



HEMI

HOPKINS EXTREME
MATERIALS INSTITUTE

HEMI Short Course Agenda Foundations of Electron Microscopy Johns Hopkins University

Day 1		
8:30 - 9:00	Breakfast and Registration	
9:00 - 9:10	Introduction	
9:10 - 10:25	Session 1	Basic Crystallography
10:45 - 12:00	Session 2	Electron Scattering by Atoms, Unit Cells, and Crystals
12:00 - 12:45	Lunch	
12:45 - 1:00	Recap/Q&A	
1:00 - 2:15	Session 3	Experimental Modalities and Geometries: SEM and TEM
2:45 - 3:30	Session 4	Electron Scattering: the Governing Equation
3:45 - 5:00	Session 5	Solution Methods
5:00 - 6:00	Social	In Malone Hall First Floor Lobby
Day 2		
8:30 - 9:00	Breakfast	
9:00 - 9:15	Recap/ Q&A	
9:15 - 10:30	Session 6	TEM: Electron Diffraction from Perfect Crystals
10:45 - 12:00	Session 7	SEM: Electron Diffraction from Perfect Crystals
12:00 - 12:45	Lunch	
12:45 - 1:00	Recap/Q&A	
1:00 - 2:15	Session 8	Defects in Crystals: Applications for SEM and TEM
2:45 - 3:30	Session 9	Orientation Representations
3:45 - 5:00	Session 10	Dictionary Indexing of Electron Diffraction Patterns
5:00 - 5:15	closing	

Unless otherwise noted, all events will take place in Malone Hall, room G33-35