

Course Syllabus

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| 1. Program of Study
Faculty/Institute/College | Bachelor of Arts (Animation Production)
Mahidol University International College |
| 2. Course Code ICAM 355 | Course Title Computer and Video Games |
| 3. Number of Credits | 4 (Lecture/Lab) (2-4) |
| 4. Prerequisite (s) | None |
| 5. Type of Course | Elective for Animation Production |
| 6. Trimester / Academic Year | TBA |

7. **Course Description**

Introduction to game theory and practice; principles, technical aspects and process of video game creation; ethical and marketing factors. Application of educational theory to adjust level of game design and activities to the intended user.

8. **Course Objective(s)**

After completing this course, students will be able to write a narrative description of a game that demonstrate their ability:

1. to apply game theory and educational theory to game design;
2. to create compelling narrative, characters, and avatars
3. to consider ethical issues in game creation

9. **Course Outline**

Week	Topic		Instructor
	Lecture/Lab	Hour	
1	Introduction to game theory and practice	2/4	
2	Narrative and dramatic structures	2/4	
3	Tree-branching programming	2/4	
4	Goal and decision point setting	2/4	
5	Student and teacher meeting to prepare assignment I. Assignment I: Written description of simple narrative with six decision points	2/4	
6	Character and avatar creation	2/4	
7	Machine-human interfaces	2/4	

8	Student and teacher meeting to prepare assignment II. Assignment II: Expansion of written narrative description adding characters and avatars	2/4	
9	Survey of successful and failed games; Ethical and marketing factors	2/4	
10	Educational theory applied to game design	2/4	
11	Student and teacher meeting to prepare final project. Final project: Expansion of assignment II by applying educational theory and considering marketing and ethical factors	2/4	
12	Presentation of final project, evaluation, and discussion	2/4	
	Total	24/48	

10. Teaching Method(s)

Lecture, discussion, and hands- on practice

11. Teaching Media

DVD/VCD players, game software, animation software, computer, TV monitors.

12. Measurement and evaluation of student achievement

Assessment is made from the criteria of A, B+, B, C+, C, D+ and D

13. Course evaluation

Assignments I, II	50%
Final assignment	50%

14. Reference(s)

Alan Gershenfeld. *Game Plan: The Insider's Guide to Breaking In and Succeeding in the Computer and Video Game Business*

Carlton Books. *Video Games*

Casey Loe. *Tom Clancy's Splinter Cell: Chaos Theory : Prima Official Game Guide (Prima Official Game Guides)*

Dave Lt Col Grossman, Gloria Degaetano. (1999) *Stop Teaching Our Kids to Kill : A Call to Action Against TV, Movie and Video Game Violence*

Edward Branigan. *Projecting A Camera: Language-games In Film Theory*

Ed Byrne, Edward Byrne, Game Level Design (Game Development Series)

James Paul Gee. (2004) What Video Games Have to Teach Us About Learning and Literacy

Johnny L. Wilson, Rusel DeMaria. High Score!: The Illustrated History of Electronic Games, Second Edition

Richard Rouse. Game Design: Theory and Practice (With CD-ROM)

Prima Temp. Tom Clancy's Splinter Cell: Chaos Theory DVD Enhanced : Prima Official Game Guide

Lorenzo Phillips. Game Programming Tricks of the Trade (The Premier Press Game Development Series)

Mark J. P. Wolf (Editor), Bernard Perron (Editor). (2003) The Video Game Theory Reader

Markus Friedl. (2002) Online Game Interactivity Theory (Advances in Computer Graphics and Game Development Series)

Martin J. Osborne. (2003) An Introduction to Game Theory

Mike Wasson, Peter Turcan. Fundamentals of Audio and Video Programming for Games

Norio Baba (Editor), Lakhmi C. Jain (Editor). (2001)Computational Intelligence in Games (Studies in Fuzziness and Soft Computing)

Raph Koster. (2004) Theory of Fun for Game Design

15. Instructor(s)

TBA

16. Course Coordinator

Prof. Charles Harpole