

Course No.		Lecture No.		Course Title (Subtitle)	Dynamic Management & Control	Project	Credit	
Representative Instructor	Name	MoonSeo Park	(post :	)	Homepage			
	E-mail				Phone No.			
	Office Hour/Place :							

Prerequisite Course								
*1. Purpose of Course	<p>This subject module deals with vital knowledge required for project management and control under uncertainties. As most of recent work environment in companies are project-based, university students are expected to have a good understanding and knowledge on relevant issues such as project initiation, organization, planning, and control methods.</p> <p>Furthermore, these days projects are getting bigger and more complex, thus it is especially useful to understand their dynamic features. In this context, the dynamic project management and control approach to be dealt with in this module provides students with a robust tool that can address all the complexity issues against increased uncertainties involved in the real project management world.</p> <p>Early part of the lecture covers traditional project management domain knowledge including project initiation, planning, selection, and scheduling, while the main focus will be given to the dynamic project management and control approach with System Dynamics, which has been widely used as a strategic policy simulation tool in many consulting firms, since developed at MIT in the late 1950's.</p>							
*2. Materials and Reference	<ul style="list-style-type: none"> <li>▪ R1: John D. Sterman, "System Dynamics Modelling for Project Management", MIT online publication at <a href="http://web.mit.edu/jsterman/www/SDG/project.html">http://web.mit.edu/jsterman/www/SDG/project.html</a>, 1992</li> <li>▪ R2: Terry Williams et. Al, "The Effects of Design Changes and Delays on Project Costs", Journal of the Operational Research Society, Vol 46, pp 809-818, 1995</li> <li>▪ R3: James M. Lyneis *, Kenneth G. Cooper, Sharon A. Els, "Strategic management of complex projects: a case study using system dynamics", System Dynamics Review, Vol. 17, No. 3, 2001</li> <li>▪ R4: Pena-Mora, Feniosky; Park, Moonseo, " Dynamic Planning for Fast-Tracking Building Construction Projects", Journal of Construction Engineering and Management, Vol 127, Issue 6, 2001</li> <li>▪ R5: Park, Moonseo, Yashada, "Model-based Construction Policymaking: Singapore Government's Policy to Diffuse Prefabrication to the Private Sector", Journal of Construction Engineering and Management, Submitted 2004 (to be distributed)</li> <li>▪ <b>Main Textbook: "Business Dynamics", John D. Sterman, 2000, McGraw-Hill</b></li> </ul>							
*3. Evaluation (%)	Attendance	Assignment	Midterm	Final	Additional Evaluation	Attitude	Other	합계
	10%	40%		30%	10%	10%		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.)					
	Other Remarks :							

\*4. Lecture Plan

	Lecture			Assignment/Term Project	
	Title	Teaching Core	Reference	Out	Due
1 (W)	Introduction to Project Management	PJ Management fundamentals		A0: Hidden pictures game	
2 (T)	PJ Initiation and Planning	PJ initiation, Organization, Planning tools, PJ Selection and evaluation tools			
3 (M)	PJ Scheduling	Scheduling and Duration shortening tools			A0
4 (W)	Simulation based project management	Dynamic project management & control	R1		
5 (T)	System Dynamics	SD Components, CLD Techniques	R2	A1: Oil crisis	
6 (M)	Where did gasoline go?	Identifying the stock and flow structure		A2: Formulation of a Simple model	A1
7 (W)	Dynamics of Stocks and Flows	Exploring dynamics of stock and flow structure	R3	A3: 성매매특별법	
8 (T)	Pay or not to pay?	Standard Modelling Process I	R4		A2
9 (M)	Hard work vs. Smart work	Model quantification, Rework Cycle, Delay			A3
10 (W)	Controlling is not enough	Standard Modelling Process II	R5		TP1
11 (T)	Daddy's dilemma (아빠의 청춘)	Modelling practice		TP1	TP2
12 (M)	Closing the loop	Dynamics of Simple Structures		TP2	TP3
13 (W)	Beer Game	Supply Chain Management		TP3	

		14 (T)	Term Project Final Presentation				
		15 (M)	No Exam				
5. Additional Notes for Students							
6. Assistance for Students with Disabilities	Class	<ul style="list-style-type: none"><li>○ Visual Impairment: Make textbooks(digital textbook, braille textbook, enlarged textbook etc.), Allow note takers</li><li>○ Physical Disability: Make textbooks (digital textbook), Allow note takers and assistants</li><li>○ Hearing Impairment: Allow note takers and translators, Allow lecture recording</li><li>○ Health Impairment: Excuse absence due to health problems, Allow note takers</li><li>○ Learning Disability: Allow note takers</li><li>○ Intellectual Disability / Autism Spectrum Disorder: Allow note takers and mentors</li></ul>					
	Assignment & Evaluation	<ul style="list-style-type: none"><li>○ 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</li><li>○ Intellectual Disability / Autism Spectrum Disorder: Offer individualized assignments and alternative evaluations</li></ul>					
	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 ***(Contact Information) or Support Center for Students with Disabilities (02-880-8787).					