Edexcel BTEC Level 4
HNC in Creative Media Production (MGA)

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Unit 1: Contextual Studies for Creative Media Production

Unit code: R/601/8242

QCF Level: 4

Credit value: 15

• Aim

This unit aims to develop learners' understanding of theoretical approaches to media production in order to inform their own practice and set it within a wider context.

• Unit abstract

This unit provides an opportunity for learners to undertake a study of the creative media in a chosen context. The unit will develop an appreciation of industry, products and audiences and the theoretical approaches used to analyse them.

The unit requires the application of academic research and referencing methods, which are appropriate for learners at this level of study.

On completing this unit learners will have gained an understanding of general media theory, which can then be applied and expanded upon in the specialist area of study or transferred to the wider context of the work environment to inform their own production work.

• Learning outcomes

On successful completion of this unit a learner will:

1   Understand the institutional context of creative media production and its influence on production
2   Understand creative media products in the context of their reception
3   Be able to present research on the production and reception of creative media products following relevant conventions.

1 **Understand the institutional context of creative media production and its influence on production**

Sector industries: film; television; radio; publishing; audio recording, eg music, audio books, audio guides; interactive media; computer games; emerging industries, eg cross-platform

Control: corporate control; access to distribution; international distribution; sources of income; regulation; legal constraints; self-imposed controls

Distribution models: cinema (Hollywood, Bollywood, world cinema, mainstream, independent); multiplex and art house cinema; broadcast television (public service, network, free to air, subscription, analogue, digital); radio (national, regional, local, restricted service licence, closed environment, digital audio broadcast, analogue); print (national press, local press, magazines); music (major labels, independent labels, retail, download); new media (internet, mobile); computer games industry (gaming on demand (GoD), electronic software distribution (ESD), game publishing, retail); global and local distribution; language communities

Marketing: corporate and brand identity; single and cross-platform advertising; viral; sponsorship; product placement; impact assessment, eg sales figures, ratings, circulation figures, number of hits, consumer awareness

2 **Understand creative media products in the context of their reception**

Products: films; television programmes; radio programmes; newspapers; magazines; books; recorded music; recorded speech; websites; computer games; emerging industries' products

Reception: theoretical approaches to content, eg structuralism, semiotics, content analysis, representation, genre theory, narrative theory, discourse analysis, ideology; theoretical approaches to audiences, eg reception theory, uses and gratifications, active or passive, fan culture, ethnography, effects debates, post modernism

3 **Be able to present research on the production and reception of creative media products following relevant conventions**

Research: focus, eg topic, texts, institutions, events; research, eg primary, secondary, quantitative, qualitative; sources, eg libraries, archives, internet; literature review; research trail; plagiarism

Presentation: format eg, essay, formal presentation, seminar group, report, viva voce; content; structure; language, eg clarity, grammar, syntax, spelling, punctuation

Conventions: structure of content, eg abstract, table of contents, summary, introduction, conclusion, chapters, numbered paragraphs, tables, graphics, indexing; citation; quotation; footnotes; terminology, eg op.cit., idem, ibid; referencing, eg Harvard, Modern Languages Association (MLA), Modern Humanities Research Association

Learning outcomes and assessment criteria

Learning outcomes **On successful completion of this unit a learner will:**	Assessment criteria for pass **The learner can:**
LO1 Understand the institutional context of creative media production and its influence on production	1.1 critically review the institutional context of the creative media and evaluate its influence on production
LO2 Understand creative media products in the context of their reception	2.1 analyse the reception of creative media products
LO3 Be able to present research on the production and reception of creative media products following relevant conventions.	3.1 present research on the production and reception of creative media products clearly 3.2 correctly follow relevant conventions for presenting research outcomes.

Recommended Reading List

ISBN 978-0333960950	Bertrand I and Hughes P	2004	Media Research Methods: Audiences, Institutions, Texts	Palgrave Macmillan
ISBN 978-0240805146	DiZazzo R	2003	Corporate Media Production, 2nd Edition	Focal Press
ISBN 978-0240515991	Block P	2001	Managing in the Media	Focal Press

Learning Time (1 credit = 15 hours)

Scheduled contact hours:	lectures	**5**
	seminars	
Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	supervised practical sessions	15
	tutorials	5
	formative assessment	5
	other scheduled time	
Guided independent study	Independent coursework	80
	Independent laboratory work	
Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision	other non-scheduled time	40
Placements (including work placement and year abroad)		0
Total hours ('Should be equal to credit x 15')		150

Unit 2: Research Techniques for Creative Media Production

Unit code: K/601/8327

QCF Level: 4

Credit value: 15

Aim

This unit aims to develop learners' skills in using the research techniques employed by professionals working in creative media production.

