



National Unit Specification: general information

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

CODE F8KT 11

SUMMARY

This Unit is a mandatory Unit in the SCQF level 5 Maritime Skills Course and has been designed to be taken as part of that Course. The Unit may also be offered as a free-standing Unit.

It is intended for candidates who wish to develop generic employability skills which are valued by all employers and vocational skills relevant to a career in the Maritime sector. The Unit will equip candidates with a basic understanding of health and safety issues, the safety procedures required for both working onboard a boat and in the maritime environment in general. They will be introduced to the process of carrying out an assessment of risk and learn how risks can be minimised through safe working practice. Practical survival exercises will be practised and basic fire safety considered. The candidates will also be introduced to the knowledge and skills necessary to deal effectively with casualties who are injured or who suffer a sudden illness, prior to being placed in the care of medically qualified personnel. This Unit has been designed for candidates in S3 or above but may also be suitable for other candidate groups.

OUTCOMES

- 1 Carry out a risk assessment in a maritime sector environment.
- 2 Participate in a practical survival activity in a given role
- 3 Demonstrate the assessment, management and treatment of casualties within emergency situations in a maritime context.
- 4 Demonstrate knowledge and understanding of basic fire safety within the maritime sector.

RECOMMENDED ENTRY

Entry is at the discretion of the centre

Administrative Information

Superclass: ZF

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National Unit Specification: general information (cont)

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

CREDIT VALUE

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**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.*

CORE SKILLS

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes of this Unit Specification.

There is no automatic certification of Core Skills or Core Skill components in this Unit.

National Unit Specification: statement of standards

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Carry out a risk assessment in a maritime sector environment.

Performance Criteria

- (a) Identify the main hazards in a given area in a maritime sector environment.
- (b) Identify the risks associated with these hazards.
- (c) Describe appropriate control measures to minimise these identified risks.

OUTCOME 2

Participate in a practical survival activity in a given role.

Performance Criteria

- (a) Put on a life jacket correctly.
- (b) Enter and exit the water taking account of the safety of others.
- (c) Work cooperatively with others to enhance the chances of survival.
- (d) Follow all the health and safety guidelines throughout the activity.
- (e) Follow all instructions given during the evacuation.

OUTCOME 3

Demonstrate the assessment, management and treatment of casualties within emergency situations in a maritime context.

Performance Criteria

- (a) Correctly assess the nature of the specific emergency situation.
- (b) Take appropriate action to address the situation.
- (c) Follow all Health and Safety Guidelines throughout.

OUTCOME 4

Demonstrate knowledge and understanding of basic fire safety within the maritime sector.

Performance Criteria

- (a) Explain the correct procedures to follow on detecting the fire.
- (b) Explain the procedures it is necessary to take during the fire.
- (c) Identify an appropriate extinguishing agent for the fire.

National Unit Specification: statement of standards (cont)

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

EVIDENCE REQUIREMENTS FOR THIS UNIT

Evidence must be produced to demonstrate that all Outcomes and Performance Criteria have been achieved.

Performance evidence will be supported by assessor checklists. The performance evidence will be generated from practical activities carried out under supervised conditions at the required safety standards.

The evidence may be gathered at appropriate points throughout the Unit

Outcome 1 — Risk assessment

A basic risk assessment completed by the candidate is required to demonstrate achievement of this Outcome. Candidates should undertake a basic risk assessment in **one** given area on **one** occasion. Candidates will be given an appropriate risk assessment template. The basic risk assessment will be carried out in a real or simulated setting under supervision at an appropriate point in the Unit. Examples of suitable areas are given in the Support Notes in this Unit Specification.

Outcome 2 — Performance evidence

Candidates will be required to demonstrate by a practical survival activity under supervision that they are able to:

- ◆ correctly put on a lifejacket on one occasion
- ◆ while wearing a lifejacket enter and exit the water in the correct manner
- ◆ while wearing a lifejacket swim to a designated point and form a survival circle
- ◆ while wearing a lifejacket tow an injured casualty to safety
- ◆ work cooperatively with others to take appropriate actions to enhance the chance of survival
- ◆ follow all health and safety guidelines throughout the activity

An assessor observation checklist must be used to record the candidate's performance and to provide evidence of performance for Outcome 2.

