Point Loma Nazarene University Department of Chemistry

CHE467 – Advanced Inorganic Chemistry Laboratory Spring Term, 2016 Thursdays, 1:30 – 5:00 pm, Sator Hall 216

Dr. Laurance G. Beauvais lbeauvais@pointloma.edu Office hours: MW, 1:15 – 2:45 pm Rohr Science 302C (619) 849-3251

Prerequisite Completion or enrollment in CHE466 is required.

Course Description

The preparation, purification and characterization of main group and transition metal inorganic and organometallic compounds.

Course Objectives

At the completion of this course, students will be able to:

- synthesize inorganic compounds using literature procedures.
- characterize inorganic compounds using a range of techniques, including NMR, UV/vis, FT-IR, and magnetic susceptibility..
- communicate the results of experiments clearly and concisely using the journal format of the American Chemical Society.

Lab Meetings

Suitable times for lab work will be arranged with Dr. Beauvais. It is your responsibility to identify appropriate times. Dr. Beauvais must be present on campus during all lab work.

Prelabs

Prelab write-ups of procedure are required before starting any lab. It should include a flow diagram of what you expect to accomplish during that lab period, brief procedures, waste handling, and safety considerations. Prelabs should be emailed to me the night before you wish to work in lab.

Lab Notebooks

Lab notebooks are an essential component of research. A handout will be provided with guidelines for proper notebook format and notebooks will be graded.

Lab Reports

Two lab reports are required for this class. Further details regarding these reports will be distributed. For each report, a rough draft is due at least one week before the due date. The first report is due on Friday, April 15. The second report is due on Monday May 2.

Recommended texts

There are no specific textbooks required for this course, but I recommend that you own at least one general inorganic text. Suitable books include,

"Inorganic Chemistry" Miessler and Tarr, any edition.

"Inorganic Chemistry" Shriver and Atkins, any edition.

"Concepts and Models of Inorganic Chemistry" Douglas, McDaniel, & Alexander, Wiley.

"Inorganic Chemistry" Huheey, Keiter, & Keiter, Harper Collins.

Notebook	10%
Product Yield	10%
& Appearance	
Prelab	10%
Rough Draft of Lab Report	10%
Lab Reports	60%

Letter grades will be assigned using the following scale.

А	90 – 100 %
В	80 - 90 %
С	70-80~%
D	60-70~%
F	< 60 %

OTHER MATTERS:

Student Privacy

Point Loma Nazarene University adheres to the provisions of the student privacy act. Following FERPA guidelines, grades in this class will be communicated to students on an individual basis. However, exams will be returned in class in such a way that scores are not visible. All other graded works will be returned in your lab section. If you are not comfortable with this procedure, please see the instructor to make special arrangements. This request must be made during the first two weeks of the course.

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic <u>dishonesty</u> is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See <u>Academic Policies</u> for definitions of kinds of academic dishonesty and for further policy information.

ACADEMIC ACCOMMODATIONS ③

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at <u>DRC@pointloma.edu</u>. See <u>Disability Resource Center</u> for additional information.

ATTENDANCE AND PARTICIPATION \circledast

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See <u>Academic Policies</u> in the Undergraduate Academic Catalog.