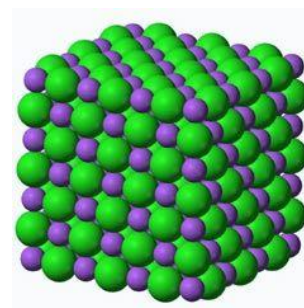


CHE 306: Inorganic Chemistry

Professor:

Dr. Kimberly Woznack
Office Location: 202D New Science Hall
Email Address: woznack@calu.edu
Office Phone#: 724-938-5734



Class Schedule:

1:00-1:50 pm Monday, Wednesday and Friday, NSC 127

Office Hours

MWF 2-3pm, Fri 1-2pm

Thursday: Zoom Review (101 focused)

<https://calu.zoom.us/j/95235773650?pwd=V3JhZkU3djZLTjBkQmtGeGhQN0wvUT09>

This is the best time to come and see me if you are having questions about anything related to the course. If you cannot come to these specific office hours, email me and you can schedule an appointment to come see me at another time.

Course Description:

This course focuses on the concepts of inorganic chemistry with emphasis on atomic structure, periodicity, group and bonding theories, symmetry, solid-state structures of metals, ionic compounds and semiconductors, as well as transition metal coordination chemistry.

The prerequisites **require completion of CHE 101 and CHE 102** (General Chemistry I and II).

Required Materials:

Text: Descriptive Inorganic Chemistry by Geoff Rayner-Canham and Tina Overton, Sixth Edition, Copyright 2014 by W. H. Freeman and Company, NY.

ISBN-13: 978-1-4641-2557-7 or ISBN-10: 1-4641-2557-0

Scientific Calculator (doesn't have to be a graphing calculator)

Recommended Materials: 1 Large or 2 small three ring binders & Loose leaf paper

Course Website:

Desire2Learn (D2L) will be used in this course and can be accessed by first logging onto VIP from the Cal U homepage and then finding the D2L link on the Academic Info tab.

Dr. Woznack is the instructor of record for this class. Only the instructor of record can properly grade coursework and issue midterm and final grades. The timeline for this course may need to be adjusted for severe weather events or other unforeseen circumstances.

1	H	2	He
3	Li	4	Be
5	B	6	C
7	N	8	O
9	F	10	Ne
11	Na	12	Mg
13	Al	14	Si
15	P	16	S
17	Cl	18	Ar
19	K	20	Ca
21	Sc	22	Ti
23	V	24	Cr
25	Mn	26	Fe
27	Co	28	Ni
29	Cu	30	Zn
31	Ga	32	Ge
33	As	34	Se
35	Br	36	Kr
37	Rb	38	Sr
39	Y	40	Zr
41	Nb	42	Mo
43	Tc	44	Ru
45	Rh	46	Pd
47	Ag	48	Cd
49	In	50	Sn
51	Sb	52	Te
53	I	54	Xe
55	Cs	56	Ba
57	La	58	Ce
59	Pr	60	Nd
61	Pm	62	Sm
63	Eu	64	Gd
65	Tb	66	Dy
67	Ho	68	Er
69	Tm	70	Yb
71	Lu	72	Hf
73	Ta	74	W
75	Re	76	Os
77	Ir	78	Pt
79	Au	80	Hg
81	Tl	82	Pb
83	Bi	84	Po
85	At	86	Rn
87	Fr	88	Ra
89	Ac	90	Th
91	Pa	92	U
93	Np	94	Pu
95	Am	96	Cm
97	Bk	98	Cf
99	Es	100	Fm
101	Md	102	No
103	Lr	104	Rf
105	Db	106	Sg
107	Bh	108	Hs
109	Mt	110	Ds
111	Rg	112	Cn
113	Uut	114	Fl
115	Uup	116	Lv
117	Uus	118	Uuo

Legend: < 1% (red), 1-10% (orange), >10-25% (yellow), >25-50% (blue), >50% (dark blue)

The Three Core Values:

I aspire to demonstrate the University's three core values: **Integrity, Civility and Responsibility**. When interacting with you I will stick to these values and I ask the same of you. Please keep these values in mind when interacting with other students in the class and myself.

Academic INTEGRITY:

All homework, exams, and lab reports must be completed independently by each student using only specified materials. I highly encourage you to **study together outside of designated class time**. However, any work you are turning in for a grade must be completed individually unless specified otherwise by the instructor. Any students found violating this policy will receive a zero for the assignment and could face other course-specific or academic consequences depending on the severity of the offense.

Classroom CIVILITY:

Please arrive on time for class and for lab. Any handouts for the day will be placed on the front bench. Stay the entire class. Please don't start shuffling around 5 minutes before class ends. Please turn your cell phones off before class starts. Text messaging under your desk will not be tolerated. You can wait until the end of class to use your personal electronic devices. Be considerate of others when listening to the professor or when working in groups. Bring your calculator to **every class and lab**.

RESPONSIBILITY:

As your professor for this course, I have taken on the responsibility to *teach* chemistry, and I ask that you take on the responsibility to *learn* chemistry. Each day you are faced with many responsibilities in many aspects of your life. If you prioritize your own education then you must also take responsibility for doing the work required to succeed in this course.

Dr. Woznack reserves the right to make changes to the schedule or syllabus as she sees fit. She will notify the entire class of any changes to the syllabus and post updated documentation on the course website in D2L.

Students with disabilities:

- Reserve the right to decide when to self-identify and when to request accommodations.
- Will register with the Office for Students with Disabilities (OSD) each semester to receive accommodations.
- Will present the OSD Accommodation Approval Notice to faculty when requesting accommodations.
- Might be required to communicate with faculty for accommodations which specifically involve the faculty.