Outcome 3 — Performance evidence

Candidates will be required to demonstrate by practical activity under supervision the appropriate assessment, management and treatment of casualties. Candidates should be given a clear brief prior to the activity, detailing the skills they will be required to demonstrate. They should not be told which injuries or conditions they will be dealing with in advance and should not have access to textbooks, notes or manuals during the assessment.

National Unit Specification: statement of standards (cont)

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

Performance evidence must cover:

- ◆ the assessment, management and treatment of one casualty with one of the injuries listed:
 - burns and scalds which may include injuries caused by electric current
 - control of bleeding
- ◆ the assessment, management and treatment of one casualty with one of the following: shock, choking, asthma
- ◆ the simulated resuscitation of an adult performed on a dummy
- ◆ the placing of someone in the recovery position

An assessor observation checklist must be used to record the candidate's performance to provide evidence for Outcome 3. If reassessment is required, the evidence should relate to a different injury or condition.

Outcome 4 —Written and/or oral — Case Study

Candidates are required to produce evidence in the form of written and/or oral recorded responses to questions based on a specific case study on their own under supervision at an appropriate point in the Unit when it is considered candidates have achieved the underpinning knowledge and understanding.

The case study with questions must enable candidates to explain the correct procedures to follow when the fire has been detected and to take during the fire. An appropriate extinguishing agent for the fire must also be identified.

The National Assessment Bank (NAB) pack provided for this Unit illustrates the standard that should be applied. It includes a risk assessment brief and template for Outcome 1, candidate briefs for Outcomes 2 and 3 for the performance evidence with assessor observation checklists, an exemplar case study with a marking schedule for Outcome 4. If a centre wishes to design its own assessments for this Unit, they should be of a comparable standard.

National Unit Specification: support notes

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

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 will equip candidates with a basic understanding of the safety procedures required for both working onboard a boat and in the maritime environment in general. The candidate will be introduced to the process of carrying out an assessment of risk and to how risks can be minimised through safe working practice. Practical boat evacuation will be practised and basic fire safety considered. The candidates will also be introduced to the knowledge and skills necessary to deal effectively with casualties who are injured or who suffer a sudden illness, prior to being placed in the care of medically qualified personnel.

During this Unit, in addition to the specific vocational skills developed and assessed, candidates will have an opportunity to develop the following employability skills:

- ◆ positive attitude and willingness to learn
- ◆ maintaining good timekeeping and attendance
- ◆ communication skills*
- ◆ ability to follow instructions*
- ◆ working cooperatively with others*
- ◆ working to agreed deadlines
- ◆ showing respect and consideration for others*
- ◆ flexibility and adaptability
- ◆ safe and appropriate handling of equipment*
- ◆ awareness of health and safety *
- ◆ understanding of personal survival techniques*
- ◆ fire safety awareness*
- ◆ confidence to seek feedback
- ◆ reflecting on own performance
- ◆ review and self-evaluation skills
- ◆ understanding of the workplace*

Development in a number of these employability skills (those marked with an asterisk *) will be clearly identified as a result of evidence generated through the assessment activities for this Unit. There are opportunities in the Unit to develop the remaining skills.

National Unit Specification: support notes

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

It is important there is an induction to this Unit which will include a health and safety briefing by the appropriate competent person. If the centre has the facilities candidates should experience on board working conditions and should be encouraged to perform tasks and conduct themselves in a manner appropriate to the workplace. Compliance with Health and Safety regulation is of paramount importance in this Course. It is the centre's responsibility to produce risk assessments which set out the safe working/teaching and learning arrangements for teachers, support staff and candidates.

The Unit covers vocational activities elements with a high degree of practicality. The learning and teaching should involve practical demonstrations and activities. A variety of methods could be used to help candidates learn by integrating their theoretical knowledge with the development of practical skills, for example: practical exercises in small groups, discussion of case studies in groups or pairs, worksheets, individual, paired or group research using a variety of resources such as the internet.