Unit abstract

This unit will develop learners' ability to use the research techniques required in the media industries and will provide them with the opportunity to develop production research skills to a professional level. Production research is crucial to all media products and is, in career terms, a key role in film, television and radio production teams, computer game design teams, and journalism.

Learners will develop an understanding of the various types of research and sources of information. They will develop the ability to check the validity and accuracy of information and will also develop an understanding of legal issues such as copyright.

Learning outcomes

On successful completion of this unit a learner will:

1   Be able to apply research methods and procedures in creative media production contexts

2   Be able to ensure the accuracy and validity of research material

3   Be able to present research outcomes with due compliance

4   Be able to evaluate research processes and outcomes.

1   **Be able to apply research methods and procedures in creative media production contexts**

Resources: internet, eg search methods, search engines; libraries, eg catalogues, inter-library loan, borrowing, reference only, microfiches, cuttings libraries, photographic and image libraries, stock shot libraries; archives, eg public records offices, broadcasters' archives, newspaper archives, film archives; private collections

Primary sources: interviews (face-to-face, over the telephone, by correspondence, by email); questionnaires; surveys; focus groups; information leaflets from source; own sources, eg notes, video or tape recording of live events, contacts list; diaries; observation; recces

Secondary sources: text-based, eg books, trade magazines, journals, newspapers, websites, published research; visual, eg photographs, paintings, film stock; audio, eg radio interviews, radio news broadcasts, documentaries, archived audio recordings; digital, eg CDROMs, databases

Procedures: note taking; collation of results and materials; cross-referencing materials; graphics; tables; ethical considerations, eg off the record, breach of confidence, protecting sources, moral issues, privacy, public interest, cheque book journalism

Production contexts: eg broadcast journalism, print and electronic articles and features, drama production, documentary production, computer game story development, website production, speech packages, contributors to programmes, presenter and producer notes, location recce reports

2   **Be able to ensure the accuracy and validity of research material**

Accuracy: cross-checking of source; multiple sources; procedural codes, eg BBC producer's guidelines, NUJ code of conduct; regulation, eg Press Complaints Commission, Ofcom, BSC, ITC

Validity: reliability of sources; validity of interpretations

3   **Be able to present research outcomes with due compliance**

Preparation of materials: suitable formats for production and post-production; photographs and archive material to correct format

Presentation format: format appropriate to production, eg written, oral, digital; format appropriate to audience; use of appropriate media

Referencing: appropriate to sources, eg books, journals, internet; methods of referencing, eg Harvard method, Modern Languages Association (MLA); citation; quotation; accreditation; acknowledgements; credits

Compliance: legal considerations, eg defamation, slander, libel, justification, fair comment, privilege, sub judice, contempt of court, differences in national laws, Official Secrets Act, Defence Advisory Notes (D notices); copyright (licences to use material, duration of copyright, in public domain, photocopying, internet, disclaimers, originality, plagiarism, intellectual integrity); royalty collection agencies, eg PRS, MCPS, ALCS; on-screen credits; permissions, eg release forms, filming permissions, theatrical agents, specialist agencies, auditions, contracts

4   **Be able to evaluate research processes and outcomes**

Process: strengths and weaknesses of the research methods used; validity; reliability; alternative routes to the same information; logistics; recommendations for the future

Outcomes: accuracy; fitness for purpose; ethical issues; feedback, eg audience, client, tutors, peers; recommendations for the future

Learning outcomes **On successful completion of this unit a learner will:**	Assessment criteria for pass **The learner can:**
LO1 Be able to apply research methods and procedures in creative media production contexts	1.1 apply research methods and procedures in a media production context to gather well focused and useful material
LO2 Be able to ensure the accuracy and validity of research material	2.1 apply correct procedures for collection of accurate data 2.2 justify validity of data
LO3 Be able to present research outcomes with due compliance	3.1 use an agreed format to present the outcomes of the research clearly to an audience 3.2 reference material and quotations accurately in a bibliography and credit list 3.3 demonstrate due compliance in all aspects of the research conducted
LO4 Be able to evaluate research processes and outcomes.	4.1 evaluate the strengths and weaknesses of the research process 4.2 evaluate the strengths and weaknesses of the research outcomes 4.3 critically assess areas for further consideration and make recommendations.

Learning Time (1 credit = 15 hours)

Scheduled contact hours:	lectures	**5**
	seminars	
Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	supervised practical sessions	10
	tutorials	10
	formative assessment	5
	other scheduled time	
Guided independent study	Independent coursework	80
	Independent laboratory work	
Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision	other non-scheduled time	40
Placements (including work placement and year abroad)		
Total hours ('Should be equal to credit x 15')		150

Recommended Reading List

ISBN 978-0333960950	Bertrand I and Hughes P	2004	Media Research Methods: Audiences, Institutions, Texts	Palgrave Macmillan
ISBN 978-0240805146	DiZazzo R	2003	Corporate Media Production, 2nd Edition	Focal Press
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Unit 8: Practical Skills for Computer Game Animation

Unit code: R/601/8838
QCF Level: 4
Credit value: 15

- **Aim**

This unit aims to develop the knowledge and practical software skills required for computer game animation and currently employed in the industry.

