Arrangements for:

NPA Web Design Fundamentals at SCQF level 5

Group Award Code: G8HD 45

Validation date: March 2007

Date of original publication: August 2007

Version: 02

Acknowledgement

History of changes

It is anticipated that changes will take place during the life of the qualification, and this section will record these changes. This document is the latest version and incorporates the changes summarised below.

Version number	Description	Date
02	F181 11 Computing: Web Design Fundamentals *has been revised by* H614 45 Computing: Website Graphics *and will finish on* 31/07/2016.	12/11/2014

Contents

1 Introduction

This is the Arrangements Document for the new Group Award in NPA Web Design Fundamentals, at SCQF level 5, which was validated in March 2007. This document includes: background information on the development of the Group Award, its aims, guidance on access, details of the Group Award structure, and guidance on delivery.

The National Progression Award (NPA) Web Design Fundamentals is a new award consisting of three Units at SCQF 5 covering the topics of creating websites and developing graphics, animation and interactive content for inclusion in websites.

Candidates will gain fundamental knowledge required for creating websites and producing content for websites, while also gaining practical skills in a range of software applications.

2 Rationale for the development of the Group Award

The rationale for developing the National Progression Award (NPA) Web Design Fundamentals at SCQF level 5, is to address a demand for provision of an entry-level qualification in web design, especially one that may be gained through short-course provision.

In recent years, there has been rapid uptake of HNC/HND and Degree level courses in multimedia, web design, and related disciplines, to the extent that multimedia qualifications are the third most popular on the Scottish Qualification Authority's catalogue of HN Computing and IT qualifications. However, as yet there has been no nationally devised course that specifically addresses these disciplines at lower levels in the Scottish Credit and Qualifications Framework (SCQF), or allows natural articulation to higher levels of study.

The NPA will offer candidates a foundation in web design and provide a suitable qualification that may allow progression to a higher level of study, such as a National Certificate in Digital Media Computing, or similar award at an appropriate level. There may also be opportunities for successful candidates to progress into employment at a junior level in the web design industry.

The qualification focuses on technical skills in the creation of websites, animation, graphics and interactive media, but also emphasises the importance of the design process and soft skills such as interviewing and responding to feedback. Some aspects of the qualification also address demands from industry and government for the promotion of 'employability skills'. Successful candidates should be expected to have an appreciation of important employability skills such as collaboration, communicating with a client, problem solving and reflective practice, as well as being able to produce aesthetically pleasing and accessible designs.

The qualification has been designed around industry-developed course materials, Digital Design: Foundations of Web Design, donated to support this award from Adobe (formerly Macromedia), as part of the SQA's DIVA project. This curriculum is particularly aimed at high schools and has found widespread use in other countries where it has been aligned with national standards in education.

A survey of a number of schools and colleges across Scotland showed strong support for the development of the NPA Web Design Fundamentals at SCQF level 5 and indicated that there is a demand for such a qualification at this level. Analysis of job advertisements over the past year has shown a significant demand for employees with the skills required for web design.

The individual Units that make up the NPA Web Design Fundamentals at SCQF Level 5 have been matched against the National Occupational Standards in Interactive Media published by the Sector Skills Council, ie Skillset, and have been shown to meet a significant range of the fundamental criteria of those standards

3 Aims of the Group Award

3.1 Principal aims of the Group Award

♦ To meet client demands and provide industry with well-qualified and competent junior designers in the specialist area of web design
♦ To provide students with the specialist skills required to access career opportunities in current and future markets
♦ To ensure that advances in software skills are matched by advances in employability skills such as working with clients, receiving feedback and responding to change
♦ To promote and maintain the importance of the iterative design process in the design and development of websites and web based content
♦ To provide students a new pathway to higher level studies in web design and related subjects, through short-course provision
♦ To develop an understanding of the legal and design issues related to website design and development
♦ To provide students access to industry standard software and principles

3.2 General aims of the Group Award

The general aim of this award is to produce a robust qualification that allows a candidate to enter the vocational education and centres to provide a solid grounding to candidates. This is achieved by:

♦ producing specialist ASPs for centres
♦ producing a flexible award that is appropriate for a variety of delivery modes
♦ to address predicted skills gaps
♦ enhancing the portfolio available to centres by mapping to the NOS and the vendor qualification(s)
♦ ensuring that candidates gain appropriate knowledge and understanding in all Units
♦ allowing a candidate to progress to a selection of different HN awards

3.3　Target groups

The rationale for developing this National Progression Award in Web Design Fundamentals at SCQF level 5 award is to address shortcomings in the current SQA provision at SCQF levels 5 and to provide colleges with a progressive set of awards more in tune with modern applications of multimedia, interactive media, computing and information technology both in the workplace and in social contexts.

