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②图玄束牵大學

②國玄東華大學								
教學計劃表 Syllabus								
課程名稱(中文) Course Name in Chinese	高互動多媒體認	计之研究		學年/學期 Academic Year/Sem	ester	113/2		
課程名稱(英文) Course Name in English	Highly interactive multimedia design							
科目代碼 Course Code	CSIEM0640	系級 Department 碩士 & Year 開課單位 Course-Offe Department			資訊工程學系			
修別 Type	選修 Elective	學分數/時間 Credit(s)/Hour(s) 3.0/3.0						
授課教師 Instructor	/黄武元							
先修課程 Prerequisite								
	課程描述 Course Description							
papers. Students will be grouped for some collaboration for preparing paper presentations and will be asked to think about how to integrate advanced technologies to improve HCI design of the paper they presented in the mid-term and final evaluations. Therefore, students will learn how to solve problems together and cultivate the HCI research sense.								
課程目標 Course Objectives								
Foster Students' critical and creative thinking through presentation, discussion and brainstorming for finding some strengths, weakness and potentials of the HCI journal papers. Students will be grouped as some collaboration for preparing paper presentation and furthermore will be asked to think how to integrate advanced technologies for improving HCI design of the paper they presented in the mid-term and final evaluations. Therefore, students will learn how to solve problems together and cultivate the HCI research sense.								
系專業能力 Basic Learning Outcomes						課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives		
A						0		
B 設計技術理論驗證實驗之能力Ability to design and conduct science experiments and to validate hypotheses.						0		

E | 近列性思考與創新研發之能力。ADITITY Of analytical tillinking, creative research planning, and innovative development.

圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated

資訊軟硬體設計開發之能力Ability to design and develop computer software and

批判性思考與創新研發之能力。Ability of analytical thinking, creative research

團隊專案開發之能力Ability to design and develop team projects.

 \mathbf{C}

D

授課進度表 Teaching Schedule & Content

週次Week 内容 Subject/Topics 備註Remarks

	Foster Ctudents' emitical and emeeting thinking through
	Foster Students' critical and creative thinking through presentation, discussion, and
	brainstorming to find some strengths, weaknesses, and potentials of
	the HCI journal
	papers. Students will be grouped for some collaboration for
	preparing paper
1	presentations and will be asked to think about how to integrate
	advanced
	technologies to improve HCI design of the paper they presented in
	the mid-term and
	final evaluations. Therefore, students will learn how to solve
	problems together and
	cultivate the HCI research sense.
	Chapter 1 Social Constructivism (2)
2	1.3 Benefit of Intra-action for Web-based learning 1.4 Group Discussion for suggestions and conclusion
	Chapter 2 Applications using Intra-action (1)
3	2. 1What is Intra-action: Annotations and Learning Journal
	2. 2 Encoding and Facilitating Short-term Memory
	Chapter 2 Applications using Intra-action (2)
4	2. 3 Intra-Psychology before Inter-Psychology
	2. 4 Group Discussion for suggestions and conclusion
	Part II Distant Field Interaction for Collaboration
5	Chapter 3 Annotation for Collaboration
	3.1 Multimedia Annotation with Computers and Internet
6	3.2 Annotations Sharing and Teamwork
0	3.3 Study on Annotation versus Homework Reviewing
	3.4 Multimedia Annotation for Learning English, Computer and
7	Mathematic
'	3.5 Annotation in E-readers for Learning English with Parental
	Involvement
8	3.6 Group Discussion for suggestions and conclusion
9	期中考試週 Midterm Exam
	Mid-term Presentation(Summary & Reflection& Proposal)
10	Mid-term Presentation(Summary & Reflection& Proposal)
	Chapter 4 Whiteboard for collaboration
11	4.1 Multimedia Whiteboard with computers and Internet
	4.2 Whiteboard Sharing and Teamwork
	4.3 Multimedia Whiteboard for Creativity in Mathematic Problem
	Solving
12	4.4 Peer learning behaviors using multiple representations in
12	virtual reality
	with Multimedia Whiteboard on geometry problem solving
	4.5 Group Discussion for suggestions and conclusion
	Part III Near Field Interaction for Collaboration
13	Chapter 5 Handheld Device for Collaboration and Practice
	5.1 Characteristics of Handheld Device for Learning 5.2 Familiar Contexts with Handheld Device for Practice
14	5.3 Bridging formal and informal learning with Handheld device
15	5.4 Group Discussion for suggestions and conclusion
	Chapter 6 Multi-touch Device for Collaboration and Practice
16	6.1 Characteristics of Multi-touch Device for Learning
1.5	. 2 Awareness and Presence for Collaboration
17	6.3 Applications of Multi-touch Device for Collaboration
	期末考試週 Final Exam
18	Final Presentation(Summary & Reflection & Proposal)
	Final Presentation(Summary & Reflection& Proposal)

教學策略 Teaching Strategies						
✓ 課堂講授 Lecture ✓ 分組討論Group Discussion 參觀實習 Field Trip						
其他Miscellaneous: <u>2. 3 hours are divided into 3 parts based on Flipped Classroom.</u>						
教學創新自評Teaching Self-Evaluation						
創新教學(Innovative Teaching)						
▼ 問題導向學習(PBL) ■ ▼ 團體合作學習(TBL) ■ 解決導向學習(SBL)						
■ 翻轉教室 Flipped Classroom ■ 磨課師 Moocs						
社會責任(Social Responsibility)						
✓ 在地實踐Community Practice 產學合作 Industy-Academia Cooperation						
跨域合作(Transdisciplinary Projects)						
──跨界教學Transdisciplinary Teaching ──跨院系教學Inter-collegiate Teaching						
□ 業師合授 Courses Co-taught with Industry Practitioners						
其它 other:						

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績(含出缺席) General Performance (Attendance Record)	10%			~	~				
期中考成績 Midterm Exam	25%			~	✓				
期末考成績 Final Exam	45%			~	~				
作業成績 Homework and/or Assignments	20%			~	~				
其他 Miscellaneous									

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目(書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

SSCI papers

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

Learning Management System

- 1. Google classroom: Please login Google classroom using xxx@gms.ndhu.edu.tw
- 2. Video lecturing online through "Google meet"

其他補充說明(Supplemental instructions)