- **Unit abstract**

In this unit learners will be introduced to the practical skills used in the design and production of 2D and 3D animated assets. The unit focuses on applying and developing software skills in a range of applications, which incorporate animated movement of 2D images and 3D models.

The unit deals specifically with the development of practical skills necessary in the production of assets and the associated production processes employed when working to a schedule and as part of a project team.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Be able to use 2D graphics software tools for computer game animation
2. Be able to use 2D animation software tools for computer game animation
3. Be able to use 3D animation software tools for computer game animation
4. Be able to apply computer game animation production processes.

Unit content

1. **Be able to use 2D graphics software tools for computer game animation**

   Drawing tools: tool options; brush; pencil; duplicate; clone; fill; text; line; stroke; shape; zoom; guides and rulers; grid; snap; effects, eg layer effects, filters, channels; image adjustments, eg brightness and contrast, hue and saturation, colour balance, gradients, transparency, invert; masks

   Editing tools: selection, eg marquee, lasso, magic wand, magnetic lasso, deselect; transform (scale, rotate, skew, flip); cut; copy; paste; crop; trim; erase; undo; fill; constraints (compression, formats, output)

2. **Be able to use 2D animation software tools for computer game animation**

   Drawing tools: drawing, eg pencil, line, pen, brush, shapes; free transform, eg rotate, skew, distort, scale, envelope, ruler and guidelines; editing, eg lasso, eraser, undo, copy, paste, duplicate, insert, delete, aligning, grouping, ungrouping

   Animation tools: frame rate; layers, frames, keyframes, onion skinning, markers; frame manipulation, eg copying, deleting, reversal; testing movies; frame by frame animation; tweening (shape, motion); constraints (compression, formats, frame rate)

3. **Be able to use 3D animation software tools for computer game animation**

   Animation controls: time; trajectories; pivot points; links; chains; forward kinematics; inverse kinematics; skeletal deformation; morphing; effects; character animation rig; motion blur; anatomy; reaction; key frames and playback; constraints (compression, formats, poly counts, triangles, frame rate); field of view

   Animation process: animating, eg objects, lights, cameras, textures, morphs and transformations; lighting; texturing; rendering

4. **Be able to apply computer game animation production processes**

   Production process: pre-production, eg planning, preparation; production, eg time management, project management, monitoring work in progress, quality assurance, technical competencies, own work; post-production, eg sound, lighting, effects, editing

   Asset management: file storage; file retrieval; naming conventions
   Teamwork: team communication; contribution to team meetings; fulfilling team role; accepting team criticism

Learning outcomes and assessment criteria

UNIT 8: PRACTICAL SKILLS FOR COMPUTER GAME ANIMATION

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to use 2D graphics software tools for computer game animation	1.1 use 2D digital graphics drawing tools imaginatively to generate graphical assets 1.2 use 2D digital graphics editing tools to generate graphical assets working to a standard acceptable to an employer or client
LO2 Be able to use 2D animation software tools for computer game animation	2.1 use 2D animation drawing tools imaginatively to produce animation assets 2.2 use 2D animation tools to animate graphical assets working to a standard acceptable to an employer or client
LO3 Be able to use 3D animation software tools for computer game animation	3.1 use 3D animation controls imaginatively to produce animation assets 3.2 use 3D animation processes to animate 3D assets working to a standard acceptable to an employer or client
LO4 Be able to apply computer game animation production processes.	4.1 apply production processes to prepare and complete assets working to a standard acceptable to an employer or client 4.2 apply asset management procedures to store digital assets working to a standard acceptable to an employer or client 4.3 critically review own contribution to team work.

Recommended Reading List

Scheduled contact hours:	lectures	

		seminars			
ISBN-10: 0-321-92785-0	Adobe Creative Team	2013 Adobe Flash Professional CC Classroom in a Book / supervised practical sessions	10	Adobe Press	
		tutorials	5		
ISBN-13: 978-0321929600	Adobe Creative Team	2013 Adobe After Effects CC Classroom in a Book / formative assessment	5	Adobe Press	
		other scheduled time	10		
ISBN-13: 978-0571238347	Richard E Williams	2012 The Animator's Survival Kit / Guided independent study / Independent coursework	100	Faber and Faber	
ISBN-13: 978-0240521602	Harold Whitaker	2009 Timing for Animation / Independent laboratory work		Focal Press	
Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision		other non-scheduled time	20		
Placements (including work placement and year abroad)					
Total hours ('Should be equal to credit x 15')			150		

Learning Time (1 credit = 15 hours)

Unit 14: Computer Games Studies

Unit code: R/601/8886
QCF Level: 4
Credit value: 15

- **Aim**

This unit aims to develop a sophisticated understanding of the history, cultural contexts and ludic structures of computer games through the application of relevant theory.

