationally certified tutoring program through the National Tutoring Association. The peer tutors are trained and certified by the coordinator each semester. Location: J.B. Coleman Library

COMPASS
The Center for the Oversight and Management of Personalized Academic Student Success (COMPASS) is designed to help Prairie View students in their second year and beyond navigate towards graduation by providing the following services: Academic Advisement, Targeted Tutorials for Personalized Learning, Campus-Wide Referrals, and Academic & Social Workshops. Location: J.B. Coleman Library

Writing Center
The Writing Center provides student consultants on all aspects of the writing process and a variety of writing assignments. Writing Center consultations assist students in such areas as prewriting, brainstorming, audience awareness, organization, research, and citation. Location: Hilliard Hall 121

University Rules and Procedures

Disability statement (See Student Handbook):
Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):
You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:
1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.

4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one’s own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook): Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

Disability statement (See Student Handbook): Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

TECHNICAL CONSIDERATIONS

Minimum Recommended Hardware and Software:
- Intel PC or Laptop with Windows 7; Mac with OS X; Smartphone or iPad/Tablet with Wi-Fi
- High speed Internet access
- 8 GB Memory
- Hard drive with 320 GB storage space
- 15” monitor, 800x600, color or 16 bit
- Sound card w/speakers
- Microphone and recording software
- Keyboard & mouse
- Most current version of Google Chrome, Safari, Internet Explorer or Firefox

Note: Be sure to enable Java & pop-ups

Participants should have a basic proficiency of the following computer skills:
- Sending and receiving email
- A working knowledge of the Internet
- Proficiency in Microsoft Word (or a program convertible to Word)
- Proficiency in the Acrobat PDF Reader
- Basic knowledge of Windows or Mac O.S.
Netiquette (online etiquette):
Students are expected to participate in all discussions and virtual classroom chats as directed. Students are to be respectful and courteous to others on discussions boards. Foul or abusive language will not be tolerated.

Technical Support:
Students should go to https://mypassword.pvamu.edu/ if they have password issues. The page will provide instructions for resetting passwords and contact information if login issues persist. For other technical questions regarding eCourses, call the Office of Distance Learning at 936-261-3283

Communication Expectations and Standards:
Emails or discussion postings will receive a response from the instructor, usually in less than 48 hours. Urgent emails should be marked as such. Check regularly for responses.

Discussion Requirement:
Online courses often require minimal to no face-to-face meetings. However, conversations about the readings, lectures, materials, and other aspects of the course can take place in a seminar fashion. This will be accomplished by the use of the discussion board. The exact use of discussion will be determined by the instructor.

It is strongly suggested that students type their discussion postings in a word processing application and save it to their PC or a removable drive before posting to the discussion board. This is important for two reasons: 1) If for some reason your discussion responses are lost in your online course, you will have another copy; 2) Grammatical errors can be greatly minimized by the use of the spell-and-grammar check functions in word processing applications. Once the post(s) have been typed and corrected in the word processing application, it should be copied and pasted to the discussion board.

Disclaimer
The instructor reserves the right to amend or change the syllabus at any time.