



Higher National Unit specification

General information for centres

Unit title: Health and Safety: Workplace Safety

Unit code: F0NH 35

Unit purpose: This Unit is designed to enable the candidate to develop knowledge and understanding of the requirements for safety in the workplace, and of specific requirements in relation to fire/explosion, construction/demolition and environmental protection/pollution control.

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

- 1 Advise on general workplace safety issues.
- 2 Relate the physical and chemical principles of fire and explosions to fire risk control measures
- 3 Advise on the content of fire risk assessments.
- 4 Describe the hazards and controls in the storage, processing, handling and use of hazardous substances.
- 5 Relate the control of environmental pollution and waste management systems to statutory requirements.
- 6 Relate the hazards associated with construction and demolition work to the appropriate control measures.

Credit points and level: 1.5 HN credits at SCQF level 8: (12 SCQF credit points at SCQF level 8*)

**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: Candidates should have the knowledge, skills and/or experience equivalent to SVQ level 3 in occupational health and safety practice. A minimum level of Core Skills at SCQF level 5 or equivalent is essential in Communication and Numeracy.

Core Skills: There is no automatic certification of Core Skills in this Unit. However, there may be opportunities to develop aspects of Core Skills components in *Communication, Problem Solving* and *Working with Others*.

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: Three instruments of assessment will be used for this Unit. Extended response questions could be used to assess Outcome 1. Restricted response questions could be used to assess Outcomes 2 and 6. All three assessments should be conducted under examination conditions.

General information for centres (cont)

Outcomes 3, 4 and 5 could be assessed by written assignments of 1,000 (Outcomes 3 and 5) or 2,000 words (Outcome 4) to be completed by the student under open-book, unsupervised conditions and to meet set deadlines.

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

Advise on general workplace safety issues

Knowledge and/or Skills

- ◆ Compliance with regulations relevant to the workplace
- ◆ Risk and controls for working in confined spaces
- ◆ Factors which contribute to structural integrity of the workplace

Evidence Requirements

To achieve the Outcome each candidate should produce evidence in an appropriate medium to demonstrate all aspects of the Knowledge and/or Skills section. Candidates should produce accurate responses to demonstrate their understanding of the relevance of statutory requirements to general workplace issues and to work in confined spaces.

Assessment Guidelines

One restricted response assessment paper could be used to assess the candidate. The candidate could be asked to provide advice based on two scenarios – one relating to a general workplace and building structure and the other to a confined space. It is recommended that the assessment be carried out under examination conditions, with the candidate allowed access to the course textbook and his/her personal notes.

Outcome 2

Relate the physical and chemical principles of fire and explosions to fire risk control measures

Knowledge and/or Skills

- ◆ Physics and chemistry of fire and explosions
- ◆ Effect of fire on materials
- ◆ Control measures for fire and explosion prevention and mitigation

Higher National Unit specification: statement of standards (cont)

Unit title: Health and Safety: Workplace Safety

Evidence Requirements

To achieve the Outcome each candidate should produce evidence in an appropriate medium to demonstrate all aspects of the Knowledge and/or Skills section. Candidates should produce accurate responses to demonstrate understanding of the physics and chemistry of fire and explosions, describe the effects of fire on materials, and relate these to fire risk control measures.

Assessment Guidelines

One restricted response assessment paper could be used to assess the candidate.

Each candidate could be asked a series of short answer questions covering the knowledge and/or skills section.

This assessment could be taken at the same time as the assessment for Outcome 6.

Outcome 3

Advise on the content of fire risk assessments

Knowledge and/or Skills

- ◆ Fire risks within a workplace
- ◆ Control measures to meet statutory requirements

Evidence Requirements

To achieve the Outcome the candidate should produce accurate responses in an appropriate medium demonstrating ability to identify, assess and evaluate fire risks and advise on controls to meet statutory requirements. This should include a fire risk assessment.

Assessment Guidelines

The candidate could be assessed by 1 x 1,000 word assignment unsupervised. The candidate should prepare a suitable and sufficient fire risk assessment for a workplace. The candidate should be provided in advance with an assignment brief detailing the requirements and giving guidelines on structure and content.

Higher National Unit specification: statement of standards (cont)

Unit title: Health and Safety: Workplace Safety

Outcome 4

Describe the hazards and controls in the storage, processing, handling and use of hazardous substances

Knowledge and/or Skills

- ◆ Risks of hazardous and dangerous substances and arrangements for their safe:
 - Processing
 - Handling
 - Storage
 - Transport
- ◆ Statutory requirements

Evidence Requirements

To achieve the Outcome each candidate should produce evidence in an appropriate medium to demonstrate all aspects of the Knowledge and/or Skills section.

The candidate should produce accurate explanations demonstrating the knowledge and understanding of the requirements for the safe processing, handling, storage and transport of hazardous and dangerous substances.

