



Higher National Unit specification

General information for centres

Unit title: History, Evolution and Impact of Computer Games

Unit code: F86J 34

Unit purpose: This Unit is designed to allow the candidate to develop a broad general knowledge and understanding of the history, evolution and impact of computer games. Explore the history and culture of computer games through social, economic and technical advances and focus on the key developments and technologies that have revolutionised the games industry. This Unit is suitable for candidates who wish to follow a career within the field of computer games development and will also help them to develop a range of skills (research, analysis, evaluation and presentation) and give them the underpinning knowledge to apply these skills in other areas.

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Recommended prior knowledge and skills: Access to this Unit will be at the discretion of the Centre; however it is recommended that candidates should have sound keyboard and mouse skills and a thorough familiarity with computers and software packages. These skills may be evidenced by the achievement of appropriate National Units or Courses but they may also have been acquired in an informal or work environment.

Core Skills: The achievement of this Unit gives automatic certification of the following:

- ◆ Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of the Core Skill of *Communication* at SCQF level 6 in this Unit and these are highlighted in the Support Notes of this Unit specification.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: This Unit could be assessed by three individual written or oral assessments or, a holistic approach could be taken by combining the three Outcomes into one written assignment or oral or signed presentation, supported by a pictorial portfolio.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the key historical developments relating to computer games

Knowledge and/or Skills

- ◆ Research skills
- ◆ Analysis
- ◆ Effective presentation techniques

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and Skills by showing that they can:

- ◆ research the history and development of computer games from the advent of Personal Computers to the present day
- ◆ identify key milestones in the evolution of computer games with regard to:
 - technological advance
 - genre
 - platforms
- ◆ present findings in a clear and professional manner

The assessment is open book. Candidates are required to produce written or oral evidence which clearly identifies timeframes and key developments within computer games. The evidence may be in the form of a written report of approximately 300 words, an electronic, verbal or signed presentation lasting 3 minutes.

Assessment Guidelines

This assessment requires the candidates to produce evidence of research either through written or oral presentation. It is recommended that the candidates produce a timeline of events and significant developments within computer games in an appropriate format. The assessment of this Outcome can be combined with Outcomes 2 and 3 as part of a researched based assessment for this Unit, resulting in a report of approximately 1,000 words or a verbal presentation of around 9 minutes. This assessment is open book. Assessors must assure themselves of the authenticity of each candidate's submission.

Higher National Unit specification: statement of standards (cont)

Unit title: History, Evolution and Impact of Computer Games

Outcome 2

Describe significant technological developments relating to computer games

Knowledge and/or Skills

- ◆ Proficiency to research and identify significant technological developments within the evolution of computer games
- ◆ Describe and explain what influenced pivotal developments

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and Skills in this Outcome by showing that they can identify key technological developments and their impact on the evolution of computer games.

They must present findings in a clear and professional manner.

Assessment Guidelines

The assessment is open book. Candidates are required to produce written or oral evidence which clearly identifies technological developments within computer games. The evidence may be in the form of a written report of approximately 300 words, an electronic, verbal or signed presentation lasting 3 minutes.

This assessment requires the candidates to produce evidence of research either through written or oral presentation. It is recommended that the candidates produce a report outlining significant technological developments within computer games, in an appropriate format. The assessment of this Outcome can be combined with Outcomes 1 and 3 as part of a researched based assessment for this Unit, resulting in a report of approximately 1,000 words or a verbal presentation of around 9 minutes.

This assessment is open book. Assessors must assure themselves of the authenticity of each candidate's submission.

Higher National Unit specification: statement of standards (cont)

Unit title: History, Evolution and Impact of Computer Games

Outcome 3

Demonstrate knowledge of a key aspect in the evolution and impact of computer games

Knowledge and/or Skills

- ◆ Analytical skills allowing a selection of an appropriate area of investigation and justification of selection
- ◆ Evaluation skills
- ◆ Description of elements to be addressed in the investigation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can explain, describe and justify an area of investigation. An area of study should be selected by the candidate after consultation with the lecturer to ensure that the area of study would allow adequate research.

Assessment Guidelines

This assessment could be assessed individually as one piece of written/oral work in the form of a report of approximately 300 words or an oral presentation of 3 minutes in duration. The assessment of this Outcome can be combined with Outcomes 1 and 2 as part of a researched based assessment for this Unit, resulting in a report of approximately 1,000 words or a verbal presentation of around 9 minutes.

This assessment is open book. Assessors must assure themselves of the authenticity of each candidate's submission.

Administrative Information

Unit code: F86J 34

Unit title: History, Evolution and Impact of Computer Games

Superclass category: CB

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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: History, Evolution and Impact of Computer Games

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

Guidance on the content and context for this Unit

The Unit is primarily intended to equip candidates with an understanding of the history evolution and impact of computer games in a social, technological and historical context. It should also provide candidates with the tools and skills necessary to undertake serious research and to communicate their findings effectively.

Outcome 1 looks at the history of computer games, how the timeline evolved as well as looking at the central figures in this development. Candidates are encouraged to keep a blog of their work as an electronic portfolio. Should the centre have access to a wiki, candidates could, as a learning aid, collaborate to produce a wiki of the timeline, making at least two entries.

Areas of exploration may include:

- ◆ First games
- ◆ Arcade games
- ◆ TV based games
- ◆ Mainframe computers
- ◆ Home computers
- ◆ Floppy disks
- ◆ Cassette tapes
- ◆ Rom cartridges
- ◆ Genre innovation
- ◆ Gaming computers
- ◆ Mouse
- ◆ Early online gaming
- ◆ Handheld
- ◆ Video game crash
- ◆ Decline of arcades
- ◆ Handhelds
- ◆ Mobile phone gaming,
- ◆ 3D and CD ERA
- ◆ Mobile phone games
- ◆ Alternate controllers

Higher National Unit specification: support notes (cont)

Unit title: History, Evolution and Impact of Computer Games

Outcome 2 looks at significant technological developments relating to computer games.