Office for Students with Disabilities

Requests for approval for reasonable accommodations should be directed to OSD. Approved accommodations will be recorded on the OSD Accommodation Approval notice and provided to the student. Students are expected to adhere to OSD procedures for self-identifying, providing documentation and requesting accommodations in a timely manner. The OSD is located in the Carter Hall Room G-35 and the phone number is (724) 938-5781.

Grading Scheme:

Homework:	15 %
Worksheets	5%
Four Exams (10% each):	40 %
Quizzes	20 %
<u>Cumulative Final Exam:</u>	<u>20 %</u>
Total:	100%

Letter Grade	Percentage Earned
A	93.3-100 %
A-	90.0-93.2 %
B+	86.7-89.9 %
B	83.3-86.6 %
B-	80.0-83.2 %
C+	76.7-79.9 %
C	73.3-76.6 %
C-	70.0-73.2 %
D	60.0-69.9 %
F	Below 60.0 %

ABSENCES:

Each day of class I will record attendance and I will keep a record of your total number of absences (excused or unexcused). *From experience* I can tell you that students with multiple class absences do not earn a high grade in the course. If you miss class you will miss review of material and announcements on homework, quiz, lab and exam content. I will not repeat lectures for students who have missed class. In the future, if you need to ask me for a letter of recommendation, what will I recall about your behavior, and work habits in this course?

Homework:

You will be given homework assignments on paper or worksheets. These assignment will occur about once per week or every other week. No extensions will be granted unless coverage or the schedule changes. Penalties will be incurred for incorrect responses. Your lowest homework assignment will be dropped.

Worksheets:

Periodically you will be given in-class worksheets to complete. Those may be graded pass/fail or they may be scored with points. They may be announced or unannounced in advance.

Four Exams:

The four exams will be given during the regularly scheduled class time. The dates for the exams for this semester are: **Monday February 7th, Monday February 28th, Monday March 28th, and Monday April 18th.** Please mark these on the calendar now.

Quizzes:

These quizzes will be announced in advance. There will be **no make-up quizzes** for students who miss class or are late, without making *prior* arrangements.

Final Exam:

The final exam will be cumulative for the entire semester. **The final exam schedule hasn't been published yet. I will let you know when I find out.**

Syllabus Addendum

California University of Pennsylvania Reporting Obligations of Faculty Members under Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, *et seq.*

California University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to comply with the requirements of Title IX of the Education Amendments of 1972 and the University's commitment to offering supportive measures in accordance with the new regulations issued under Title IX, the University requires faculty members to report incidents of sexual violence shared by students to the University's Title IX Coordinator; Amy E. Salsgiver salsgiver@calu.edu. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. **Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the person designated in the University protection of minors policy.** Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is available at the is available at the Office of Diversity, Equity and Inclusion in 114 Old Main, Ms. Sheleta Camarda-Webb at camardawebb@calu.edu or on the website at <https://www.calu.edu/inside/titleix.aspx>.

The University's information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at:

- **Counseling Center**, Carter Hall G53, 724-938-4056
- **End Violence Center**, Carter Hall G94, 724-938-5707
- **Student Affairs**, Natali Student Center 311, 724-938-4439
- **Wellness Center**, Carter Hall G53, 724-938-4232
- **Women's Center**, Natali Student Center 117, 724-938-5857
- **Threat Response Assessment and Intervention Team (T.R.A.I.T.) & Dept. of Public Safety & University Police**, Pollock Maintenance Building, 724-938-4299
 - **EMERGENCY:** From any on-campus phone & Dial **H-E-L-P** or go to any public pay phone & Dial ***1**. (*Identify the situation as an emergency and an officer will be dispatched immediately.)

Important Safety Statement:

All students and faculty are required to wear an appropriate personal protective equipment (PPE) face covering during class and in all buildings. If a student refuses to comply with PPE and safety guidelines when asked, they will be asked to leave the class and meet with the Associate Dean for Student Conduct in Student Affairs to resolve the matter. Reports to Student Conduct will be made by following this [link](#). University Police (724-938-4299) will be summoned to assist if the request to leave is met with confrontation or refusal. Any student who needs an accommodation for the wearing of PPE should contact the Office for Students with Disabilities (osdmail@calu.edu).

Updated 1/13/22

Updated Face Covering Requirements

Disposable surgical masks or higher-grade masks (KN95 or KF94) must be worn at all times while inside university facilities.

Approved face coverings are **strongly** recommended to be worn outdoors by all individuals, regardless of vaccination status, and are required outside when physical distancing is not possible. It's on all of us to maintain a safe place to work and study.

Cloth masks, face shields, bandanas, neck gaiters, and masks with valves are no longer permitted.

These requirements apply to all employees, students and visitors.

IONiC VIPEr

Interactive Online Network of Inorganic Chemists

VIRTUAL INORGANIC PEDAGOGICAL ELECTRONIC RESOURCE: A COMMUNITY FOR TEACHERS AND STUDENTS OF INORGANIC CHEMISTRY



The VIPEr Fellows project is supported by a 5-year grant from the National Science Foundation's Improving Undergraduate STEM Education (IUSE) program. A primary project goal is to develop, test, and refine a flexible, foundation-level inorganic chemistry course based on classroom observations, analysis of student work, surveys of students, and interviews with faculty.

Your instructor has been chosen as a VIPEr Fellow (cohort 2) for AY21-23, and as such, there will be several surveys and recorded sessions that accompany this project. If you have any questions, please refer to the Participant Notice for Students form or ask your instructor.