

COM5514: MOBILE COMMUNICATION AND APPS DESIGN

Effective Term

Semester B 2025/26

Part I Course Overview

Course Title

Mobile Communication and Apps Design

Subject Code

COM - Media and Communication

Course Number

5514

Academic Unit

Media and Communication (COM)

College/School

College of Liberal Arts and Social Sciences (CH)

Course Duration

One Semester

Credit Units

3

Level

P5, P6 - Postgraduate Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to cover key concepts, technologies and skills in mobile communication and mobile application (Apps) design, such as design thinking, Apps architecture, prototyping, server-side scripting language, database connectivity, session management, and visual layout. After the completion of this course, students will be able to understand the entire pipeline of Apps design and develop a mobile Apps or social media applications using dynamic and interactive contents.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Demonstrate a good understanding of the key concepts core design principles of mobile communication and Apps development	20	x		
2	Explain different programming techniques for developing mobile applications with dynamic and interactive contents	20	x		
3	Describe the fundamental elements in Apps development	20	x	x	
4	Develop Apps with dynamic and interactive contents using a server-side scripting language	30		x	x
5	Review and evaluate the performance and user experience of existing mobile applications	10		x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Learning and Teaching Activities (LTAs)

LTAs		Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture and class discussion	Class lectures and discussions on knowledge and applications of mobile communication, web technologies, and front-end programming language	1, 2, 3	Throughout the class
2	Case study and analysis	Case studies from the guest lectures and company visits will cover the entire pipeline of Apps development for mobile communication	1, 2, 3, 5	Throughout the class
3	Project implementation	Mobile Apps development, user studies and prototyping	4, 5	5 weeks

4	Presentation	Demonstration of the Apps via presentations	3, 4, 5	1 week
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Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Class discussion	1, 2, 3	10	-	Yes
2	Individual assignments	1, 2, 4	20	AI use is allowed for brainstorming	Yes
3	Apps development	1, 2, 3, 5	40	AI use is allowed for brainstorming	Yes
4	Analytical report and presentation	1, 2, 3, 4, 5	30	AI use is allowed for brainstorming	Yes

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)**Assessment Task**

1. Class discussion

Criterion

Actively join class discussion on mobile communication and Apps development

Excellent

(A+, A, A-) Actively participated in all of the related class activities.

Good

(B+, B, B-) Actively participated in most of the related class activities.

Fair

(C+, C, C-) Rarely participated in the related class activities.

Marginal

(D) Occasionally participated in the related class activities.

Failure

(F) Did not participate in any of the related class activities.

Assessment Task

2. Individual assignments

Criterion

Demonstrate adequate knowledge on the core theories and principles of Apps design and development

Excellent

(A+, A, A-) Provide correct and insightful answers

Good

(B+, B, B-) Provide correct answers

Fair

(C+, C, C-) Provide incomplete or partially correct answers

Marginal

(D) Provide mostly incorrect answers or show minimal effort

Failure

(F) Do not prepare for the questions

Assessment Task

3. Apps development

Criterion

Demonstrate adequate ability to apply the skills to develop an Apps for mobile communication

Excellent

(A+, A, A-) Comprehensive understandings of the class materials in the Apps design

Good

(B+, B, B-) Adequate understandings of the class materials in the Apps design

Fair

(C+, C, C-) Moderate understandings of the class materials in the Apps design

Marginal

(D) Limited understandings of the class materials in the Apps design

Failure

(F) Fail to demonstrate basic understandings of class materials in the Apps design

Assessment Task

4. Analytical report and presentation

Criterion

Produce an analytical report on the user study and review of the Apps and make a good presentation as a product demonstration

Excellent

(A+, A, A-) Provide profound insights and adequate analyses and good presentation

Good

(B+, B, B-) Provide adequate analyses and good presentation

Fair

(C+, C, C-) Provide acceptable analyses, and a mostly clear presentation

Marginal

(D) Provide superficial analyses and an unclear presentation

Failure

(F) The paper and the presentation are unclear and have no logic

Additional Information for AR

Not applicable to students admitted before Semester A 2025/26

Part III Other Information**Keyword Syllabus**

Web technologies, social media, mobile media, dynamic web design, front-end programming languages, CSS, D3, JavaScript, Python, Apps, Advanced DOM scripting, Apps architecture, prototyping, design thinking, database support and service, web session management, visual component and navigation

Reading List**Compulsory Readings**

Title	
1	Vennaro, E. (2023). IOS Development at Scale: App Architecture and Design Patterns for Mobile Engineers (1st ed.). Apress L. P.
2	Prasad, P., Sonnenschein, L. M., Wydeven, E., & Morey, M. (2022). App Design Apprentice: A Non-Designer's Guide to Making Better Mobile UI & UX.
3	Staiano, F. (2022). Designing and Prototyping Interfaces with Figma: Learn essential UX/UI design principles by creating interactive prototypes for mobile, tablet, and desktop. Packt Publishing Ltd.
4	Mostefaoui, G. K., & Tariq, F. (Eds.). (2019). Mobile apps engineering#: design, development, security, and testing. CRC Press.

Additional Readings

Title	
1	Light, B., Burgess, J., & Duguay, S. (2018). The walkthrough method: An approach to the study of apps. New media & society, 20(3), 881-900.
2	Wilken, J. (2015). Ionic in action: Hybrid mobile apps with Ionic and AngularJS. Simon and Schuster.
3	Grundy, Q. (2022). A review of the quality and impact of mobile health apps. Annual review of public health, 43, 117-134.
4	Albury, K., McCosker, A., Pym, T., & Byron, P. (2020). Dating apps as public health 'problems' : cautionary tales and vernacular pedagogies in news media. Health Sociology Review, 29(3), 232-248.
5	Zhang, X., Zhu, R., Chen, L., Zhang, Z., & Chen, M. (2022). News from Messenger? A cross-national comparative study of news media's audience engagement strategies via Facebook Messenger chatbots. Digital Journalism. 10.1080/21670811.2022.2145329
6	Yus, F. (2021). Smartphone communication: Interactions in the app ecosystem (1st ed.). Routledge. https://doi.org/10.4324/9781003200574