

Course No.	M1522.002600	Lecture No.	001	Course Title	Advanced Mobile Computing	Credit	3	
Representative Instructor	Name	Youngki Lee (post : )		Homepage	N/A			
	E-mail	youngkilee@snu.ac.kr		Phone No.	02-880-1726			
	Interview Time/Place : Thursday 16:45-18:00							
Prerequisite Course	N/A							
* 1.Purpose of Course	<p>Computing services are penetrating every facet of people's lives and various industry sectors, enabled by advances in consumer devices such as smartphones, wearables, IoT devices, AR/VR devices along with cloud and edge computing services. This is quickly making Mark Weiser's vision of ubiquitous computing into reality. Mobile computing systems can be considered as the first step towards ubiquitous computing, which is significantly different from conventional computing systems. They require highly coordinated operations of heterogeneous sensor devices for continuous monitoring of users and surroundings, multi-staged distributed systems to process deep/big sensor data, automated actuators based on uncertain inference results. Furthermore, it is essential to design highly personalized and adaptive system interfaces considering the diversity of users and their situations. In this course, students are expected to learn, apply, and improve core technologies to design and develop mobile computing technologies successfully. The topics will include software systems for smartphones and IoT/wearable/VR/AR devices, machine learning pipelines to extract insights from noisy sensing data, distributed system architecture for efficient mobile computing services, innovative interface and application design, etc.</p>							
* 2.Materials and Reference	Lecture notes and papers (The paper list is to be announced in the Week1 class)							
* 3.Evaluation Method	Attendance	Project	Medium	Final	Paper reading & Presentation & Discussion	Attitude	Other	Total
		40	0	40	20	0	0	100
	<p>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.)</p>							
Remark of Others :								

* 4.Lecture Plan	◇ Lecture Plan should be entered in the form of the week plan. (from the 1st week to at least the 15th week)	
	Week	Lecture Topic
	1	Class Intro & Intro to Mobile Computing
	2	Human Behaviour and Context Sensing/Analytics: Activities
	3	Human Behaviour and Context Sensing/Analytics: Activities
	4	Project Proposal and Feedback
	5	Human Behaviour and Context Sensing/Analytics: Locations
	6	Human Behaviour and Context Sensing/Analytics: Locations
	7	Human Behaviour and Context Sensing/Analytics: Emotions and Health
	8	Human Behaviour and Context Sensing/Analytics: Emotions and Health
	9	Talks on Special Topics
	10	Project Review and Demonstration of Initial Prototype
	11	Mobile and Embedded Machine Learning: Basics
	12	Mobile and Embedded Machine Learning: Power
	13	Mobile and Embedded Machine Learning: Cloud and Edge
14	Mobile and Embedded Machine Learning: Privacy and Other Issues	
15	Project Final Presentation and Demo	
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.