The age range of candidates is from young secondary education and adult learners, in the community and FE. The flexibility allowed in the structure of the awards will provide centres with the means of meeting the needs of individual learners. The practical nature of the component Units and their relevance to modern technology usage will help centres engage and motivate the 'difficult to teach' client groups that are often encountered at SCQF levels 4 and 5.

The provision of award at SCQF level 5, and Units at SCQF levels 5 meet the requirements of candidates for an entry-level that matches their ability and for progression at an appropriate pace to further levels of study. This award is a subset of the National Certificate in Digital Media Computing suite of awards (reference should be made to the Arrangements Documents for each level of award).

Overall, this award should be well suited to the following candidate groups: young persons entering after leaving school (often with low-attainment); mature adults returning to full-time study or preparing for a career change; mature adults who have previous experience of short IT courses and wish to extend their interest.

There is nothing in the award structure or content that would provide artificial barriers to candidates with disabilities.

3.4　Employment opportunities

The majority of candidates undertaking this award are looking to improve their skills in multimedia, interactive media, computing and information technology using this award as a stepping stone for progression and articulation to the next level.

Many centres will use this award to address the needs of the 16–18 year olds that fall into the category of Not in Education, Employment or Training (NEET). This cohort are targeted by the Government's Get Ready for Work Programme, a work based training programme.

4　Access to Group Award

Access to the qualification is at the discretion of the centre.

5   Group Award structure

All Units are mandatory within the National Certificate in Digital Media Computing at SCQF level 5. The framework for the award is as follows:

5.1   Framework

Unit title	Code	SCQF credit points	SCQF level	SQA credit value
*Computing: Website Graphics	H614 45	6	5	1
Computing: Web Design and Development	F182 11	6	5	1
Computing: Interactive Multimedia for Website Development	F180 11	6	5	1

*Refer to history of changes for revision details
Note: All Units are mandatory within the award

5.2   Mapping information

A mapping has been carried out between the National Occupational Standards (NOS) for Interactive Media, published by Skillset, May 2005 and the Units. This mapping between the Units and the NOS can be found in Appendix 1 — National Occupational Standards Mapping.

Note that some Performance Criteria within the Units do not map directly to specific NOS Performance Criteria, so the mapping only indicates where there is significant overlap in the criteria. It should also be noted that the NOS Performance Criteria are designed to reflect a level of knowledge, understanding and practical skill at practitioner level, while the Units of the NPA are designed for level SCQF level 5.

Candidate evidence is, therefore, not expected to fully reach the standards defined by the NOS.

5.3   Articulation, professional recognition and credit transfer

There are opportunities to articulate to a number of higher PDA awards (at time of writing — these awards are subject to validation) which are being developed along with the HNC Interactive Media.

There are also opportunities to articulate to one of the awards within the suite of National Certificate in Digital Media at SCQF level 4, level 5 or level 6 (at time of writing — this award is under development).

There is no professional recognition mapped to this award apart from the Adobe vendor syllabus.

The Units within this award are new and there is no credit mapping available as Units of this nature do not exist.

6　Approaches to delivery and assessment

The NPA Web Design consists of three mandatory Units. It is recommended that the Units be undertaken by candidates in the order specified in the table below.

It is advised that candidates undertake the Unit F181 11 *Computing: Web Design Fundamentals* Unit first as it provides foundation knowledge and skills that are extended in the other Units. However, the assessments for each Unit have been designed to facilitate easy integration of assessment, so it may be possible for candidates to undertake the Unit F182 11 *Computing: Web Design and Development* and the Unit F180 11 *Computing: Interactive Multimedia for Website Development* Units in reverse order or simultaneously as part of an integrated project.

The NPA Web Design Fundamentals was created to match the requirements of the vendor curriculum, Digital Design: Foundations of Web Design from Adobe (formerly Macromedia). This curriculum provides resources and learning materials which may be used in the delivery of the NPA Web Design Fundamentals.

However, there is no requirement to use this curriculum or the recommended Adobe software applications in the delivery of this NPA, and alternative software and materials may be used.

An integrated approach to assessment is recommended for the NPA Web Design Fundamentals. The individual Units that comprise the NPA were designed to ease integration of assessment, and the practical assessments across the three Units may be combined into a single extended project. The assessment of Outcome 1 of the Unit F181 11 *Computing: Web Design Fundamentals* would lend itself to assessment via a series of restricted response questions, eg multiple choice, and therefore, would be a suitable candidate for delivery through e-assessment.

