Diffusion and Interface Kinetics

MATSCEN 6737

Credit Hours:

3.00 - 3.00

Course Levels:

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Detailed atomic and phenomenological descriptions of rate limiting steps, diffusion, and interface kinetics with applications involving mass transport and phase transitions in the solid state.

Prerequisites and Co-requisites:

Prereq: Grad standing in MatScEn, or permission of instructor.

Course Goals / Objectives:

• Provide a fundamental understanding of diffusion-controlled kinetics in the solid state

Course Topics:

- Diffusion
- Kinetics of diffusion-controlled phase transformations
- Microstructural evolution

Designation:

Elective

Required