

# **SYLLABUS**

# CHEM 1021 General Inorganic Chemistry Laboratory-II Spring 2018

Instructor: Dr. Gururaj M. Neelgund

Section # and CRN: P50 and 24749

Office Location: Room# 210 E. E. O'Banion Science Building

**Office Phone:** 936-261-3099

Email Address: gmneelgund@pvamu.edu PREFERRED MODE OF CONTACT!!

Office Hours: M: 10am-11am, T: 9.30am-11am, W: 11am-3pm and R: 9.30am-1pm or by appointment

Mode of Instruction: Face to Face

Course Location: Room# 201 at E. E. O'Banion Science Building

Class Days & Times: Tuesday 11:00 am - 12:50 pm

Catalog Description: The second semester continuation of 1011. A general laboratory course covering aspects

of qualitative and quantitative analysis and determination of chemical and physical

properties.

Prerequisites: MATH 1113

Co-requisites: CHEM 1023 or 1043

Required Texts: Modular Laboratory Program in Chemistry

Recommended

Chemistry: An Introduction to General, Organic and Biological Chemistry, 12th edition by

**Texts:** Karen C. Timberlake

Custom edition available at PVAMU bookstore at lower cost. This version contains

Chapters 1-9 and two supplemental chapters.

Access to Learning Resources:

**PVAMU Library**:

phone: (936) 261-1500;

web: http://www.tamu.edu/pvamu/library/

University Bookstore:

phone: (936) 261-1990;

web: https://www.bkstr.com/Home/10001-10734-1?demoKey=d

#### **Student Learning Outcomes:**

	Upon successful completion of this course, students will be able to:	Program Learning Outcome # Alignment	Core Curriculum Outcome Alignment
1	Understand basic laboratory safety procedures.		
2	Perform basic laboratory techniques such as titration and filtration.		
3	Demonstrate the ability to understand theoretical chemical principles that are supported by experimental results.		
4	Define the technical terms used in the laboratory exercises.		
5	Perform simple stoichiometric calculations.		
6	Identify the impact of chemical systems on everyday life.		

# **Major Course Requirements**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

**Exams** – written tests designed to measure knowledge of presented course material.

Exercises – written assignments designed to supplement and reinforce course material.

Class Participation – daily attendance and participation in class discussions.

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Course Grade Requirement	Value	Total
1) Lab reports and execution	9 labs at 100 points each	900
2) Two exams	50 points each	100
Total:	·	1000

#### **Grading Criteria and Conversion:**

A = 1000 - 900pts;

B = 899 - 800 pts:

C = 799 - 700pts;

D = 699 - 600pts;

F = 599 pts or below

#### **Detailed Description of Major Assignments:**

**Assignment Title or** 

Grade Requirement Description

Lab reports In this course you have to submit a report for each lab.

# **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.

#### **Submission of Assignments:**

Lab reports are due the week after completion of the lab. Late assignments will be subjected to late penalty. **Formatting Documents:** 

Microsoft Word is the standard word processing tool used at PVAMU. If you're using other word processors, be sure to use the "save as" tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

#### **Exam Policy**

Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

# Semester Calendar

Week One: Topic Laboratory Setup

Week Two: Topic #1-TECH 430; Safety Quiz; Safety Film

Week Three: Topic #2-PROP 377

Determining the Molar Volume of Oxygen

Week Four: Topic #3–STRC 434

Writing Lewis Symbols and Lewis Structures

Week Five: Topic #4-PROP 391

Solutions

Week Six: Topic #5-KINE 505

Studying the Rate of the Reaction of Potassium Permanganate and Oxalic Acid

**First Exam** 

Week Seven: Topic #6-EQUL 404

Studying Chemical Equilibrium (2 systems)

Week Eight: Topic #7-EQUL 465

Using Acid-Base Indicators to Visually Estimate the pH of Solutions

Week Nine: Topic #8-ANAL 466

Standardizing a Sodium Hydroxide Solution and using it to Analyze Vinegar

Week Ten: Topic #9-ELEC 450

Studying Electrochemical Half-Cells and Half-Reactions

Week Eleven: Topic #10-SYNT 439

Synthesizing Aspirin

Week Fourteen: Topic Review, Experiment Completion

Week Fifteen Topic Second Exam

Week Sixteen

**FINAL EVALUATION** 

# 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):**

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#### **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 <a href="https://mypassword.pvamu.edu/">https://mypassword.pvamu.edu/</a> 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 accomplish 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.