

CHE 640 - CHEMICAL CRYSTALLOGRAPHY

Fall 2023

This course is an introduction to X-ray crystallography with an emphasis on applications of interest to synthetic chemists.

The course is split roughly 50:50 between lectures and laboratory sessions. The fundamentals of small-molecule X-ray crystallography, including symmetry and diffraction physics are covered in the lectures. In the lectures, the modern terminology and methods of single-crystal X-ray crystallography are presented along with some historical context. The other half of the course is based in the X-ray laboratory, where hands-on use of state-of-the-art equipment provides familiarity with crystal handling, X-ray equipment, and computer programs.

Class Meets: MWF 10:00 – 10:50, but we might need to arrange additional times for laboratory work.

Room: CP-221 and CP-146 (X-Ray Laboratory)

Credit hours: 3

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