The NPA Web Design Fundamentals lends itself particularly to part-time study and there has been strong support from centres suggesting this is the delivery mode they would adopt. However there are no obvious barriers to delivering the award in a full-time mode or, with suitable learner resources, in open learning mode.

7　General information for centres

Candidates with disabilities and/or additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs* (**www.sqa.org.uk**).

Internal and external verification

All instruments of assessment used within this/these Group Award(s) should be internally verified, using the appropriate policy within the centre and the guidelines set by SQA.

External verification will be carried out by SQA to ensure that internal assessment is within the national guidelines for these qualifications.

Further information on internal and external verification can be found in *SQA's Guide to Assessment and Quality Assurance for Colleges of Further Education* (**www.sqa.org.uk**).

8   General information for candidates

The NPA Web Design Fundamentals introduces a candidate to the fundamental knowledge and skills required in modern web design. A candidate will gain knowledge and understanding of key technical and design issues in developing websites, including design principles, copyright law and technical standards. A candidate will also gain practical skills in a range of software applications used in the development of websites, including graphics packages, web authoring tools and animation software.

A candidates will be involved mainly in practical activities, including interviewing clients, designing website layouts, constructing web pages, developing animations and interactive media, and conducting evaluations of completed work.

Assessment is mainly in the form of practical assignments in designing, developing and testing websites. There are some written assessments, mostly relating to the design and testing of a website, and one formal written assessment conducted under closed-book conditions.

Successful candidates will have gained the knowledge and skills suitable for entry-level employment in web design and related industries or for progression to a higher level qualification.

9   Glossary of terms

SCQF: This stands for the Scottish Credit and Qualification Framework, which is a new way of speaking about qualifications and how they inter-relate. We use SCQF terminology throughout this guide to refer to credits and levels. For further information on the SCQF visit the SCQF website at **www.scqf.org.uk**

SCQF credit points: One SCQF credit point equates to 10 hours of learning. NQ Units at SCQF levels 2-6 are worth 6 SCQF credit points, NQ Units at level 7 are worth 8 SCQF points.

SCQF levels: The SCQF covers 12 levels of learning. National Qualification Group Awards are available at SCQF levels 2-6 and will normally be made up of National Units which are available from SCQF levels 2-7.

Dedicated Core Skill Unit: This is a Unit that is written to cover one or more particular Core Skills, eg National Units in Information Technology or Communications.

Embedded Core Skills: This is where the development of a Core Skill is incorporated into the Unit and where the Unit assessment also covers the requirements of Core Skill assessment at a particular level.

Signposted Core Skills: This refers to the opportunities to develop a particular Core Skill at a specified level that lie outwith automatic certification.

Qualification Design Team: The QDT works in conjunction with a Qualification Manager/Development Manager to steer the development of the National Certificate/National Progression Award from its inception/revision through to validation. The group is made up of key stakeholders representing the interests of centres, employers, universities and other relevant organisations.

Consortium-devised National Certificates/National Progression Awards: These are developments or revisions undertaken by a group of centres in partnership with SQA.

10   Appendices

Appendix 1: (National Occupational Standards Mapping) — Page 8

Appendix 1: National Occupational Standards Mapping

The following tables indicate how each Unit of the award maps to the National Occupational Standards (NOS) for Interactive Media, published by Skillset, May 2005.

Note that some Performance Criteria within the Units do not map directly to specific NOS Performance Criteria, so the mapping only indicates where there is significant overlap in the criteria. It should also be noted that the NOS Performance Criteria are designed to reflect a level of knowledge, understanding and practical skill at practitioner level, while the Units of the NPA are designed for level SCQF 5. Candidate evidence is therefore not expected to fully reach the standards defined by the NOS.

Computing: Web Design Fundamentals

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
1	A) The main purposes of Hyper Text Markup Language (HTML) tags are accurately described.	IM18	1 Identify and specify relevant design and technical parameters
	B) The role of the World Wide Web Consortium (W3C) in relation to web standards is accurately described.	-	-
	C) The key copyright considerations related to web-based content are correctly identified.	IM1 IM19	11 Comply with copyright law. 9 Agree the ownership, nature and extent of all rights held in the product with other parties who have an interest; 10. Ensure assets in which you have acquired licenses for use are obtained in an appropriate format; 11 Ensure intellectual property is exploited in compliance with legal and statutory obligations.
	D) The main file formats used in contemporary web-based media elements are correctly identified.	IM3	9 Identify parameters and constraints that will influence your choices regarding asset manipulation, file formats, compression techniques etc.
	E) The principal accessibility and usability issues which must be considered when designing a website are accurately described.	IM17	1 Identify the expectations and requirements of the product's target users;