- **Unit abstract**

In this unit, learners will explore the medium of computer games from a number of points of view. Beginning with an examination of the history of computer games, learners will then explore the relationship between games and the wider culture of which they form a part. Learners will also apply relevant theories to the analysis of specific computer games.

• Learning outcomes

On successful completion of this unit a learner will:

1. Understand the historical development of computer games
2. Understand the cultural context and impact of computer games
3. Be able to analyse the ludic and narrative aspects of computer games.

Unit content

1. **Understand the historical development of computer games**
   Development of game technologies: escalating power in graphics cards; evolution of game controllers

   Development of game platform types: arcade; consoles; PC; phones (smartphones); handhelds

   Development of game genres: pioneers, eg Electronic Arts, Valve; influential developers, eg Shigeru Miyamoto, Peter Molyneux, Keita Takahashi, Sid Meier; computer game publishers, eg Nintendo, Apple

   Development of legal framework: copyright; intellectual property, eg Marvel vs City of Heroes, Nintendo vs Nyko; anti-piracy legislation, eg Digital Rights Management (DRM) techniques, digital distribution

2. **Understand the cultural context and impact of computer games**

   Gaming cultures: pop culture (games as icons, games as cultural artifacts, game genres, synergy with other media); fan culture; game communities; social games; online and multiplayer games; social networking; viral messaging; virtual economies; gambling; open-source economics; virtual worlds play; experimentation; games used in social settings; games in education; therapeutic gaming; physical games; games as an art form

   Game-player identities: exploration of self-identity, eg avatars, role-playing, stereotypes, gender, sexuality, ethnicity, Jungian archetypes, narcissism; creative play, eg The Sims, Little Big Planet; mod culture, eg Half-Life, Quake, Battlefield 1942

   Gaming demographics: diversity of players, eg gender, nationality, ethnicity, language, sexuality; choices of players; buying patterns of players

   Impact: effects debate and computer games, eg portrayal of sex, portrayal of violence; addiction; ethical responsibilities of developers

3. **Be able to analyse the ludic and narrative aspects of computer games**

   Ludology: agency; toys; children's playgrounds; rule systems; serious games; authors, eg Gonzal Frasca, Johan Huizinga, Roger Caillois, Jesper Juul; games with a focus on gameplay over narrative, eg *Bejeweled*, *Wipeout*, *Tekken*, *Katamari Damacy*; dynamic systems (cybernetics, positive and negative feedback loops); emergence, eg Steven Johnson, John Holland

   Narratology: dramatic structure (three act structure, five act structure, hero's journey); linear narrative, eg *Half-Life*, *The Secret of Monkey Island*; comparability with other media, eg film, comics, novels, graphic novels, soap operas

   Critical approaches: analytical, eg semiotics, structuralism, post-structuralism, content analysis, genre analysis; social, eg memetics, social networking

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the historical development of computer games	1.1 critically review the development of computer games
LO2 Understand the cultural context and impact of computer games	2.1 critically review computer games in the context of the wider culture 2.2 critically assess the cultural impact of computer games
LO3 Be able to analyse the ludic and narrative aspects of computer games.	3.1 analyse the ludic qualities of examples of computer games 3.2 analyse the narrative qualities of examples of computer games.

Learning Time (1 credit = 15 hours)

Scheduled contact hours: Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	lectures	
	seminars	
	supervised practical sessions	10
	tutorials	5
	formative assessment	5
	other scheduled time	10
Guided independent study	Independent coursework	100

ISBN 978-0333960950	Bertrand I and Hughes P	2004	Media Research Methods: Audiences, Institutions, Texts	Palgrave Macmillan
ISBN 978-1845137144	Steven Cavalier	2011	The World History of Animation	Aurum Press Ltd

Guided independent study	Independent laboratory work	
	other non-scheduled time	20
Placements (including work placement and year abroad)		

Total hours ('Should be equal to credit x 15')	150

Recommended Reading List

Unit 35: Animation Techniques

Unit code: L/601/8787
QCF Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners' understanding of the development of animation and provide them with skills needed to create animation productions to a professional standard.

- **Unit abstract**

This unit will develop learners' understanding of the history of and key developments in animation. Learners will develop skills in techniques such as key frame, tweening, and motion capture.

