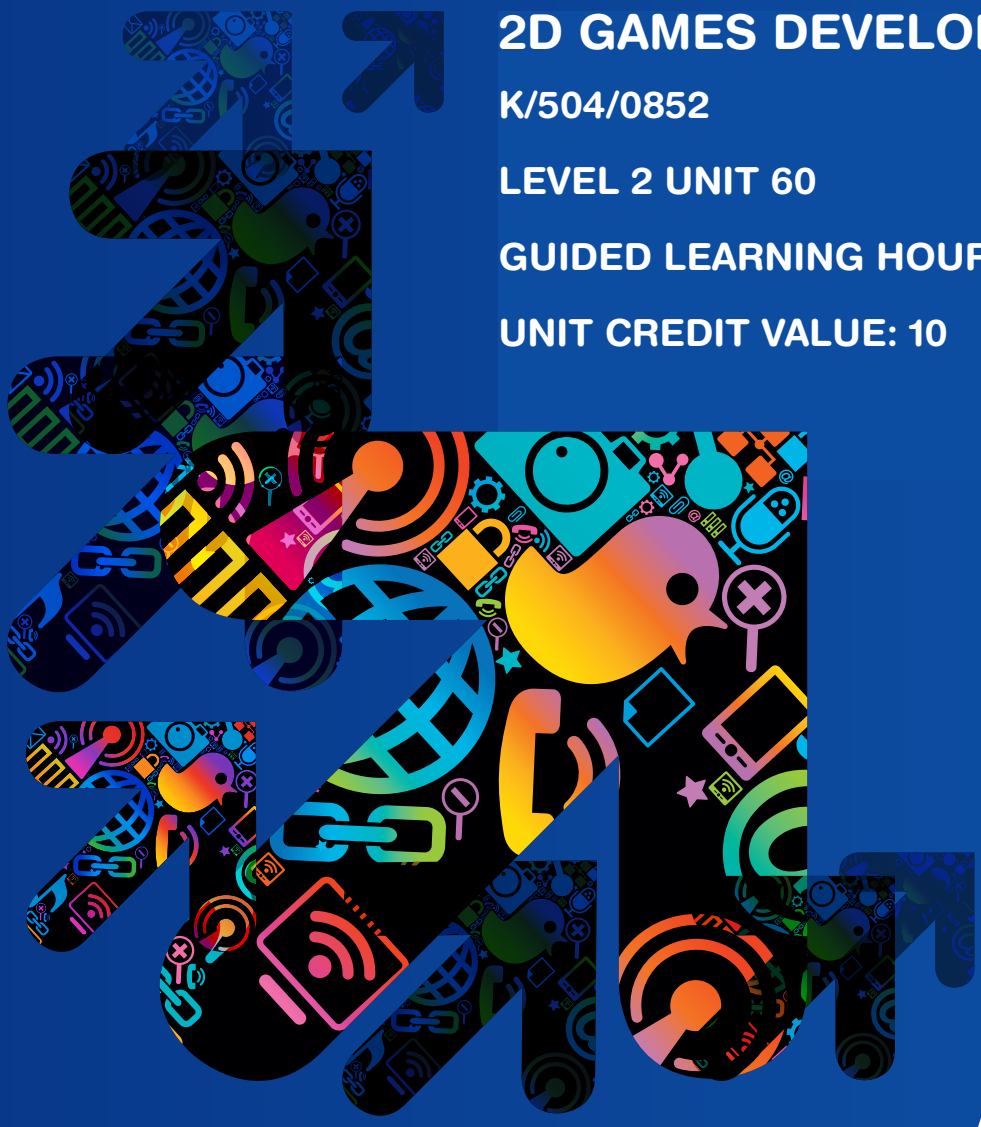
Cambridge TECHNICALS

Accredited

OCR LEVEL 2 CAMBRIDGE TECHNICAL

CERTIFICATE/DIPLOMA IN

MEDIA



2D GAMES DEVELOPMENT

K/504/0852

LEVEL 2 UNIT 60

GUIDED LEARNING HOURS: 60

UNIT CREDIT VALUE: 10

OCR

2D GAMES DEVELOPMENT

K/504/0852

LEVEL 2

AIM OF THE UNIT

By completing this unit learners will understand the principles and practice of small scale game development. Learners will also gain some practical skills by designing a character, planning the first level of a new computer game, and producing sample elements.