Assessment Guidelines

The candidate could be assessed by 1 x 2,000 word assignment unsupervised. Each candidate would be required to prepare a report for the safe processing, handling, storage and transport of hazardous and dangerous chemicals in a specified organisation. The candidate might be provided with a chemical plant scenario detailing various dangerous and hazardous substances, and stating their quantities.

The candidate should be provided in advance with an assignment brief detailing the requirements and giving guidelines on structure and content.

It is recommended that this assessment be linked with the assessment for Outcome 5.

Outcome 5

Relate the control of environmental pollution and waste management systems to statutory requirements

Knowledge and/or Skills

- ◆ Types of environmental pollution and pollutants and their control
- ◆ Statutory requirements for environmental protection
- ◆ Waste categories, safe disposal of waste and waste management strategies

Higher National Unit specification: statement of standards (cont)

Unit title: Health and Safety: Workplace Safety

Evidence Requirements

To achieve the Outcome each candidate should produce evidence in an appropriate medium to demonstrate all aspects of the Knowledge and/or Skills section. Candidates will be required to produce accurate responses demonstrating the ability to identify the potential for environmental pollution and to evaluate this in terms of statutory requirements and monitoring/control measures.

Assessment Guidelines

It is recommended that this assessment be linked with the assessment for Outcome 4.

The candidate could be assessed by 1 x 1,000 word report which advises on compliance with environmental statutory regulations and waste management for the organisation detailed in Outcome 4.

Outcome 6

Relate the hazards associated with construction and demolition work to the appropriate control measures

Knowledge and/or Skills

- ◆ General construction and demolition hazards and controls
- ◆ Construction (Design and Management) Regulations
- ◆ Hazards and control measures for:
 - Working at height
 - Excavations
 - Demolition
 - Mobile Equipment
- ◆ Statutory requirements

Evidence Requirements

To achieve the Outcome each candidate should produce evidence in an appropriate medium to demonstrate all aspects of the Knowledge and/or Skills section.

The candidate should produce accurate responses to demonstrate understanding of the Regulations and their relationship with construction/demolition activities.

Assessment Guidelines

One restricted response assessment paper could be used to assess the candidate. The candidate could complete a set of short answer questions under closed-book examination conditions.

This assessment could be taken at the same time as the assessment for Outcome 2.

Administrative Information

Unit code: F0NH 35
Unit title: Health and Safety: Workplace Safety
Superclass category: PL
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Version	Description of change	Date

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Higher National Unit specification: support notes

Unit title: Health and Safety: Workplace Safety

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 60 hours.

Guidance on the content and context for this Unit

The Unit forms part of the Professional Development Award in Occupational Health and Safety Practice, and may be delivered as part of this or similar SCQF level 8 Group Award. It is designed to meet ENTO occupational standards at level 4, and is a likely qualification route for full-time professional occupational safety and health professionals aspiring to Membership of professional institutions.

This Unit is designed to provide candidates with the knowledge and understanding of occupational health risks and associated control/monitoring measures and strategies.

The following areas should be covered:

Outcome 1

- ◆ Compliance with regulations relevant to the workplace:
 - Safe place of work
 - Work environment
 - First aid provision
 - Safety signs

- ◆ Risk and controls for working in confined spaces:
 - Definition
 - Risk assessment
 - Training

- ◆ Factors which contribute to structural integrity of the workplace:
 - Environmental factors
 - Alterations
 - Operations within and external to workplace
 - Age
 - Subsidence

Higher National Unit specification: support notes (cont)

Unit title: Health and Safety: Workplace Safety

Outcome 2

- ◆ Understand the physics and chemistry of fire and explosions:
 - Properties of fire, including rates and possible routes of propagation
 - Mechanisms of fire
 - Mechanisms explosions
 - Vapour phase explosions
 - Dust explosions

- ◆ Understanding the effect of fire on materials:
 - Building materials
 - Typical building contents

- ◆ Advise on control measures for fire and explosion prevention and mitigation:
 - Structural protection
 - Plant design
 - Segregation and zoning
 - Explosion mitigation

Outcome 3

- ◆ Assess the fire risks within a workplace:
 - Identification of fire hazards
 - Assessment of risks

- ◆ Advise on control measures to meet statutory requirements:
 - Detection and alarms
 - Fire fighting equipment fixed and portable
 - Means of escape
 - Emergency procedures

Outcome 4

Understanding of the risks of hazardous and dangerous substances and arrangements for safe:

- ◆ Processing:
 - Reactions
 - Factors affecting reactions
 - Control of reactions
 - Major accidents due to failures

- ◆ Handling:
 - Pipelines
 - Filling and emptying containers
 - Other means dispensing

Higher National Unit specification: support notes (cont)

Unit title: Health and Safety: Workplace Safety

- ◆ Storage:
 - Hazards and risks
 - Storage methods
 - Segregation
 - Spillages and leaks

- ◆ Transport:
 - Loading and unloading containers
 - Labelling and packaging
 - Driver and Goods Safety Advisor duties and training.