Learners will plan and produce 2D and 3D animation suitable for a specified audience. On completion of this unit they will be able to undertake animation projects working to near professional standards.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Understand the techniques and styles used in animation
2. Be able to plan animated productions for specified audiences
3. Be able to create animated productions for specified audiences
4. Be able to evaluate own animation production work.

Unit content

1. **Understand the techniques and styles used in animation**

   Origins of animation: pioneers and techniques, eg Chinese zoetrope, William Horner (zoetrope), Edison (kinetoscope), Lumière brothers, Walt Disney (cel), Ray Harryhausen (claymation), Nick Park (stop motion); visual styles, eg anime, photorealistic, cartoon, computer generated images (CGI); techniques, eg 2D, 3D, 4D, stop motion, cel, motion capture

   Applications: music videos; advertising; films; TV programmes; computer games; mobile phones; internet, eg banners, widgets, websites

2. **Be able to plan animated productions for specified audiences**

Planning work: content; style; ideas; mood boards; proposals; treatment; scripts; storyboard; scheduling; lip sync; voiceover; texturing; lighting; rendering and exporting; budget; resources, eg music

Audience: composition of audience, eg age, gender, ethnicity, psychographics; style; design

3. **Be able to create animated productions for specified audiences**

Techniques: 2D animation software; 3D animation software; effect; 12 principles of animation (timing, squash and stretch, anticipation, staging, straight ahead action and pose to pose, follow through and overlapping action, slow in and slow out, arching, secondary action, exaggeration, solid drawing, appeal)

Production: appropriate techniques, eg 2D, 3D, 4D, stop motion, cel; sound and music dubs; lip sync; appropriate formats; lighting; texturing

Technical considerations: file formats; compression; output; audio; frame rates

Post-production: gathering materials, eg textures, images; editing, eg rough cut, final edit; effects, eg sound, graphics, transitions, rendering; exporting, eg file type, file size

4. **Be able to evaluate own animation production work**
Finished product: technical quality; aesthetic quality; suitability for purpose; meeting deadline; audience feedback

Production skills: technical competence; workflow and time management; team working

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the techniques and styles used in animation	1.1 critically review the history of and key developments in animation 1.2 analyse examples of animation
LO2 Be able to plan animated productions for specified audiences	2.1 generate imaginative ideas for an animation for a specified audience 2.2 complete pre-production work for an animation working to a standard acceptable to an employer or client
LO3 Be able to create animated productions for specified audiences	3.1 complete an animated production for a specified audience working to a standard acceptable to an employer or client
LO4 Be able to evaluate own animation production work.	4.1 critically evaluate own finished product against agreed criteria and make recommendations for improvements 4.2 critically evaluate own production skills against agreed criteria and make recommendations for improvements.

ISBN 9780240809939	Michael D Mattesi	2008	Character Design for Life Drawing	Focal Press
ISN 9780907610663	Stan Lee	1978	How to Draw Comics the Marvel Way	Titan Books
ISBN 9781856695503	Maureen Furniss	2008	The Animation Bible	Laurence King Publishing Ltd
ISBN 9781856695879	Andrew Selby	2009	Animation in Process	Laurence King Publishing Ltd
ISBN-13: 978-0 571238347	Richard E Williams	2012	The Animator's Survival Kit	Faber and Faber
ISBN-13: 978-0240521602	Harold Whitaker	2009	Timing for Animation	Focal Press

Recommended Reading List

Learning Time (1 credit = 15 hours)

Scheduled contact hours: Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	lectures	
	seminars	
	supervised practical sessions	10
	tutorials	5
	formative assessment	5
	other scheduled time	10
Guided independent study Note: include in guided independent study preparation for scheduled sessions, follow up work,	Independent coursework	100
	Independent laboratory work	
	other non-scheduled time	20

wider reading or practice, revision		
Placements (including work placement and year abroad)		
Total hours ('Should be equal to credit x 15')	150	

Unit 45: Drawing Techniques for Computer Game Concept Art

Unit code: A/601/8347
QCF Level: 4
Credit value: 15

- ## Aim

This unit aims to develop learners' understanding of the techniques of drawing in various media and their practical skills in drawing figures and environments for computer game concept art.

- ## Unit abstract

The essence of this unit is to develop drawing skills to permit effective communication of the visualisation of imagined characters and locations within the conceptual game world. Skilful execution of these visualisations begins with study and practice of observational and life drawing.

In this unit learners will use a variety of media and techniques to develop their skills and ability in observational drawing. The process of observational work includes the ability to analyse, measure, dissect and accurately describe, not only from the environment but particularly in reference to life drawing and the human figure.

To achieve this, learners will have opportunities to explore, understand and communicate what they are observing, while incorporating formal elements into their drawings to show the use of line, shape, form, colour, pattern and texture, viewpoint, perspective, scale, and space. The study of human and animal anatomy and movement will develop understanding of what is happening under the skin, encouraging preparation of impressive dynamic concept drawings with enhanced realism.