As part of the learning and teaching for Outcome 1, scenarios could be devised demonstrating hazards and risks within the maritime sector environment and candidates could be asked to identify these in groups and then decide as a group how these risks could be minimised or prevented. This would be good preparation for assessment. It is essential that candidates experience health and safety as an interactive process and delivery should be based on practical scenarios whenever possible.

In the underpinning knowledge for Outcome 2, emergency situations which may require abandonment of a boat such as collision, fire, foundering should be considered. The various types of life-saving appliances, the equipment in a survival craft such as location aids, eg flares, EPIRB, SART and VHF Radio and the principles concerning survival at sea — value of drills and training, actions before and after abandonment and the main dangers to survivors should be considered.

As this Unit is taught in the context of current Health and Safety Executive Guidelines, it is important that teachers/lecturers and candidates are familiar with current theory and practical procedures as stated in these Guidelines. There are a number of manuals, DVDs and CD ROMs available. The internet may also prove a good resource for the most up-to-date information on current Guidelines. The resuscitation of adults must include: the breathing and circulation process, life-saving properties, identification of responsiveness, opening the airway, checking the breathing, the recovery position and cardio pulmonary resuscitation (CPR). This exercise should be simulated with a dummy however the correct use and practice of the recovery position should be carried out on a live subject. The use of techniques, equipment, dressings and bandages and the treatment of such injuries and conditions as listed should be covered in practical sessions. The injuries and conditions that should be considered are detailed in the Evidence Requirements.

In the development of fire awareness in Outcome 4, candidates could consider the implications of a fire on board a boat. The importance of Emergency duties, Fire Control plans, Fire patrols and the General alarm should be considered. The fire triangle, types and sources of ignition, ignition temperatures, spontaneous ignition, fire extinguishers and their suitability, the use of various types of portable fire extinguishers could be investigated. Precautions to avoid injury on detecting a fire, movement in vicinity of a fire, the dangers of smoke inhalation and re-ignition and smoke extraction should also be considered.

National Unit Specification: support notes (cont)

UNIT Health and Safety in the Maritime Sector (SCQF level 5)

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

In this Unit, candidates may work in groups. This will give rise to opportunities for the development of aspects of *Working with Others* and *Communication*. The aspects of the Core Skill of *Problem Solving* may be developed if candidates involve themselves in the critical thinking required for complying with onboard safety and first aid.

GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Evidence that covers all the Outcomes and Performance Criteria is required. This should take the form of written and/or oral recorded evidence and performance evidence.

Evidence Requirements are fully expressed in the mandatory section of this Unit Specification. Candidates should be given a clear indication of the requirements of assessment for the Unit. Assessment should be carried out appropriate points in the delivery of the Unit when candidates are considered to have developed the underpinning appropriate knowledge and understanding.

In Outcome 1, an area that is typical of that in the maritime sector such as a deck of a boat should be provided to enable candidates to carry out a realistic simulated basic risk environment, however the area may be generic such as a kitchen (galley), maintenance area (engine room) or store room (hold). Candidates should be provided with an appropriate template for the risk assessment.

In the assessment of Outcome 2, candidates should be given a clear indication of the requirements of the assessment before undertaking the activities in the form of a brief. An assessor observation checklist must be used to record performance.

For Outcome 3, an appropriate Instrument of Assessment would be practical activities which include the resuscitation exercise with a dummy requires the breathing and circulation process, life-saving proprieties, identification of responsiveness, opening the airway, checking the breathing, the recovery position and cardio pulmonary resuscitation (CPR). The recovery position must be demonstrated using a live subject. The injuries and conditions that should be assessed are detailed in the Evidence Requirements. An assessor observation checklist must be used to record performance.

The case study for Outcome 4 should be set in a realistic maritime sector environment for example a fire in the engine room on board a boat or a fire in a yacht in a marina. The case study may be presented in a written and/ or oral or audio-visual form.

Written and/or recorded oral evidence, assessor checklists and other assessment records should be maintained and kept up to date to keep track of candidate progress and to provide evidence for internal and external verification purposes.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by information and communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

National Unit Specification: support notes (cont)

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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