

SM5359: PSYCHOLOGY OF INTERACTIVE MEDIA AND GAMES

Effective Term

Semester A 2025/26

Part I Course Overview

Course Title

Psychology of Interactive Media and Games

Subject Code

SM - School of Creative Media

Course Number

5359

Academic Unit

School of Creative Media (SM)

College/School

School of Creative Media (SM)

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 deals with effective design of interactive experiences through user testing and iterative prototyping, utilizing psychological theories of sensation and perception, motivation and personality, needs, learning, goals, belief systems, behaviors, and social influence as they pertain to interactive experiences like games, in online, offline, and immersive forms. We examine principles including visual and audio perception, emotions, cognition, personality, and the recent results in experimental psychology around psychological models explaining play behavior or motivation theories behind play. We introduce how audiences respond to play experiences based on the relationship of interactivity to learning theories, and explore visual and cultural archetypes like narratives, movies, and cartoons to distillate how people react as pertains to psychological theories, critically analyzing play behavior in game experiences. Hands on projects will prototype interactive experiences and layout full user testing workflows, taking methodology from game companies and research literature in careful evaluation processes.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe principles of psychology in the game science and interactive media context.		x	x	
2	Design and create user testing studies for development of game and interactive media prototypes.		x	x	x
3	Create, implement, and analyze psychological studies for the purpose of studying the interaction of games.		x	x	x
4	Apply biometric approaches to understand game and media interaction from user perspective.			x	x
5	Produce compelling and effective presentations and writing that can disseminate results to business, general audiences.		x	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	Lectures	Lectures by faculty	1, 2, 3, 4, 5
2	Discussion	Students and teachers discuss and critique each others' studies and designs.	2, 3, 4, 5
3	Presentations	Students present and defend their design, study, and production.	2, 3, 5

4	Projects	Final project involving previous concepts elaborated in class.	1, 2, 3, 4, 5	
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Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks ("- " for nil entry)	Allow Use of GenAI?
1	Participation & documentation	1, 2, 3, 4, 5	10	-	Yes
2	Assignments	3, 4	40	-	Yes
3	Project design	1, 2, 3, 4, 5	25	-	Yes
4	Project testing	2, 3, 4, 5	25	-	Yes

Continuous Assessment (%)

100

Examination (%)

0

Minimum Continuous Assessment Passing Requirement (%)

0

Minimum Examination Passing Requirement (%)

0

Assessment Rubrics (AR)**Assessment Task**

Participation & documentation

Criterion

- Active in-class participation, positive listening, strong ability to stimulate class discussion and comment on other points
- Interpret others' views with an open mind and ready to negotiate

Excellent

(A+, A, A-)

- Active participation, positive listening, stimulate discussion with others.
- Interpret others' views openly and inclusively.

Good

(B+, B, B-)

- Good participation, can listen, can discussion with others.
- Interpret others' views reasonably.

Fair

(C+, C, C-)

- Participates from time to time, discuss with others occasionally.
- Can listen to other view points.

Marginal

(D)

- Participates only rarely, discuss with others rarely.
- Listens to others rarely.

Failure

(F)

- Never participate nor discuss with others.
- Do not interpret other view points.

Assessment Task

Assignments

Criterion

- Excellent grasp of research material, able to explain key concepts, assumptions and debates
- Rigorous organization, coherent structure, distinct thesis, properly argued with strong narrative
- Critical analysis with insightful comments opening up new issues, or suggesting the ability to theorize

Excellent

(A+, A, A-)

- Excellent grasp of research material, can explain clearly.
- Strong organization and structured thesis with good arguments.
- Strong critical analysis and insightful theories.

Good

(B+, B, B-)

- Good grasp of research material, can explain well.
- Good organization and structured thesis with good arguments.
- Good critical analysis and good theories.

Fair

(C+, C, C-)

- Reasonable grasp of research material.
- Organization and structured thesis is valid.
- Reasonable critical analysis and theories.

Marginal

(D)

- Can barely grasp research material and explain.
- Can make arguments from time to time.
- Can critical analyze from time to time.

Failure

(F)

- Cannot explain research material.
- Cannot make coherent arguments.
- Cannot critically analyze.