Use of the participatory web will encourage exchange of critical feedback to improve drawing skills and throughout the unit learners will maintain a portfolio of concept drawing work suitable to support career development.

- ## Learning outcomes

On successful completion of this unit a learner will:

1. Be able to create concept drawings for computer games from life
2. Be able to create and maintain personal drawing weblogs of computer game concept art
3. Be able to create and review career-oriented portfolios of own concept art drawing work.

Unit content

1. **Be able to create concept drawings for computer games from life**
   Drawing media: pencils (graphite, colour, watercolour); charcoal; pastel (soft, hard); pen and ink; marker pens

   Drawing techniques: line, eg gesture, contour; tone (value), eg shading, linear hatching, crosshatching; texture; perspective (1-point, 2-point, 3-point, 4-point); foreshortening; composition; colour

   Observational techniques: lines; edges; spaces (positive, negative); shapes; relationships between spaces; light and shade; scale; point of view; gestalt (spirit or essence of subject matter)

   Working process: preliminary sketches; media experimentation; annotated studies; final drawings (life drawing, environment)

   Physiology for drawing: skeleton and muscles (human, animal); body proportions; biomechanical movement (human movement; animal movement)

2. **Be able to create and maintain personal drawing weblogs of computer game concept art**

   Personal drawing weblog: weblog application, eg Facebook, Blogger, blog.co.uk; prepare work for upload (scan, photograph, resolution); upload; tags; weblog maintenance (regular postings, filtering comments)

   Feedback: receive feedback; respond to feedback; feedback on others' weblogs

3. **Be able to create and review career-oriented portfolios of own concept art drawing work**

   Portfolio: choice of media, eg paper, digital, online gallery; quality of presentation; for career development

   Content: drawing media exercises; drawing technique exercises; annotated studies; final work

   Reflect on: finished products (technical qualities, aesthetic qualities, suitability for purpose); technical skills; workflow and time management

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Be able to create concept drawings for computer games from life	1.1 use different drawing media and techniques to create concept drawings from life working to a standard acceptable to an employer or client
LO2 Be able to create and maintain personal drawing weblogs of computer game concept art	2.1 create an effective personal drawing weblog able to receive feedback 2.2 maintain personal drawing weblog thoroughly and regularly
LO3 Be able to create and review	3.1 create a portfolio that effectively presents own drawing

career-oriented portfolios of own concept art drawing work.	work for career development purposes 3.2 regularly review own drawing work against agreed criteria and make recommendations for improvements.

Learning Time (1 credit = 15 hours)

Scheduled contact hours: Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	lectures	
	seminars	
	supervised practical sessions	10
	tutorials	5
	formative assessment	5
	other scheduled time	10
Guided independent study Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision	Independent coursework	100
	Independent laboratory work	
	other non-scheduled time	20
Placements (including work placement and year abroad)		
Total hours ('Should be equal to credit x 15')	150	

Reading List:

ISBN Number (for printed material)	Author	Date	Title	Publisher
ISBN 9781783297443	Bungie	2014	The Art of Destiny	Titan Publishing Group
ISBN 9781781168116	Danny Graydon	2009	Angry Birds Hatching a Universe	Titan Books
ISBN 9781856695503	Maureen Furniss	2008	The Animation Bible	Laurence King Publishing Ltd
ISBN 9781856695879	Andrew Selby	2009	Animation in Process	Laurence King Publishing Ltd

Unit 46: 2D Digital Graphics for Computer Games

Unit code: J/601/8349
QCF Level: 4
Credit value: 15

- **Aim**

This unit aims to develop learners' understanding of 2D digital graphics software and provide them with the skills required to use this software in creating graphics for computer games.

- **Unit abstract**

In this unit learners will become familiar with tools and techniques of the digital graphics software used to produce images for computer games. These techniques form the basis of the development of graphics for game poster production, game packaging, in-game graphics such as head up display graphics, sprite graphics, background graphics, image textures and concept art graphics – in short for all print and screen graphics for computer games. This unit is therefore fundamental to the development of digital design skills for the production of computer games.

It is important for learners to develop appropriate skills in using digital graphics software and this unit provides knowledge, understanding and practical experience providing an essential awareness and experience of commonly used software tools. Learners will have opportunities to experiment with graphic styles used to set mood and theme in computer game products.

Since this unit encourages learners to express imaginative skills, it is appropriate that some critical self-reflective practice is undertaken. This professional skill will be of great value in any future career.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Understand the theory of digital graphics for computer games
2. Be able to generate ideas for computer game graphics
3. Be able to create digital graphics for computer games following industry practice.

