NEW ZEALAND INSTITUTES OF TECHNOLOGY AND POLYTECHNIC QUALIFICATIONS IN INFORMATION & COMMUNICATIONS TECHNOLOGY

PRESCRIPTION: GD600 GAME DESIGN AND DEVELOPMENT

AIM OF MODULE:	To provide the student with an understanding of the various techniques and principles involved with Game design, including the application and implementation of real-time graphic engines and integration of media components.
CREDITS:	7
KNOWLEDGE ASSUMED FROM:	MA500 Multimedia Principles MA600 Multimedia Development
STUDENT LEARNING HOURS:	70
CONTENT REVISED:	2004 (new)
PRESCRIPTION EXPIRY DATE:	Nov 2011

Level and Assessment Schedule

TOPICS	Highest Skill Level R	C	A	P	Suggested Assessment Percentage
1. Gaming Principles		*			20
2. Project Design		*			20
3. Project Development			*		60
					100

LEARNING OUTCOMES

The student will:

C 1. Demonstrate an understanding of gaming principles by outlining a variety of development issues.

C 2. Develop conceptual artwork and proposal documentation for a simple game project.

A 3. Create a functional game project, integrating a variety of media components, using the appropriate software.

CONTENT

1. Gaming Principles

- Outline the evolution and development of game design and discuss current trends and developments.
- Outline a typical game development life cycle.
- Identify features and components that could be incorporated into a gaming solution.
- Identify common problem areas in game development, and suggest potential solutions.
- Discuss the prototyping process.

2. Project Design

- Create concept script detailing game play objectives.
- Create conceptual artwork and documentation outlining a simple game project, including annotated storyboards.
- Create documentation detailing proposed game structure and graphic engines.
- Outline details of required media components, and discuss possible issues relating to the integration and development of components.

3. Project Development

- Apply previously developed conceptual documentation and artwork to create a functional game prototype.

- Demonstrate the use and incorporation of a variety of media components, including 3D elements, graphical components and digital video.

- Demonstrate interactivity through various programming techniques, including the incorporation of collision detection and a functional physics engine.

- Create and outline source code documentation.

NOTE

The software packages employed should reflect packages currently used in the commercial environment.