Areas of study may include:

- ◆ Oscilloscope
- ◆ Vector versus raster graphics
- ◆ Mainframe
- ◆ Cathode ray tube
- ◆ LCD screen technology
- ◆ Integrated circuit
- ◆ Mouse
- ◆ Cassettes
- ◆ Atari
- ◆ Microprocessor
- ◆ Laser disc
- ◆ Commodore 64
- ◆ Nintendo
- ◆ Sega
- ◆ Spectrum
- ◆ Playstation
- ◆ Gameboy
- ◆ Dreamcast
- ◆ PSP
- ◆ Xbox 360
- ◆ Wii

Outcome 3 allows candidates to explore key issues of personal interest in the evolution and impact of computer games. Through investigation and undertaking research candidates will be able to explore aspects of personal interest. Areas of study might include social, economic and cultural development, looking at demographics such as the gender divide, age, effects of game playing on society, game controversy.

Possible areas of study may include:

- ◆ Who or what influenced developments in the computer games industry (arcade, console, mobile etc)
- ◆ Identifying and explaining genres such as action, simulation, role play etc
- ◆ Social developments (sex, age, single, multi)
- ◆ Economic change
- ◆ Cultural (Eastern, Western, regulation)
- ◆ Controversy in relation to computer games such as:
 - bullying
 - games addiction
 - students being expelled for modelling their school as a game level
 - anti games activists
 - violence and sexual content - ratings controversy
 - the role of War simulation in games — Government

Higher National Unit specification: support notes (cont)

Unit title: History, Evolution and Impact of Computer Games

Computer Game genres could be investigated, such as:

- ◆ Action
- ◆ Shooter
- ◆ Action-adventure
- ◆ Educational
- ◆ Adventure
- ◆ Simulation
- ◆ Role-playing
- ◆ Strategy
- ◆ Exercise games (Wii)
- ◆ Music and dance
- ◆ Puzzle

- ◆ Identification of future trends and developments such as:
 - online gaming
 - motion control
 - artificial Intelligence
 - cloud computing
 - mobile gaming — growth of female interest

Guidance on the delivery and assessment of this Unit

The history evolution and impact of computer games should be covered to include a chronology of the periods of its growth; technological developments should be related to social, economic and cultural contexts. Each Outcome could be assessed by individual written or oral assessments or, a holistic approach could be taken by combining the three Outcomes into one written assignment or oral presentation.

Group discussions and use of technologies such as blogs and wikis should be encouraged as part of the delivery and formative assessment of this subject.

It may be appropriate to deliver Outcome 3 as a class debate as long as sufficient evidence in the form of notes or video from the session is collated.

It could be used as an introduction to the Unit F0N0 35 *Professional Issues in Computing*.

Since the Core Skill component of Critical Thinking at SCQF level 5 is embedded in this Unit, it is strongly recommended that you follow the assessment guidelines given. If you wish to use a different assessment model, you should seek prior verification of the assessment instrument(s) you intend to use to ensure that the Core Skill component is still covered.

Higher National Unit specification: support notes (cont)

Unit title: History, Evolution and Impact of Computer Games

Opportunities for developing Core Skills

In both formative and summative assessment the candidate should be encouraged to present all essential ideas/information and supporting detail in a logical and effective order; use a structure that takes account of purpose and audience, and links major and minor points in ways that assist the clarity and impact of the writing; use conventions that are effective in achieving the purpose and adapted as necessary for the target audience; and use spelling, punctuation, and sentence structures that are consistently accurate.

These skills can be developed through formative activities, such as group discussions, presentations, blogs and wiki entries on each theory or debate/issue, without being formally assessed for certification of Core Skill.

Open learning

This Unit is suited to delivery by distance learning.

If this Unit is delivered by open or distance learning methods, additional planning and resources may be required for candidate support, assessment and quality assurance.

The evidence for Outcomes 1, 2 and 3 (blog, wiki) could be held in a logbook and portfolio (or electronic portfolio) and sent to the assessor. The logbook and portfolio may be submitted in print or electronic format — it might be appropriate for example to include relevant extracts from the blog or wiki, should that have been used as a means of formative assessment by the centre.

If an oral presentation is used, it could be recorded on video and sent to the assessor, or made using video conferencing facilities and observed by the assessor.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

General information for candidates

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On completion of the Unit you should be able to:

- 1 Describe the key historical developments relating to computer games.
- 2 Describe significant technological developments relating to computer games.
- 3 Demonstrate knowledge of a key aspect in the evolution and impact of computer games.

You will learn how to research and analyse key aspects of computer games evolution and bring your findings together in a clear, logical format.

You will show your proficiency and demonstrate your knowledge and skill by showing that you can identify key technological developments and their impact on the evolution of computer games.

You will select an area of study and explain, describe and justify the area of investigation.

This should allow you to pursue an area of study of particular personal interest.

You will learn to present all essential ideas/information and supporting detail in a logical and effective order; use a structure that takes account of purpose and audience, and links major and minor points in ways that assist the clarity and impact of the writing; use conventions that are effective in achieving the purpose and adapted as necessary for the target audience; and use spelling, punctuation, and sentence structures that are consistently accurate.

You are encouraged to develop these skills through activities such as group discussions, presentations, blogs and wiki entries on each theory or debate/issue, without being formally assessed for certification of Core Skill.