

CHE 6680: Special Topics in Inorganic Chemistry
Structure Determination by X-ray Diffraction
Spring, 2014

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Office Hours: T Th 6th period
12:55

COURSE DESCRIPTION

The purpose of this course is to help you gain a theoretical and practical understanding of the various aspects of Single Crystal X-Ray Structure Determination. The course will cover theories and techniques of X-Ray Diffraction, Symmetry, Intensity data collection, Structure determination and Refinement, and Molecular graphics.

Class will meet twice a week. One meeting we will cover theories and principles of X-Ray Diffraction and X-Ray Structure Determination. During the other meeting you will learn the practical part of Crystallography by carrying out a full crystal structure determination project.

Each student will work on at least one crystal structure project, from start to finish. Search the Cambridge Structural Database for similar structures. Write a regular format manuscript for publication in *Acta Crystallographica E*.

GRADING

Your participation in class	10 %
Homework	10 %
Progress in project	10%
One exam (midterm)	40 %
Manuscript	30 %