Course Outline (Higher Education)

Institute / School:	Global Professional School
Course Title:	GAME DEVELOPMENT FUNDAMENTALS
Course ID:	GPSIT2001
Credit Points:	15.00
Prerequisite(s):	GPSIT1101
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED:	020103

Description of the Course:

This course introduces you to Games development, emphasising a mix of creative content design, development, and technical specialisation. You will gain an understanding of the Games industry from its conception through to current trends. Initially, you will study the lifecycle of games development, focusing on story design, character design, game mechanics, and level design, as well as content development including textures and interface, 3D modelling, game development, and programming. You will learn event driven programming through triggers and updates in a games development environment. This course will incorporate additional learning hours to support the development of students' academic and study skills.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Does Recognition of Prior Learning apply to this course?   No

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a

final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

Level of course in Program	AQF Level of Program					
	5	**6**	**7**	**8**	**9**	**10**
Introductory						
Intermediate	✔					
Advanced						

Learning Outcomes:

Knowledge:

K1. Describe the games industry, technologies and cultures;

K2. Discuss games design and development methodologies;

K3. Identify and explain the appropriate and correct syntax and programming constructs for different game development requirements.

Skills:

S1. Select and apply appropriate games design and development approaches to align with industry needs;

S2. Design and develop a range of art and programming assets, implementing aesthetics and logic into a game project;

S3. Analyse, design, implement and test game concepts using a games engine and programming constructs;

S4. Develop the appropriate English language and academic skills to successfully study at an undergraduate level

Application of knowledge and skills:

A1. Utilise appropriate software packages to design, build and program game prototypes and assets that align with user experience and project expectations;

Course Content:

Topics may include:

- Definitions, characteristics, and mechanics of games;

- Uses and applications of games related skills and practice;

- Delivery platforms for games;

- 2D and 3D asset development;

- Game character design;

- Games story development;

- Game level design;

- Games design and development processes

- Current trends and developments in games;

- Programming constructs such as methods, basic Object Oriented Programming, event driven programming;

- Implementing object and character behaviours;

- Identification and utilisation of programming libraries;

- Testing and debugging code syntax and game logic;

- Documentation of code

Graduate Attributes

The Federation University Federation graduate attributes (GA) are entrenched in the Higher Education Graduate Attributes Policy (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, K2, K3, S1, S2, S3, S4, A1	1 and 2
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K1, K3, S1, S2, S3, S4, A1	1 and 2
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K1	1 and 2
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K1, K2, K3, S1, S2, S3, S4, A1	1 and 2
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	K1, K2, K3, S1, S3, S4, A1	1

Learning Task and Assessment:

Assessment for this course will be based on a number of tasks including practical assignments, laboratory exercises covering the creation and editing of multimedia assets, documentation and code implementation, as well as an end of semester examination covering theoretical aspects of the course.

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K2, K3, S1, S2, S3, S4, A1	Theoretical and practical demonstrations of design and technical skills in game production; including pitching, planning and creating functional prototypes.	Assignments/Presentations	60% - 80%
K1, K2, K3, S1, S4	Tests and/or examinations covering a range of taught game theory, design, development and programming topics.	Test(s) &/or Examination(s)	20% - 40%

Alignment to the Minimum Co-Operative Standards (MiCS)

The Minimum Co-Operative Standards (MiCS) are an integral part of the Co-Operative University Model. Seven criteria inform the MiCS alignment at a program level. Although courses must undertake MiCS mapping, there is NO expectation that courses will meet all seven criteria. The criteria are as follows:

1. Co-design with industry and students
2. Co-develop with industry and students
3. Co-deliver with industry
4. FedTASK alignment
5. Workplace learning and career preparation
6. Authentic assessment
7. Industry-link/Industry facing experience

MiCS program level reporting highlights how each program embraces the principals and practices associated with the Co-Operative Model. Evidence of program alignment with the MiCS, can be captured in the Program Modification Form.

MICS Mapping has been undertaken for this course   No

Date:

Adopted Reference Style:

APA

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)