NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus Schedule of Classes for more information.

COURSE NUMBER (CH 412)
COURSE NAME (ADVANCED INORGANIC CHEMISTRY II)

For more information, contact: Greta Kvinnesland 541-737-6707 or RICH CARTER, 153 GILB, 541-737-2081

COURSE CREDIT
(3) This course combines approximately 90 hours of instruction, online activities, and assignments for 3 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES
CH 411 [D-] and /or instructor approval..

COURSE DESCRIPTION:
Descriptive chemistry of the elements, focusing on main-group compounds, transition metal complexes, and solid-state chemistry.

CONTACT INFORMATION:
Email: michael.lerner@oregonstate.edu

LEARNING RESOURCES:
- Inorganic Chemistry 6e (Shriver et al) (Required)
- Solutions Manual to accompany text (Optional)
- Practice exams, lecture notes, assigned exercises and problems in the text will be provided on the class website
• There may be other assigned or suggested readings; these will be provided when needed.

**NOTE:** For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information. Students can also click the ‘OSU Beaver Store’ link associated with the course information in the Ecampus schedule of classes for course textbook information and ordering.

**COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:**
The course is designed to for students to analyze and integrate concepts relevant to inorganic chemistry (these are described in detail below) that are required to understand, read, write, and do research in inorganic chemistry.

For each Chapter 11-19, 23:
• Evaluate and describe the structures and properties of important chemical compounds containing the elements in this group.
• Evaluate and describe the chemistry (acid/base, redox) of important compounds as provided in the text, lectures, and assigned problems.
• Evaluate and predict these structures and chemistries based on periodic trends and inorganic chemical concepts.

Chapter 24:
• Describe structures of common solid lattices including spinel and perovskite.
• Explain types of defects, causes, relation to non-stoichiometry and diffusion.
• Describe examples of intercalation chemistry and chemistry of framework structures.
• Describe cooperative phenomenon such as magnetism and ferroelectric effects.
• Describe recent research topics such as fullerenes and solid electrolytes.

**COURSE CONTENT AND POLICIES:**
This course will cover chapters on the descriptive chemistry of the main group, transition metals, and f-block elements, as well as a chapter on solid state chemistry.

**EVALUATION OF STUDENT PERFORMANCE:**
Course grades in CH412 will be based on 2 midterms (100 pts each) and a final exam (200 pts).

**COURSE SITE LOGIN INFORMATION**
Information on how to login to your course site can be found HERE.

**STATEMENT REGARDING STUDENTS WITH DISABILITIES**
Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by
the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our Getting Started with DAS page.

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

ACADEMIC INTEGRITY AND STUDENT CONDUCT (OSU POLICY)
Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course.

Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect.

Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university's regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

For more info on these topics please see:
- Statement of Expectations for Student Conduct
- Student Conduct and Community Standards - Offenses
- Policy On Disruptive Behavior

PLAGIARISM
You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Academic dishonesty will result in a grade of “F.”

- Statement of Expectations for Student Conduct
- Avoiding Academic Dishonesty

TECHNICAL ASSISTANCE
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

- COURSE DEMO
- GETTING STARTED

TUTORING
For information about possible tutoring for this course, please visit our Ecampus NetTutor page. Other resources include:

- Writing Center
- Online Writing Lab

STUDENT EVALUATION OF TEACHING
The online Student Evaluation of Teaching form will be available in week 9 and close at the end of finals week. Students will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. Students will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/supervisors. Unless a comment is “signed,” which will associate a name with a comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded to the unit head/supervisor.

REFUND POLICY INFORMATION
Please see the Ecampus website for policy information on refunds and late fees.