ASSESSMENT AND GRADING CRITERIA

Learning Outcome (LO) The learner will:	**Pass** The assessment criteria are the pass requirements for this unit. The learner can:	**Merit** To achieve a merit the evidence must show that, in addition to the pass criteria, the learner is able to:	**Distinction** To achieve a distinction the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
1 Understand 2D games and how they are developed	P1 Learners investigate 2D game development through a focused case study of an existing games development company, including: a) games engines b) planning c) level design d) character design e) gameplay		
2 Be able to write a proposal for a small scale 2D computer/console game	P2 Learners write a game proposal for a small-scale 2D computer/console game, including: a) game engine b) level design c) character design d) gameplay e) target audience		
3 Be able to design a character to feature in a small scale 2D computer/console game	P3 Learners design a character to feature in a small scale 2D computer/console game, including: a) character profile b) at least two character visuals	M1 The visuals created by learners are generally of a good standard and quality. The visuals are detailed and are conventional for the chosen genre	
4 Be able to produce elements for the first level of a small scale 2D computer/console game	P4 Learners produce sample materials by creating competent elements for the first level of a proposed small scale 2D computer/console game, including: a) background and environment visuals b) props/asset visuals c) relevant soundtrack	M2 The elements created by learners are generally of a good technical standard and quality. They are fit for purpose and used effectively to create meaning within the planned outcome. The soundtrack created includes some sound effects	D1 The elements created by learners are generally of a high technical standard and quality. Conventions of the chosen genre are followed, within the intentions of the planned game. The animated character's movement is appropriate for the planned gameplay

TEACHING CONTENT

The unit content describes what has to be taught to ensure that learners are able to access the highest grade.

Anything which follows an i.e. details what must be taught as part of that area of content.

Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used, learners must know and be able to apply relevant examples to their work though these do not need to be the same ones specified in the unit content.

Understand 2D games and how they are developed

For example:

- aesthetics of the game, impact on the audience, unique selling point, innovations
- sound effects, audio levels, character voiceovers/stars
- challenges, movements, decisions
- e.g. GameMonkey, Lua
- e.g. Gamestudio, Multimedia Fusion 2, RPG Maker 95, Wintermute Engine
- MP3 Player, Wii, DSi, PC Mac, mobile phone, PDA, online computer gaming, App
- e.g. Torque 2D Game Builder

Be able to write a proposal for a small scale 2D computer/console game

For example:

- Flash, Game Editor, Torque 2D Game Builder
- Tools which change or alter the game files (.mix, .ini)
- A functioning version of the game which includes any modifications

Examining any gameplay problems and errors in the program.

Be able to design a character to feature in a small scale 2D computer/console game

- pencil/colour drawings of 2D characters, characteristics i.e., special powers, personality

Be able to produce elements for the first level of a small scale 2D computer/console game

For example:

- drawn, image, 2D graphic design
- 2D background/environment drawings, illustrations, 2D graphic design
- static prop – i.e. non moving or physics prop - moving prop i.e. moves when hit by another object or dynamic prop – i.e. user moves the prop/models, textures, audio, 3D models
- select sound effects, music.

DELIVERY GUIDANCE

This unit is centre-assessed and externally moderated.

In order to achieve this unit, learners must produce a portfolio of evidence showing that they can meet all the pass grading criteria.

Portfolios of work must be produced independently. Portfolios put forward for moderation must be available for the OCR Visiting Moderator to access freely during the moderation visit, along with witness statements and any other necessary supporting documentation.

Centres must confirm to OCR that the evidence produced by learners is authentic.

In order to achieve this unit, learners must produce evidence that meets the pass grading criteria. There are no other additional requirements for this unit.

Learners should gain knowledge, understanding and skills through practical tasks related to their own productions as well as professional produced media products. This unit can be linked with the other units including, 211, 212

If working as a team, learners should ensure that they have identified their contribution to the planning and execution of any task involving teamwork, this should be supported by a witness statement from the tutor. If learners are working as a team this presents the opportunity for individuals to draw on their strengths and also to develop new skills.

