

City University of Hong Kong
Information on a Course
offered by School of Creative Media
with effect from Semester A in 2012 / 2013

Part I

Course Title: Computer Animation for Interactive Content

Course Code: SM6314

Course Duration: One semester (13 weeks)

No. of Credit Units: 3 units

Level: P6

Medium of Instruction: English

Prerequisites: NIL

Precursors: NIL

Equivalent Courses: NIL

Exclusive Courses: NIL

Part II

1. Course Aims:

This course aims to explore the potentials of computer animation in interactive applications. At the end of this course, students are able to understand the potential and limitation of real-time interactive computer animation, and create their own interactive works using selected tools. Topics include sprite-based animation, dynamic background techniques, creating 3D animation contents for interactive applications, real-time rendering, and using physics and AI in an interactive computer animation environment.

2. Course Intended Learning Outcomes (CILOs)

Upon successful completion of this course, students should be able to:

No.	CILOs	Weighing (if applicable)
1.	Identify the potential and limitation of real-time interactive	30%

	computer animation	
2.	Name and compare the tools for real-time graphics	10%
*3.	Create their own real-time interactive animation graphics through selected tools with personal style/ signature	60%

*Negotiated Learning Outcome (NLO) explicitly articulating the elements of Discovery oriented learning.

3. Teaching and Learning Activities (TLAs)

(Indicative of likely activities and tasks designed to facilitate students' achievement of the CILOs. Final details will be provided to students in their first week of attendance in this course)

TLAs	ILO No
Lectures: the theory behind interactive computer animation is covered during the lectures. Students' activities will be conducted during the lectures to allow them hands-on practice in identifying the potential and limitation of real-time interactive computer animation.	CILO 1
In-class demonstration: various tools will be demonstrated during the classes, to show the potential and limitation of these tools. Students are allowed to have actual hands-on practice in naming and comparing selected tools for real-time graphics.	CILO 2
Workshops: workshops will be conducted every week, to help the students to create interactive computer animation using selected tools.	CILO 3

4. Assessment Tasks/Activities

(Indicative of likely activities and tasks designed to assess how well the students achieve the CILOs. Final details will be provided to students in their first week of attendance in this course)

Type of assessment tasks/activities	Weighting (if applicable)	ILO No	Remarks
Short assignments: students are required to complete some short assignments, which test their understanding of the potential and limitation of interactive computer animation.	30%	CILO 1	
Presentation: students are required to present during the classes to demonstrate their understanding on the topics.	10%	CILO 2	
A course project: students are required to finish an interactive animation project individually (using selected tools).	60%	CILO 3	

5. Grading of Student Achievement:

Refer to Grading of Courses in the Academic Regulations for Taught Postgraduate Degrees.

100% coursework and in-class participation

Grading pattern: Standard (A+AA-...F)

Grading is based on performance in assessment tasks / activities.

A. Presentation

This assessment will grade on content and fluency of presentation. Students should show their co-operation to conduct a well-organized presentation with their own argument and evidence from readings and notes. The threshold of ‘discovery’ lied in a student’s self initiatives to conduct additional research and to personalize theories for her/his personal daily experience.

Letter Grade	Grade Point	Grade Definitions	Description
A+ A A-	4.3 4.0 3.7	Excellent	<ul style="list-style-type: none"> – Rich, informative content, excellent grasp of the material with in-depth and extensive knowledge of the subject matter – Rigorous organization, coherent structure, and systematic exposition with a strong sense of narrative – Superior presentation skills: distinct pronunciation, fluent expression and appropriate diction, exact time-management – Critical analysis with insightful comments opening up new issues, or suggesting the ability to theorize
B+ B B-	3.3 3.0 2.7	Good	<ul style="list-style-type: none"> – Adequate content with firm grasp of the material that informs the audience on a subject matter – Reasonable organization, balanced structure and composition – Good verbal communication: comprehensible pronunciation, fluent expression and diction, fair time-management
C+ C C-	2.3 2.0 1.7	Adequate	<ul style="list-style-type: none"> – Adequate content with comprehensive grasp of the material demonstrating basic knowledge of the subject matter – Fair organization, weak structure and composition – Fair presentation skills: acceptable pronunciation, expression and diction, fair time-management
D	1.0	Marginal	<ul style="list-style-type: none"> – Weak content, loose grasp of the general ideas with some knowledge of the subject matter – Poor organization, structure and composition – Poor presentation skills: marginal pronunciation, expression and diction, poor time-management
F	0.0	Failure	<ul style="list-style-type: none"> – Inadequate content, fail to identify the general ideas with knowledge of the subject matter – No organization, structure or/and composition – Poor presentation skills: marginal pronunciation, expression and diction, minimal time-management

Note: All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

B. Creative Project

Students should demonstrate ability to utilize primary and secondary sources, execute creative ideas and projects. The threshold of ‘discovery’ lies in a student’s proactively turning theory into praxis, to transform course material into self-owned authorship.

Letter Grade	Grade Point	Grade Definitions	Description
A+ A A-	4.3 4.0 3.7	Excellent	<ul style="list-style-type: none"> – Work has strong affective quality and the articulation of personal styles and signature – Excellent appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium

			<ul style="list-style-type: none"> – Work raises questions and instill insights about the process of conception, creative strategization and production – Innovative exploration by combining knowledge from different disciplines (e.g. mathematics, psychology, physics, anthropology, etc.) to create an inter-disciplinary project – Efficient adjustment of plans and strategies in response to resources (time, space, equipment, etc) available with constructive adjustment
B+ B B-	3.3 3.0 2.7	Good	<ul style="list-style-type: none"> – Strong appreciation, exploration and/or application of the aesthetic and expressive qualities of the medium – Ability to create project/ work that demonstrate the processes of thinking and creative exploration – Proper adjustment of plans and strategies in response to resources (time, space, equipment, etc) available and constructive feedback/ suggestions
C+ C C-	2.3 2.0 1.7	Adequate	<ul style="list-style-type: none"> – Basic appreciation and/or application of the aesthetic and expressive qualities of the medium – Limited ability to create project/ work that demonstrate the processes of thinking and creative exploration – Adjustment of plans and strategies in response to resources (time, space, equipment, etc) available
D	1.0	Marginal	<ul style="list-style-type: none"> – Marginal appreciation of the aesthetic and expressive qualities of the medium – Marginal ability to create project/ work that demonstrate the processes of thinking and creative exploration – Limited adjustment of plans and strategies in response to resources (time, space, equipment, etc) available
F	0.0	Failure	<ul style="list-style-type: none"> – No appreciation of the aesthetics and expressive qualities of the medium – Fail to create project/ work that demonstrate the processes of thinking and creative exploration – Minimal adjustment of plans and strategies in response to resources (time, space, equipment, etc) available

Note: All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III

Keyword Syllabus:

Real-time interactive computer animation, real-time rendering, OpenGL and GLSL, dynamic sprites, isometric graphics, dynamic background, 3D models for interactive environment, real-time physics, AI in interactive graphics

Recommended Reading:

Text(s):

Nil

Online Resources:

Nil