

Course Information					
* Course Code	MT313	* Credit Hours	32	* Credits	2
* Course Name	Materials Chemistry				
(Course Type)					
Audience	undergraduates				
(Language of Instruction)	Chinese				
* School	School of Materials Science and Engineering				
Prerequisite	thermodynamics of material. undergraduate chemistry; undergraduate physics;				
Instructor	Xingwu Guo Xiaobin Hu Peng Zhang; Han Chen.	(Course Webpage)	http://cc.sjtu.edu.cn/G2S/OC/Site/main#/rich/33900?ref=&currentoc=6654		

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Description

<p>* Description</p>	<p>Material chemistry has always been an integral part of chemistry and is a chemistry associated with the preparation, processing, service, and analytical processes of materials. Material chemistry has a broad-based, multidisciplinary or interdisciplinary nature. As a key area of chemical research and new materials technology, it is gaining more and more recognition worldwide.</p> <p>The purpose of this course is to equip students with the intrinsic links between chemistry and materials science and engineering, and to understand the latest advances in applied chemistry and chemistry concepts in materials science. Understanding the intrinsic link between the arrangement of atoms, ions, or molecules that make up a material and its macrostructure and properties allows students to learn to apply and address related material science issues from an atomic and molecular level perspective. To lay a good material chemistry knowledge base and thinking method for undergraduate students of Materials College, and to provide services for the follow-up courses.</p> <p>The main teaching contents of this course include the introduction of material chemistry; the theoretical basis of material chemistry; the chemical of metals and inorganic non-metallic materials; the chemistry of polymer materials; the chemistry of organic/inorganic hybrid materials; and the application of material chemistry in the preparation of advanced materials. It is hoped that the teaching of this course will more widely convey to students in the materials science and engineering disciplines the exciting research directions in this field and the opportunities that material chemistry provides for new materials technologies.</p>
<p>course syllabus</p>	
<p>* (Learning Outcomes)</p>	

* Relationship between learning outcomes and graduation requirements					
	1	1.1	1		
		1.2	2		
	2.	2.1	3		
		2.2	3		
	4	4.1	4		
	7	7.2	5		
	10	10.2	4		

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	<p>[6] , ,</p> <p>:1999</p> <p>[7]</p> <p>[8] .[] ;,1993</p> <p>[9] , : 1996</p> <p>[10] 2007 7</p> <p>[11] 2008 4</p>
<p>More</p>	
<p>Notes</p>	