



## Higher National Unit specification

### General information for centres

**Unit title:** User Interface Design

**Unit code:** F1VV 34

**Unit purpose:** This Unit is designed to develop the candidate's knowledge and skills in usable design of visual user interfaces for use in multimedia, web, animation and graphic design.

On completion of the Unit the candidate should be able to:

- 1 Identity concepts of colour theory, font terminology, layout and graphic design elements in terms of visual user interface design.
- 2 Evaluate existing visual user interface designs in terms of colour, layout and fonts.
- 3 Demonstrate effective use of colour, layout and fonts when designing visual user interfaces to meet the requirements of given brief.

**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 and the following recommendations are for guidance only. Candidates should have knowledge of the interactive, multimedia and web design area. A basic knowledge of web design, multimedia, animation or graphic design would be advantageous. This may be evidenced by the possession of the National Certificate in Digital Media Computing or the National Progression Award in Web Design Fundamentals at SCQF level 7 or an equivalent qualification or experience.

**Core Skills:** There are opportunities to develop the Core Skill(s) of written communication (writing) at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

**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.

## General information for centres (cont)

**Assessment:** Evidence is required that candidates have achieved all Outcomes.

Candidates are encouraged to use the Internet in any research etc, however, the evidence produced must be the candidate's own words. Assessors should assure themselves of the authenticity of candidate's evidence.

Written and/or oral recorded, performance and product evidence is required which demonstrates that the candidate has achieved the requirements of all of the Outcomes to show that the candidate has appropriate knowledge and understanding of the content of this Unit.

This Unit should be assessed by three separate assessment tasks detailed as follows:

- ◆ Outcome 1 is closed-book and should take the form of an objective test where the candidate describes colour theory, font terminology and user interface layout strategies.
- ◆ Outcome 2 is open-book and should take the form of a case study where the candidate evaluates two different visual user interfaces and reports on the use of colour schemes, layout and fonts and their effectiveness.
- ◆ Outcome 3 is open-book and should take the form of a practical exercise where the candidate is given a scenario. From the scenario, they must produce requirement specifications, design and produce two prototype visual user interfaces as well as a report justifying the designs in terms of colour schemes, fonts and layout.

There is an opportunity to take a more holistic approach to assessment by integrating Outcomes 2 and 3.

Assessors should ensure themselves of the authenticity of the candidate's evidence.

The Assessment Exemplar Pack for this Unit provides sample assessment materials including assessor checklists, practical tasks and an instrument of assessment for the knowledge. Centres wishing to develop their own assessments should refer to the Assessment Exemplar Pack to ensure a comparable standard.

## Higher National Unit specification: statement of standards

**Unit title:** User Interface Design

**Unit code:** F1VV 34

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

Identity concepts of colour theory, font terminology, layout and graphic design elements in terms of visual user interface designs

#### Knowledge and/or Skills

- ◆ Colour
- ◆ Fonts
- ◆ Layout
- ◆ Graphic Design Elements

#### Evidence Requirements

Evidence of all the Knowledge and/or Skills in this Outcome will be assessed using a representative sample covering the bullet points below showing that a candidate demonstrates an understanding of colour theory, layout strategies, font terminology and graphic design elements. A candidate's response will be judged to be satisfactory where the evidence provided shows the candidate is able to:

- ◆ Colour
  - explain the origin of the colour wheel, monochromatic, analogous, complementary colour schemes
  - explain hue, saturation, shade, tint, tone, RGB, CYMK, HSB/HSL
  - explain colour psychology and colour symbolism/association
- ◆ Fonts
  - explain serif/sans serif, decorative/ body text, contrast of fonts, alignment, kerning, leading
- ◆ Layout
  - Explain consistency, balance, hierarchy, emphasis, unity, white space in terms of visual user interface design
- ◆ Graphic Design Elements
  - explain how lines, shapes, texture, movement can be used as building blocks in graphics for visual user interface designs

Evidence for all Knowledge and Skills in this Outcome will be assessed using a representative sample of twenty questions. The assessment will be supervised, controlled and under closed-book conditions and should last no more than 1 hour. The instrument of assessment must provide opportunities for the Outcome to be fulfilled by means of sampling across the range of the content of Outcome 1.

## **Higher National Unit specification: statement of standards (cont)**

### **Unit title:** User Interface Design

This assessment must change on each assessment occasion. Achievement can be decided by use of a 60% cut-off score.