Outcome 5

Identification of different types of environmental pollution and pollutants and their control.

- ◆ Different types of release
- ◆ Different behaviour of pollutants
- ◆ Affects on ground, water and air
- ◆ Different pollutants

Understanding of the statutory requirements in relation to environmental protection.

- ◆ Integrated Pollution Control
- ◆ Best Practicable Environmental Option
- ◆ Best Available Technique
- ◆ Scottish Environmental Protection Agency
- ◆ Monitoring requirements
- ◆ Emergency procedures

Description of the waste categories, safe disposal of waste and waste management strategies.

- ◆ Classification
- ◆ Waste management
- ◆ Waste treatment

Outcome 6

General construction and demolition hazards and controls.

- ◆ Mobile equipment
- ◆ General hazards
- ◆ Site layout
- ◆ Protection of public
- ◆ Use of method statements and permits to work

Higher National Unit specification: support notes (cont)

Unit title: Health and Safety: Workplace Safety

Understanding of the Construction (Design and Management) Regulations.

- ◆ Duties of named person/s
- ◆ Safety Plan
- ◆ Safety File

Identify hazards and control measures for:

- ◆ Working at height:
 - Scaffolds
 - Mobile Elevated Platforms
 - Other access equipment
 - Roof work
 - Falling materials
- ◆ Excavations:
 - Buried Services
 - Inspections
- ◆ Demolition:
 - Hand
 - Ball
 - Controlled collapse

Guidance on the delivery and assessment of this Unit

Assessment for Outcome 1 could be set at any time, but would best be set immediately on completion of study of this section. Assessments for Outcome 2 and 6 could be set at the end of the Unit.

Assessments for Outcomes 3, 4 and 5 can only be set once the material has been covered.

Due to logical progression, it would be beneficial to deliver the Outcomes in numerical sequence.

Delivery and assessment should wherever possible include reference to the workplaces of candidates. Assignments should ideally be designed such that the candidate can base much of the evidence for assessment on his/her own workplace. Additionally or alternatively, case studies could be used.

Higher National Unit specification: support notes (cont)

Unit title: Health and Safety: Workplace Safety

Bibliography

Dangerous Substances (Notification and Marking of Sites) regulations
Health and Safety in Construction HSG150
Environmental Protection Act
Construction (Design and Management) Regulations
Work at Height Regulations
Dangerous Substances and Explosive Atmospheres Regulations
Workplace (Health, Safety and Welfare) Regulations
Health and Safety (First Aid) Regulations
Health and Safety (Safety Signs and Symbols) Regulations
The Confined Spaces Regulations
Control of Substances Hazardous to Health Regulations
Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations
NEBOSH level 4 Diploma in Occupational Health and Safety Practice Unit C — Managing Health and Safety — RRC Business Training 2003.

Opportunities for developing Core Skills

There are no Core Skills embedded in this Unit. However, there may be some opportunities to develop aspects of the Core Skills in *Working with Others*, *Problem Solving* (evaluation) and *Communication* (both written and oral) in the delivery of the Knowledge and Skills and the assessments for this Unit.

Open learning

This Unit could be delivered by Open learning. However, while candidates would study out with the centre using materials provided, it would be necessary to attend the centre at intervals for workshops and assessments. For further information on Open and Distance Learning, please refer to the SQA publication, *Assessment and Quality Assurance of Open and Distance Learning* (SQA 2000).

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).

General information for candidates

Unit title: Health and Safety: Workplace Safety

This Unit focuses on the development of knowledge and understanding of the statutory requirements for safety in the workplace, and of specific requirements in relation to fire/explosion, construction/demolition and environmental protection/pollution control.

The Unit is divided into a logical sequence of six sections:

- ◆ general workplace safety issues
- ◆ physical and chemical principles of fire and explosions and fire risk control measures
- ◆ fire risk assessments
- ◆ hazards and control measures in relation to the storage, processing, handling and use of hazardous substances
- ◆ environmental pollution and waste management procedures
- ◆ hazards and control measures associated with construction and demolition work

Assessment requires you to meet six Outcomes, which correspond to the sections listed above. Outcome 1 (general workplace safety) could be assessed using extended response questions based on workplace scenarios. Outcome 2 (fire and explosions) and Outcome 6 (construction/demolition) could be assessed by means of short answer restricted response questions. These assessments may be carried out under examination conditions.

Outcomes 3 (fire risk assessment), 4 (hazardous substances) and 5 (environmental pollution) could be assessed by means of unsupervised open-book assignments. For each of these you will receive in advance a briefing from your tutor and a briefing paper detailing the requirements and giving guidelines on structure and content.

Outcomes 2 and 6 could be completed at the same time. The assignments for Outcomes 4 and 5 could be linked.

On completion of the Unit you should be able to advise an organisation on suitable management systems for workplace safety.