

Topic	Lec	Rec	Lab	Cli	IS	Sem	FE	Wor
Thermodynamics of surfaces and interfaces								
Thermodynamics of defects in crystals								
Thermodynamics of electrochemistry								
Thermodynamics of diffusion and phase transformations								

Grades

Aspect	Percent
Homework	20%
Midterm Exam	40%
Final Exam	40%

Representative Textbooks and Other Course Materials

Title	Author
<i>Thermodynamics in Materials Science, 2nd edition</i>	Robert DeHoff

ABET-EAC Criterion 3 Outcomes

Course Contribution	College Outcome
	a An ability to apply knowledge of mathematics, science, and engineering.
	b An ability to design and conduct experiments, as well as to analyze and interpret data.
	c An ability to design a system, component, or process to meet desired needs.
	d An ability to function on multi-disciplinary teams.
	e An ability to identify, formulate, and solve engineering problems.
	f An understanding of professional and ethical responsibility.
	g An ability to communicate effectively.
	h The broad education necessary to understand the impact of engineering solutions in a global and societal context.
	i A recognition of the need for, and an ability to engage in life-long learning.
	j A knowledge of contemporary issues.
	k An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Prepared by: Mark Cooper