

Course No.	M1586.00260 0	Lecture No.	001	Course Title (Subtitle)	Advanced Construction Materials	Credit	3	
Representative Instructor	Name	Juhyuk Moon (post : Assistant Professor)			Homepage	https://sites.google.com/view/moonslab		
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	Interview Time/Place : Tu 11am at #35-412							
Prerequisite Course	N/A							
* 1.Purpose of Course	Materials characterization techniques for construction materials will be covered in this lecture with providing sufficient background to understand their principles and results. In modern civil structures, along with conventional materials, various materials including sustainable and high-performance concrete, high-strength steel and smart materials are being actively applied. Therefore, the understanding on the physics of those materials and suitable characterization skills becomes more and more important. This lecture intends to provide knowledge on the principles of the characterization techniques and suitable interpretation on the experimental results which could enable to equip the multi-functionalities of civil and architectural structures and extends service life.							
* 2.Materials and Reference	Introduction to Solid State Physics, Kittel (Not a required textbook)							
* 3.Evaluation Method	Attendance	Task	Medium	Final	Random Evaluation	Attitude	Other	Total
	10	20	30	40	0	0	0	100
	Attendance Policy : Students who are absent for over 1/3 of the class will receive a grade of 'F' or 'U' for the course. (Exceptions can be made when the cause of absence is deemed unavoidable by the course instructor.)							
Remark of Others :								
* 4.Lecture Plan	Week 1: Introduction Week 2: Crystal structure Week 3: Bravais lattice Week 4: Reciprocal lattice Week 5: XRD Week 6: Cement chemistry Week 7: Elastic constants Week 8: Pore structure Week 9: Image processing introduction Week 10: Image processing technique 1 Week 11: Image processing technique 2 Week 12: Image processing technique 3 Week 13: Phonon spectrum 1 Week 14: Phonon spectrum 2 Week 15: Final exam							
5.References to Course Registration								

6. Support Services for Students with Disabilities ※ You can modify these default contents.	For Lectures	<input type="checkbox"/> Visual Impairment: Make textbooks(digital textbook, braille textbook, enlarged textbook etc.), Allow note takers <input type="checkbox"/> Physical Disability: Make textbooks (digital textbook), Allow note takers and assistants <input type="checkbox"/> Hearing Impairment: Allow note takers and translators, Allow lecture recording <input type="checkbox"/> Health Impairment: Excuse absence due to health problems, Allow note takers <input type="checkbox"/> Learning Disability: Allow note takers <input type="checkbox"/> Intellectual Disability / Autism Spectrum Disorder: Allow note takers and mentors
	For Assignments & Evaluations	<input type="checkbox"/> Visual Impairment / Physical Disability / Hearing Impairment / Health Impairment / Learning Disability: Extend assignment deadlines, Offer alternate assignment submission and response method, Extend testing period, Offer alternate testing method, Offer different testing room <input type="checkbox"/> Intellectual Disability / Autism Spectrum Disorder: Offer individualized assignments and alternative evaluations
	Others	Students who take this course can get appropriate level of support service including the support listed above depending on the students' individual characteristics and needs through consultation with professors and the Support Center for Students with Disabilities. If you have any questions concerning support service for students with disabilities you can contact Professor *** (02-880-****) or Support Center for Students with Disabilities (02-880-8787).

◇ fields with * : required fields

◇ If you don't release the syllabus, you may have some disadvantages.