P1: Learners could prepare for their case studies through visits to games development companies and/or visits from representatives from the game development company. Learners may find it helpful to draw upon their own experiences of gaming when investigating games fundamentals, in particular learners may find game company websites and published material like game magazines useful sources of information, especially when describing the principles and practice of games development. Learners' findings could be evidenced by outcomes such as a written report with supporting images, blog, a commentary of audiovisual material, a verbal presentation with a supporting slide show presentation.

P2: When planning the game proposal for a small-scale 2D computer game/console learners should draw upon their explorations from P1, in particular when deciding on the elements of the new computer game. Learners should where possible use industry standard formats when planning the new computer game, they may also be assisted by teacher led skills workshops, which could focus on developing key skills which learners would find beneficial in planning their material. Learners could investigate games fundamentals through class led studies on particular games centres may also arrange visits from practitioners. Learners should be encouraged to see the interconnectivity of each element when designing the level, the characters and how the user interacts with the game. Learners may find it helpful to use clear headings for each section of their planning material in a folder or written report with supporting diagrams, sketches and images so that this becomes a working document as well as providing evidence for the grading criteria. All evidence where possible should reflect industrial working practices.

P3/M1: When designing a 2D character learners should follow industry standard production processes. Learners should be taught appropriate pre-production skills in line with commercial practices, which may be possible teacher led skills workshops, or where possible inviting guest practitioners to the Centre. It is also important that learners adopt safe working practices in line with the media product they are producing. Suggested evidence could include wire frame 2D character model designs, illustrations. Evidence could also include a witness statement from the tutor.

P4/M2/D1: When creating the production elements for the first level of a computer game learners should, wherever possible work to a deadline and follow industry standard production processes. Learners should be taught appropriate production skills in line with commercial practices, which may be possible through teacher led skills workshops, or where possible inviting guest practitioners to the Centre. It is also important that learners adopt safe working practices in line with the media product they are producing. Suggested evidence could include graphic designs, illustrations or model designs of the background, include sound effects and music. Evidence should also include a witness statement from the tutor.

Learners should seek to evidence the grading criteria through a variety of mediums, (i.e. written format, written presentations, verbal presentations, audio content, audiovisual content) which highlight their particular strengths, however learners should be encouraged to stretch their skills and knowledge by using a range of mediums to evidence their work.

RESOURCES

This section provides suggestions of suitable resources. The list is neither prescriptive nor exhaustive, and learners should be encouraged to gather information from a variety of sources.

Some suggested resources are intended for Tutor use. The resources in this section were current at the time of production.

Books

Thompson, J & Berbank-Green, B (2007)	*The Computer Game Design Course: Principles, Practices and Techniques for the Aspiring Game Designer* Thames & Hudson
Dille, F & Zuur Platten, J (2006)	*The Ultimate Guide to Video Game Writing and Design* Lone Eagle Publishing Company
Ince, S (2006)	*Writing for Video Games* Methuen Drama
Chandler, R (2007)	*Game Writing Handbook* Charles River Media
Dunniway, T (2008)	*Game Development Essentials: Gameplay Mechanics* Delmar
Saunders, K & Novak, J (2006)	*Game Development Essentials: Game Interface Design* Delmar

Websites

www.lua.org

www.unity3d.com

www.virtools.com

www.conitec.net

www.quest3d.com

unrealtechnology.com

LINKS TO NOS

Skillset – Interactive Media and Computer Games (2009)

IM1 Work effectively in interactive media

IM3 Prepare assets for use in interactive media products

IM5 Design user interfaces for interactive media products

IM6 Use authoring tools to create interactive media products

IM20 Design electronic games

IM21 Program electronic games to develop functionality

IM23 Create narrative scripts for interactive media products

IM24 Create 2D animations for interactive media products

IM27 Create sound effects for interactive media products

Skillset – Animation (2007)

ANIM 2 Manage and store assets

ANIM 8 Create designs

ANIM 11 Create 2D assets for production

ANIM 21 Create digital visual effects

ENTO – Health and Safety Standalone Units

HSS1 Make sure your own actions reduce risks to health and safety



CONTACT US

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

Telephone 02476 851509
Email cambridgetec@ocr.org.uk
www.ocr.org.uk