Where re-assessment is required it should contain a different sample from the range of mandatory content.

### **Outcome 2**

Evaluate existing visual user interfaces in terms of colour, layout and fonts to meet requirements of given briefs

#### **Knowledge and/or Skills**

- ◆ Colour schemes
- ◆ Use of fonts
- ◆ Layout strategies
- ◆ Design consistency
- ◆ Usability

#### **Evidence Requirements**

Evidence of all the Knowledge and/or Skills in this Outcome will be assessed by issuing a pro-forma which will be completed by the candidate covering all the Knowledge and Skills bullet points. The candidate will need to provide evidence to demonstrate their knowledge and/or skills by showing that they can evaluate two existing visual user interface designs.

A candidate's responses can be judged to be satisfactory where the evidence provided shows the candidate is able to:

- ◆ evaluate
  - effectiveness of colour schemes
  - appropriateness in the use of fonts
  - different layout strategies
  - design consistency
- ◆ report on the overall usability of visual user interfaces

The candidate should be given the existing designs as well as a short design brief for each. Each design must be different and between them cover all Evidence Requirements.

This assessment should be supervised and open-book.

## **Higher National Unit specification: statement of standards (cont)**

**Unit title:** User Interface Design

### **Outcome 3**

Demonstrate effective use of colour, layout and fonts when designing visual user interfaces to meet the requirements of a given brief

#### **Knowledge and/or Skills**

- ◆ Client needs
- ◆ Functional requirements
- ◆ Design Constraints
- ◆ Usability

#### **Evidence Requirements**

Evidence of all the Knowledge and/or Skills in this Outcome will be assessed by issuing a scenario to the candidate. The candidate will need to provide evidence to demonstrate by showing that they can apply effective use of colour, layout and fonts when designing visual user interfaces.

A candidate's response can be judged to be satisfactory where the evidence provided shows the candidate is able to:

- ◆ produce requirements specifications that define client needs, functional requirements and design constraints from a brief
- ◆ produce prototype visual user interfaces using colour, layout and fonts appropriate for the brief
- ◆ justify for designs, the choices of colour, layout and fonts in terms of and in relation to the client needs, functional requirements, design constraints and usability

The assessment for this Outcome should be a practical exercise where the candidate is given a design scenario. From this scenario the candidate must define the client needs, functional requirements and constraints then design prototypes justifying their choices of colour, layout and fonts.

The scenario must be sufficient for the candidate to produce enough evidence to satisfy all of the Evidence Requirements.

This assessment should be supervised and open-book.

## Administrative Information

**Unit code:** F1VV 34  
**Unit title:** User Interface Design  
**Superclass category:** CB  
**Original date of publication:** August 2007  
**Version:** 03 (June 2011)

### History of changes:

Version	Description of change	Date
02	Change to Evidence Requirements in Outcome 2.	25/11/09
03	Amendment made to “Assessment” to clarify number of User Interface Designs required.	09/06/11

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## Higher National Unit specification: support notes

### Unit title: User Interface Design

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

This Unit is designed to develop candidate's knowledge and skills in usable design of visual user interfaces for use in multimedia, web, animation or graphic design.

Outcome 1 is designed to test the candidate's knowledge and understanding of colour, typography, layout and graphic design elements in terms of visual user interface designs.

The purpose of Outcome 2 is to enable the candidate to study and evaluate existing interfaces and gain valuable knowledge on design techniques that are effective and which ones are ineffective and to recognise strategies used in terms of colour, fonts and layout.

The purpose of Outcome 3 is to allow the candidate to apply the knowledge they have gained and design their own interfaces for a specific client brief.