Assessment Task

Project design

Criterion

- Rich, informative content, excellent grasp of the material with in-depth and extensive knowledge of the subject matter
- Strong grasp of the research literature and basing design on previous academic knowledge.
- Critical analysis with insightful comments opening up new issues, or suggesting the ability to theorize.

Excellent

(A+, A, A-)

- Informative content of the project, strong grasp of the subject matter.
- Strong understanding of the literature and previous work.
- Highly critical analysis and ability to theorize.

Good

(B+, B, B-)

- Good content of the project, good grasp of the subject matter.
- Good understanding of the literature and previous work.
- Good critical analysis and ability to theorize

Fair

(C+, C, C-)

- Moderate content of the project, moderate grasp of the subject matter.
- Moderate understanding of the literature and previous work.
- Moderate critical analysis and ability to theorize

Marginal

(D)

- Not much content of the project, do not know the subject matter well.
- Some understanding of the literature and previous work.
- Some critical analysis and ability to theorize

Failure

(F)

- No project content, no knowledge of project.
- No understanding of the literature and previous work.
- No critical analysis and ability to theorize

Assessment Task

Project testing

Criterion

- User testing done in rigorous and statistically valid manner.
- Work raises questions and instill insights about the design and principles illustrated by the design as an intervention, and told in an academic context in the paper.
- Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project

Excellent

(A+, A, A-)

- Highly rigorous and statistically valid user testing.
- Strong impact of the study illustrated by the design and highly academically impactful.
- Highly innovative interdisciplinary approach in the testing process.

Good

(B+, B, B-)

- Good rigorous and statistically valid user testing.
- Good impact of the study illustrated by the design and academically impactful.
- Good innovative interdisciplinary approach in the testing process.

Fair

(C+, C, C-)

- Moderately rigorous and statistically valid user testing.
- Moderately impactful study illustrated by the design and somewhat academically impactful.

- Somewhat innovative interdisciplinary approach in the testing process.

Marginal

(D)

- Some rigorous and statistically valid user testing.
- Somewhat impactful study illustrated by the design and a little bit academically impactful.
- Marginally innovative interdisciplinary approach in the testing process.

Failure

(F)

- No rigorous and statistically valid user testing.
- No impact of the study illustrated by the design and no academic relevance.
- Not innovative and no interdisciplinary approach in the testing process.

Part III Other Information

Keyword Syllabus

Game science, psychology of play, interactive media, user testing, biometric testing, psychological testing, playful design, physical design, game design, design for motivation, involvement, emotional engagement, personality analysis, cognition and action, learning in games and media, environmental storytelling, coding analysis, interviews, focus groups, think-aloud testing.

Reading List

Compulsory Readings

Title	
1	Przybylski, A. K., Rigby, C. S., & Ryan, R. M. (2010). A motivational model of video game engagement. <i>Review of general psychology</i> , 14(2), 154.
2	Hodent, C. (2017). <i>The Gamer's Brain: How Neuroscience and UX Can Impact Video Game Design</i> (Chapters on Perception and Attention). CRC Press.
3	Canossa, A., Badler, J. B., El-Nasr, M. S., Tignor, S., & Colvin, R. C. (2015). In Your Face(t) Impact of Personality and Context on Gameplay Behavior. In FDG.
4	Isbister, K. (2010). Enabling social play: A framework for design and evaluation. In <i>Evaluating user experience in games</i> (pp. 11-22). Springer London.

Additional Readings

Title	
1	Fogg, B. J. (2009, April). A behavior model for persuasive design. In <i>Proceedings of the 4th international Conference on Persuasive Technology</i> (p. 40). ACM.
2	Murray, J. H. (1997). Immersion. In <i>Hamlet on the Holodeck: The future of narrative in cyberspace</i> (pp. 123-158). Cambridge, MA: The MIT Press.
3	Vieira, L. C., & da Silva, F. S. C. (2017). Assessment of fun in interactive systems: A survey. <i>Cognitive Systems Research</i> , 41, 130-143.
4	Yee, N. (2006). Motivations for play in online games. <i>CyberPsychology & behavior</i> , 9(6), 772-775.
5	Bavelier, D., Green, C. S., Han, D. H., Renshaw, P. F., Merzenich, M. M., & Gentile, D. A. (2011). Brains on video games. <i>Nature reviews neuroscience</i> , 12(12), 763.