

Chemistry 832 - Solid State Structural Methods

Dr. Allen Hunter

Lecture: Monday and Wednesday, 1:00 to 1:50

Lab: Monday, 2:00 to 4:50

This class is designed to teach the fundamentals of solid state structural methods with a strong emphasis on **X-Ray Crystallography** (and the related neutron and electron diffraction experiments). This is an Undergraduate/Graduate Swing Course and is designed for the analytical, organic, and inorganic chemists, biochemist, biologist, geologist, materials scientist, etc., that needs to use these methods in their work. The prerequisites or corequisites of this class, *for chemistry students*, are sophomore organic and physical chemistry. For those with majors in biology, physics, geology, and materials science permission will be granted on an individual basis but juniors/seniors in these disciplines will typically have fully acceptable backgrounds. This class has two hours of lecture and three hours of lab per week. In the lecture, we will cover the basic principles of crystallography from a conceptual and qualitative perspective while the labs will focus on practical aspects of collecting data and solving structures. Those completing this course will be ready to do **Their Own X-Ray Crystal Structures for Publications and Theses.**