The following topics are a focus of the three Outcomes:

Recommended *colour* topics to be covered are:

- ◆ colour terms including hue, saturation or intensity, tint, tone, shade
- ◆ colour models including RGB, CYMK, HSB
- ◆ colour schemes including monochromatic, analogous, complementary, triadic, alternate complementary, tetrad
- ◆ colour psychology, including symbolic uses of colour, colour association, cultural and emotive colour meanings
- ◆ colour contrast, colour consistency, colour behaviour
- ◆ colour perception, including how humans interpret and identify colour and make judgments
- ◆ using colour consistently

Recommended *font/typography* topics to be covered are:

- ◆ terminology including serif, sans serif, character set, decorative and body text
- ◆ recognition of and appropriate font use including formal and informal fonts, serious and casual
- ◆ adding contrast to fonts by size, weight, form, direction, and colour
- ◆ using fonts consistently
- ◆ leading, kerning and alignment

## Higher National Unit specification: support notes (cont)

### Unit title: User Interface Design

Recommended *layout* topics to be covered are:

- ◆ visual consistency
- ◆ visual hierarchy
- ◆ visual balance
- ◆ emphasis
- ◆ unity

Recommended *design element* topics to be covered are:

- ◆ lines
- ◆ shapes
- ◆ texture
- ◆ movement

Throughout the learning and teaching approach, it may be a good idea for the candidate to keep a log book, which may be electronic, with screen dumps of particular visual user interface designs that demonstrate the different design techniques. The log book could contain a screen dump, colour scheme, font usage, a note of how visually consistent and well balanced the interface is, etc.

### Guidance on the delivery and assessment of this Unit

This Unit is designed to develop candidate's knowledge and skills in usable design of visual user interfaces for use in multimedia, web, animation or graphic design.

The Outcomes should be taught in sequence, as each builds on the knowledge gained in the previous. At all times the candidates should be encouraged to study and gain ideas on colour schemes, font usage and ways of laying out from existing visual user interfaces. They should be encouraged to keep a log book of ideas that they find effective in terms of aesthetics and usability.

It is recommended that this Unit be assessed using three separate assessments due to the building of candidate's knowledge and skills throughout the delivery of the Unit. However this is not a requirement and the Unit could be assessed using integrated assessment(s).

Outcome 1 should take the form of an objective test where the candidate describes colour theory, font terminology and user interface layout strategies.

Outcome 2 should take the form of a case study where the candidate evaluates two different visual user interfaces and reports on the use of colour schemes, layout and fonts and their effectiveness.

Outcome 3 should take the form of a practical exercise where the candidate is given a scenario, for which they must design and produce prototype visual user interfaces as well as a report justifying the designs in terms of colour schemes, fonts and layout.



## **Higher National Unit specification: support notes (cont)**

**Unit title:** User Interface Design

### *Opportunities for developing Core Skills*

There are opportunities to develop the Core Skill(s) of written communication (writing) at SCQF level 5 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

### **Open learning**

This Unit could be delivered by distance learning that may incorporate some degree of on-line support.

However, it would require planning by the centre to ensure the sufficiency and authenticity of candidate's evidence. Agreements would have to be made to ensure the assessment for Outcome 1 is delivered in a supervised environment under controlled conditions.

### **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](http://www.sqa.org.uk/assessmentarrangements).

## General information for candidates

### Unit title: User Interface Design

This Unit is designed to teach you how to design user interfaces for use in web design, multimedia, animation or graphic design.

You will learn about colour theory including:

- ◆ what the colour wheel is and how to pick colour schemes from it
- ◆ colour psychology and colour association, which is all about how people view colour and how it affects them

You will learn about fonts (the proper name for this study is typography) including:

- ◆ which font characteristic makes them easily readable on screen
- ◆ font that are used for serious subject matter and others that are used for subject matter of a casual or fun nature
- ◆ understanding when to use different font types

You will learn strategies for layout of interface designs including:

- ◆ why white space is important and how to use it
- ◆ how to include images and text to give your interface a balanced look

You will learn the importance of consistency in giving an interface design a professional look.

You will be encouraged to study interfaces that already exist gaining ideas and valuable knowledge from them. Towards the end of the Unit you will have to put what you have learned into practice and design an interface yourself.

There will be three assessments:

- ◆ Outcome 1 will be assessed using a set of questions, which will take place in a supervised, closed-book environment
- ◆ Outcome 2 will be assessed by a series of case studies, where you will have to examine existing interfaces and report on how they have used colour, fonts and layout
- ◆ Outcome 3 is where you get to try out what you have learned and have to produce visual user interface designs

On completion of the Unit you should be able to:

- ◆ Demonstrate an understanding of colour theory, font terminology, layout and graphic design elements in terms of visual user interface design
- ◆ Evaluate existing visual user interface designs in terms of colour, layout and fonts
- ◆ Demonstrate effective use of colour, layout and fonts when designing visual user interfaces to meet the requirements of a given scenario