Outcome	Performance Criteria		NOS Unit	NOS Performance Statements	
1 cont…	F)	The basic principles of design are accurately described.	IM9	1	Identify and specify relevant design and technical parameters;
2	A)	The digital images are correctly captured using digital cameras and scanners.	IM3	1 2	Digitise assets and save them in an appropriate format; Scan images;
	B)	The digital images are correctly created and include text, colour and simple shapes.	IM3	3 4	Crop, resize, edit and change the resolution of images and video; Select or create appropriate colour palettes for images and video;
	C)	The digital images are correctly optimised for the World Wide Web.	IM3	7 9	Manipulate audio and video files as necessary to fit the required length, remove unwanted sections, add transitions or other effects etc.; Identify parameters and constraints that will influence your choices regarding asset manipulation, file formats, compression techniques etc.
3	A)	The webpage is accurately created using the basic HTML features.	IM6	1 3	Select and use an appropriate authoring tool; Use an authoring tool to develop functionality according to provided specifications;
	B)	The webpage is correctly checked against the requirements.	IM5	1 2	Design within specified style guidelines; Design within specified parameters and constraints relating to the target platform and medium;
			IM6	2	Assemble, organise and check the required content and assets;
	C)	The webpage is correctly uploaded to a web-server.	IM6	8	Deploy the finished product in an appropriate format — for example, by uploading web pages and assets to a web server, or by exporting an executable application to run on the required platform(s).

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
3 cont…	D) The webpage is verified as operational.	IM6	8 Deploy the finished product in an appropriate format - for example, by uploading web pages and assets to a web server, or by exporting an executable application to run on the required platform(s).

Computing: Interactive Multimedia for Website Development

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
1	A) A storyboard for a simple animation is produced.	IM24	1 Design animations within specified style guidelines;
	B) File formats for web-based animation are correctly described. C) File formats for web-based animation are correctly compared. D) A suitable file format for web-based animation is selected.	IM24	2 Design animations within specified parameters and constraints relating to the target platform and medium; 5 Save your animations in appropriate formats so that they can be easily incorporated into the product;
2	A) A simple animation with both shape tweening and motion tweening is created.	IM24	3 Create animations that are attractive, easy to use and fit for purpose;
	B) A simple animation which includes synchronised sound is created.	IM27	3 Edit existing audio material to create sound effects to meet a brief or specification; 4 Save sound effects in an appropriate format for different target platforms;
	C) A simple animation which includes interactivity in the form of play and stop controls is created.	IM24	3 Create animations that are attractive, easy to use and fit for purpose;
	D) A simple animation is incorporated in a website.	IM6	8 Deploy the finished product in an appropriate format - for example, by uploading web pages and assets to a web server, or by exporting an executable application to run on the required platform(s).
3	A) The purpose and audience of the digital narrative is identified.	IM23	1 Create narratives that are engaging for the intended audience and appropriate for the target platform(s) or technologies being used;

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
3 cont…	B) A script for a short digital narrative, which is appropriate to both the purpose and audience, is produced.	IM23	1 Create narratives that are engaging for the intended audience and appropriate for the target platform(s) or technologies being used; 2 Define story worlds and characters in sufficient detail; 3 Write narratives that are consistent and congruent with the story world and the characters' backgrounds, agendas, personalities and abilities; 4 Organise the narrative flow so that it is congruent with the story;
		IM15	1 Write in a style suitable for the target audience and the purpose of the communication; 2 Maintain a consistent style both within texts and between related texts; 3 Use correct grammar, appropriate punctuation and accurate spelling; 4 Structure the text-based content so that it is easy to read and navigate; 5 Follow relevant writing conventions, style guides and policies;
	C) A storyboard of the digital narrative, which is appropriate to both the purpose and audience, is produced.	IM16	3 Identify suitable opportunities to enhance the effectiveness of text with other storytelling tools;

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
4	A) Audio, textual and graphical information is correctly incorporated into the digital narrative.	IM23	1 Create narratives that are engaging for the intended audience and appropriate for the target platform(s) or technologies being used;
	B) Filmmaking technique is correctly incorporated into the digital narrative.	IM23	4 Organise the narrative flow so that it is congruent with the story;
		IM16	3 Identify suitable opportunities to enhance the effectiveness of text with other storytelling tools;
	C) A transition effect is correctly incorporated into the digital narrative.	IM16	3 Identify suitable opportunities to enhance the effectiveness of text with other storytelling tools;
	D) Interactivity in the form of play and stop controls is correctly incorporated into the digital narrative.	-	
	E) The digital narrative is appropriately included in a website.	IM6	8 Deploy the finished product in an appropriate format — for example, by uploading web pages and assets to a web server, or by exporting an executable application to run on the required platform(s).