Unit content

1. **Understand the theory of digital graphics for computer games**

   Digital imaging theory: pixel (picture element, image resolution, intensity); types of digital graphics (raster images, vector images); file extensions; compression (lossy; lossless); MIP maps

   Image capture: scanner; digital camera; tablet
   Image optimisation: target image output; image bit depth; image resolution; image dimensions; image compression
   Storage of digital image assets: file size; file naming conventions; asset management

Applications: sprites; concept art, eg character, weapon, vehicle, environment; texture art; background graphics, eg walls, forests, clouds; head up display (HUD); game packaging

Artistic styles: photorealism; cel-shading; abstraction; exaggeration, eg anime, manga

2. **Be able to generate ideas for computer game graphics**

Ideas generation: stimulus, eg client brief, own brief, from market research; brainstorming; mood boards; thumbnail sketching; concept drawings

Legal and ethical considerations: legal (copyright, libel, defamation, British Board of Film Classification, Race Relations Act 1976 and later amendments, Obscene Publications Act 1959 and later amendments); ethical (decency, representation of social groups)

Computer game graphics: in-game graphics, eg head up displays, sprites, backgrounds, textures; concept art; game packaging

Graphics specification: client needs; audience; thumbnail sketching; visual style, eg colour, style, photorealistic, cel-shaded, anime; composition (scale, point of view, perspective); typography; technical considerations, eg file format, file size, optimisation, file naming conventions, asset management, intended output

3. **Be able to create digital graphics for computer games following industry practice**

Preparation: workflow (scheduling, efficient time management); deadlines (production milestones, deliverables, quality assurance); asset management (file storage, file retrieval, naming conventions)

Software interface: work area; tool box; status bar; file information; window control; palettes (floating, docking, tabs, customising)

Workflow: reference images; plug-ins; optimising (bit depth, resolution, dimensions)
Drawing tools: tool options; brush; pencil; duplicate; clone; fill; text; line; stroke; shape; zoom;

guides and rulers; grid; snap; palettes; layers; colour selection; graphics tablets

Editing tools: selection; transform; cut; copy; paste; crop; trim; erase; undo; fill

Advanced tools: effects; image adjustments; masks; paths; brushes; brush plug-in

Game graphics: head up displays; sprite graphics; image textures; concept art; game packaging, eg box cover, manual, label, poster

Industry practice: reflect on finished product (compared with original intentions, fitness for purpose, technical qualities, aesthetic qualities); production skills (ideas generation, graphics specification, workflow and time management, technical competence, teamwork)

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the theory of digital graphics for computer games	1.1 explain the theory of digital graphics for computer games
LO2 Be able to generate ideas for computer game graphics	2.1 generate imaginative ideas for a computer game taking account of legal and ethical considerations 2.2 document a graphics specification for a computer game working to a standard acceptable to an employer or client
LO3 Be able to create digital graphics for computer games following industry practice.	3.1 use preparation techniques to create digital graphics for a computer game working to a standard acceptable to an employer or client 3.2 use digital animation software tools to create digital graphics for a computer game working to a standard acceptable to an employer or client 3.3 critically evaluate own digital graphics work against agreed criteria following industry practice.

Reading List:

ISBN Number (for printed material)	Author	Date	Title	Publisher
ISBN-978-0133927108	Adobe Creative Team	2014	Adobe Flash professional CC: 2014 release	Adobe Press
ISBN-13: 978-0321929600	Adobe Creative Team	2013	Adobe After Effects CC Classroom in a Book	Adobe Press
ISBN-13: 978-0321928078	Adobe Creative Team	2013	Adobe Photoshop CC Classroom in a Book	Adobe Press
ISBN-13: 978-0321929495	Adobe Creative Team	2013	Adobe Illustrator CC Classroom in a Book	Adobe Press
ISBN-978-0133927108	Adobe Creative Team	2014	Adobe Flash professional CC: 2014 release	Adobe Press

Learning Time (1 credit = 10 hours)

Scheduled contact hours: Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	lectures	
	seminars	
	supervised practical sessions	10
	tutorials	5
	formative assessment	5
	other scheduled time	10
Guided independent study Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision	Independent coursework	100
	Independent laboratory work	
	other non-scheduled time	20
Placements (including work placement and year abroad)		
Total hours ('Should be equal to credit x 15')		150

Unit 47: 2D Digital Animation for Computer Games

Unit code: A/601/8350
QCF Level: 4
Credit value: 15

- **Aim**

The aim of the unit is to develop learners' understanding of and skills in using the software, tools and techniques that are needed to animate 2D content for computer games.

- **Unit abstract**

This unit provides learners with the opportunity to develop their skills in traditional animation techniques (as a background to inform planning and production of animation projects using 2D digital animation tools) and in using the tools and techniques of 2D digital animation needed to produce content for computer games.

