

Information Form for SJTU Graduate Profession Courses

Basic Information			
	Surfaces and Interfaces of Materials		
	2		32
	School of Materials Science and Engineering		
Extended Information			
	<p>The main contents of this course include six parts: surface atomic structure, surface electronic structure, surface thermodynamics, surface adsorption, surface analysis method as well as surface and interface effect. It covers basic concepts of two-dimensional crystallography, atomic arrangement of surfaces, relaxation and reconstruction, surface defects, surface and interfacial states as well as surface tunneling effects, surface space charge layers and surface conductance, interface and grain boundary characteristics, the basic theory of surface thermodynamics, surface tension and surface energy, macroscopic and microscopic theories of surface adsorption, surface analysis methods as well as phenomena and their applications related to surface and interface theories. The</p>		

	prerequisite includes Materials Science Foundation Metallurgy or Introduction to Solid State Physics.																										
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	2	20% +	80%																								
	<p>1 Homework For the course, totally four homework should be done. The homework will be taken from the four parts including surface atomic structure, surface electronic structure, surface thermodynamics and surface adsorption corresponds one homework.</p>																										

	<p>2 Examination: Attendance and Homework 20% +course papers 80%</p>
	<p>1. Surface and interface physics. Lvbing Zhu, 1993 2 Surface and interface physics of semiconductors, Si chou Q u, 1995</p>