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
5	A) A test plan is developed for the digital narrative. B) The digital narrative is tested for functional errors. C) The digital narrative is correctly evaluated for usability. D) The digital narrative is appropriately revised in line with testing and evaluation results.	IM12	1 Specify what aspects of the product are to be tested and identify relevant assessment criteria; 2 Devise an appropriate testing methodology; 4 Specify tasks or activities and prepare clear instructions for test participants; 5 Decide how test data is to be collected and design response forms, logging sheets and/or recording
		IM14	1 Collate test results; 2 Analyse and evaluate test results; 3 Document your findings in an appropriate format; 4 Recommend design changes arising from the test results to the appropriate authority.
		IM13	1 Give instructions to test participants, an accordance with a provided script or brief; 2 Ensure test participants understand and complete their tasks; 3 Ensure any equipment and materials necessary for recording test data are available to yourself and/or test participants and are in working order; 4 Document test results in accordance with provided instructions.

Computing: Web Design and Development

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
1	A) A client is interviewed to determine the requirements for the proposed website.	IM1	9 Conduct discussions and negotiations in a way that promotes co-operation and goodwill;
	B) The goals, audience and delivery requirements for the proposed website are accurately identified.	IM2	1 Identify the types of assets you need to obtain; 2 Undertake research to identify appropriate sources of assets; 5 Lease constructively with others as required to obtain assets and any necessary clearances for their use; 6 Liaise with others as necessary to commission original work from internal or external specialists;
	C) The hardware and software required for creating the website are accurately identified.	-	
	D) The sub-tasks and timescales for the website development are accurately determined.	IM1	5 Produce work to the required standard within relevant timescales and budgets;

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
2	A) The structure and navigation features of the proposed website is planned to the client's requirements. B) The sketches and screen designs are produced for the proposed website. C) A storyboard is produced for the proposed website.	IM5	1 Design within specified style guidelines; 2 Design within specified parameters and constraints relating to the target platform and medium; 3 Design end user features to facilitate the use of interactive products; 4 Select and agree the visual style and interactive character of products; 5 Design interfaces or environments that are attractive, easy to use and fit for purpose; 6 Liaise with colleagues to ensure your designs can be implemented within the available resources and project parameters; 7 Liaise with the relevant authority to obtain approval for your designs; 8 Deliver your designs in appropriate formats so that they can be easily implemented; 10 Provide documentation or instructions as required to ensure that others have the necessary information to implement your designs correctly.

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
3	A) Assets and content including text and graphics are collected for the website project. B) Assets and content including text and graphics are created for the website project. C) The website which includes text and graphics is constructed. D) The website is correctly uploaded to a web-server.	IM2	1 Identify the types of assets you need to obtain; 2 Undertake research to identify appropriate sources of assets; 3 Locate assets that you wish to obtain; 4 Be clear about the format, size and any other attributes of the assets you wish to obtain; 5 Liaise constructively with others as required to obtain assets and any necessary clearances for their use;
		IM6	1 Select and use an appropriate authoring tool; 2 Assemble, organise and check the required content and assets; 3 Use an authoring tool to develop functionality according to provided specifications; 8 Deploy the finished product in an appropriate format - for example, by uploading web pages and assets to a web server, or by exporting an executable application to run on the required platform(s).
4	A) The website is correctly tested for functional errors.	-	
	B) The website is correctly evaluated for accessibility and usability issues.	IM16	4 Identify and specify storytelling tools required for the product, and brief specialists where original assets needs to be created; 5 Specify when and where instructional text should be included in the product;

Outcome	Performance Criteria	NOS Unit	NOS Performance Statements
4 cont…	C) The website is correctly evaluated against a client's requirements. D) The website is correctly revised in line with test results.	IM12	1 Specify what aspects of the product are to be tested and identify relevant assessment criteria; 2 Devise an appropriate testing methodology; 4 Specify tasks or activities and prepare clear instructions for test participants; 5 Decide how test data is to be collected and design response forms, logging sheets and/or recording and organisation procedures as appropriate;
		IM13	1 Give instructions to test participants, an accordance with a provided script or brief; 2 Ensure test participants understand and complete their tasks; 3 Ensure any equipment and materials necessary for recording test data are available to yourself and/or test participants and are in working order; 4 Document test results in accordance with provided instructions.