

Syllabus

Interface Engineering

Course Name	Course type (credit/hours)		전선(3/3)		Course code	
	Target students Division/major/grade		산업공학과/6학년		Opening semester	2017년 1학기
	Class time and classroom		목10(팔735) 목11(팔735) 목12(팔735)(팔735)			
Reference to this course	Related basic courses					
	Recommended concurrent courses					
	Related advanced courses					
Instructor	Name (title/division)		박범 (교수/ 산업정보시스템공학부)			
	Office Room Number	Paldal(팔달관) Rm # 810호	Office phone Number	2426	e-mail	ppark@ajou.ac.kr
	Office hours	목 17-18, 21-22		Homepage address		
Teaching Assistant	Name (title/division)					
	Office Room Number	팔달관 223호	Office phone Number	2428	e-mail	yjkim4004@hotmail.com

1. Introduction

Interface Engineering is some principal and advanced study of HCI(Human Computer Interaction) which is the discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them. Some principles of perceptual, cognitive, and motor-skill processor in human information processing are studied to consider user oriented interface design and development with Human Systems and Technology. Major applications and cases are studied with Human Informatics, Telematics and Telemedicine, Multimodal Interaction system, uX(user eXperience) design and ubiquitous computing network service systems and solutions in advanced ICT application domain industries and environments.

2. Course Objectives

- 교육 목표:

인간과 시스템과의 상호 작용, 소통, 협력을 위한 공학적 기술 지식과 제품 설계개발을 위한 융합적 지식, 디자인, 주용 도메인 지식을 학습하고 실습한다.

- 교과목 학습 성과:

1. 신제품에 대한 창의적 아이디어 창출 방안
2. 인간시스템 상호작용에 대한 문제 해결 방안 도출
3. 시스템 설계개발에 대한 Roadmap rPghlr
4. 설계 제작을 위한 연구개발 팀원의 역할 정의 및 협동 작업
5. 공학적 설계 개발에 대한 기술 보고서 및 연구 논문 등의 작성
6. HCI 기술과 제품의 연구개발 모델 및 가이드라인 확보

3. Class types and activities

4. Teaching Method

1. Lecture
2. Seminar
3. Project
4. Experiment
5. etc.

5. Knowledge and ability required for taking this course

6. Method of Evaluation

Evaluation Item	The Number of Times	Evaluation Proportion	Remarks
Attendance			
midterm exam			
final exam			
quiz			
presentation			
discussion			
homework			
etc			

-Term project: 35%
 -Final exam: 35%
 -Participation: 10%
 -Seminar & Quiz: 20%

7. Textbooks

Main/Sub	Title	Writer	Publisher	Publication year
주교재	Cognitive Systems Design	차우창(W. Cha)	Chaosbook	2013
부교재	Interaction Design beyond HCI	Preece, Jennifer	John Wiley & Sons, Inc.	
부교재	Human Computer Interaction	Preece, Jenny	Addison-Wesley	

8. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
1	Introduction to Interaction Engineering	Lecture	
2	Introduction to Virtual Environment	Lecture	
3	Ubiquitous Technology & Service	Lecture	
4	Human Information Processor	Lecture & Seminar	Team Project
5	Multimodal Interface Design Factors	Lecture & Seminar	Team Project
6	Knowledge Representation	Lecture & Seminar	Team Project
7	uX (User Experience) Design – Model	Lecture & Seminar	Team Project
8	uX Design Process	Lecture & Seminar	Team Project
9	uX Design and Applications	Lecture & Seminar	Team Project
10	Big Data Analysis and Mining	Lecture & Seminar	Team Project
11	Human Informatics Application	Lecture & Seminar	Team Project
12	Ubiquitous Networking and Interface system	Lecture & Seminar	Team Project
13	UI Design Tool	Lecture & Seminar	Team Project
14	Prototyping	Lecture & Seminar	Team Project
15	Usability Test	Lecture	Team Project & Presentation

8. Lecture Schedule

Week	Lecture contents	Lesson type	Remark
16	Project 사례 발표	Lecture	

9. Others

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