

Crystallography course, Lab Parts

Laboratory Course Schedule

<i>Part</i>	<i>Date</i>	<i>3-hr-time slot</i>	<i>Section</i>	<i>Students</i>
1			A	
1			B	
1			C	
2			A	
2			B	
2			C	
3			A	
<i>Break</i>	<i>Break</i>		<i>Break</i>	
3			B	
3			C	
4			A	
4			B	
4			C	
5 <i>QUIZ</i>	<i>QUIZ</i>		<i>A, B, C</i>	<i>Everyone</i>

Parts:

1. Safety; introduction to the x-ray generator; optically assessing the sample; mounting one crystal from the sample;
2. Introduction to the crystal orienter and the x-ray detector; assessing the diffraction from the crystal;
3. Collecting reflections to determine unit cell data; collecting an x-ray diffraction data set; resolution, completeness and crystallinity requirements;
4. Reducing the data; integration schemes, corrections to the intensities, scaling of area detector data;
5. Publication requirements of precision and accuracy of the reflection data; in-class exam.

Note: Students must be on the roster and must attend all 5 of their sessions.