Learners will develop their drawing skills, and the ability to develop fresh ideas, as these are a key pre-requisite to establishing a successful career in the animation industry.

Learners will also develop an understanding of the relationship of the animator to the computer programmer in a game production. Animations are triggered by software, so animators need to learn to work closely with programmers.

Since this unit requires learners to exercise imaginative skills, it is appropriate that some critical self-reflective practice is undertaken. This professional skill will be of great value in any future career.

- **Learning outcomes**

On successful completion of this unit a learner will:

1. Understand 2D animation techniques
2. Be able to generate ideas for 2D digital animations with soundtrack for computer games
3. Be able to create 2D digital animations with soundtrack for computer games following industry practice.

Unit content

1. **Understand 2D animation techniques**
   Traditional 2D animation techniques: paper animation; cut-out animation; rotoscoping *Digital 2D animation techniques*: application software, eg Flash, After Effects, Toon Boom Studio; pixel (picture element, image resolution, intensity); types of digital graphics (raster images, vector images); file extensions; compression (lossy; lossless); image capture (scanner, digital camera, tablet); image optimisation (image bit depth, image resolution, image dimensions, image compression); storage of digital assets (file size, file naming conventions, asset management)
2. **Be able to generate ideas for 2D digital animations with soundtrack for computer games**

   Ideas generation: stimulus, eg client brief, own brief, from market research; brainstorming; mood boards; storyboards; concept drawings; characters; backgrounds; story scripts; audio; working within technical limitations

   Soundtrack: sounds (dialogue, sound effects, actions, on-screen movement); music

Animation specification: client needs; audience; storyboarding; visual style; composition; typography; technical considerations; consideration of movement and timing; continuity; frames per second; perspective; soundtrack design; point of view

Legal and ethical considerations: copyright; ethical issues; intellectual property (IP)

3. **Be able to create 2D digital animations with soundtrack for computer games following industry practice**

Preparation: workflow (scheduling, efficient time management); deadlines (production milestones, deliverables, quality assurance); asset management (file storage and retrieval, naming conventions)

Software interface: work area; drawing tools; animation tools; motion paths; effects; camera movements; lip sync; image capture; import (artwork, video)

Digital production: use of software application, eg Flash, Photoshop, After Effects, Toon Boom Studio

Post-production: use of software, eg Flash, Photoshop, After Effects, Toon Boom Studio; soundtrack (music, dialogue, sound effects); synchronisation

Asset management: file storage and retrieval systems; export file path; file format; compression; file naming conventions; file backup systems

Industry practice: reflect on finished product (compared with original intentions, fitness for purpose, technical qualities, aesthetic qualities); production skills (ideas generation, animation specification, workflow and time management, technical competence, teamwork, own contribution)

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand 2D animation techniques	1.1 explain 2D animation techniques 1.2 explain 2D digital animation techniques
LO2 Be able to generate ideas for 2D digital animations with soundtrack for computer games	2.1 generate imaginative ideas for a 2D animation with soundtrack, taking account of legal and ethical considerations 2.2 document a 2Danimationspecificationworkingtoa standard acceptable to an employer or client
LO3 Be able to create 2D digital animations with soundtrack for computer games following industry practice.	3.1 use preparation techniques in the creation of a 2D animation for a computer game working to a standard acceptable to an employer or client 3.2 use digital animation software tools to create an imaginative 2D animation for a computer game working to a standard acceptable to an employer or client 3.3 critically evaluate own contribution to animation production against agreed criteria following industry practice.

Reading List:

ISBN Number (for printed material)	Author	Date	Title	Publisher
ISBN-13: 978-0321929600	Adobe Creative Team	2013	[Adobe After Effects CC Classroom in a Book](#)	Adobe Press
ISBN-13: 978-0321928078	Adobe Creative Team	2013	[Adobe Photoshop CC Classroom in a Book](#)	Adobe Press
ISBN-13: 978-0321929495	Adobe Creative Team	2013	[Adobe Illustrator CC Classroom in a Book](#)	Adobe Press
ISBN-978-0133927108	Adobe Creative Team	2014	Adobe Flash professional CC: 2014 release	Adobe Press

Learning Time (1 credit = 15 hours)

Scheduled contact hours:	lectures	
	seminars	
Note: include in scheduled time: project supervision, demonstrations, practical classes and workshops, supervised time in studio or workshop, scheduled lab work , fieldwork, external visits, work-based learning where integrated into a structured academic programme	supervised practical sessions	10
	tutorials	5
	formative assessment	5
	other scheduled time	10
Guided independent study	Independent coursework	100
	Independent laboratory work	
Note: include in guided independent study preparation for scheduled sessions, follow up work, wider reading or practice, revision	other non-scheduled time	20
Placements (including work placement and year abroad)		
Total hours ('Should be equal to credit x 15')		150