

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0068610 -Session-1986-87

-Superclass- XQ

-Title- INTRODUCTION TO SMALL BOATS (x 1/2)

-DESCRIPTION-

Type and Purpose A general module (1/2) which enables the student to acquire the basic knowledge and skills necessary for safe working of small boats.

Preferred Entry Level None.

Learning Outcomes The student should:

1. know and apply the principles and practices of safe conduct in small boats;
2. know the main materials used in the construction of small boats;
3. know and use different methods of propelling small boats;
4. recognise visual indications of wind, weather and tide and the significance of these factors for the safe operation of small boats;
5. use the main items of marine equipment, particularly ropes and anchors.

Content/ Context This module is intended as a basic introduction to small boat work in general.

Corresponding to the Learning Outcomes:

1. Safety in small boats:
 - (i) basic principles of personal safety in all conditions;

- (ii) proper use of lifejackets, heavy weather gear and safety harnesses;
 - (iii) correct terminology associated with parts of a boat, relative directions and orders;
 - (iv) relative seaworthiness of small boats;
 - (v) launching of small boats from beaches etc;
 - (vi) weatherliness and handling characteristics of different types of boat in rough weather.
2. Construction materials: G.R.P., wood and plywood, aluminium, steel, ferro-cement, inflatable. Brief explanation of reasons for the use of each.
3. Methods of propulsion:
- (i) use of oars: rowing, sculling, steering;
 - (ii) engines - inboard, outboard.

The student should be expected to use each type.

4. Wind, weather and tidal information:
- (i) interpretation of common useful visual signs;
 - (ii) estimation of wind and tide direction and force by visual perception;
 - (iii) use of Met. Office broadcasts.

Implications of wind, weather and tidal factors for use of small boats.

5. (a) Ropes and twines: various types; their usefulness and limitations.
- (b) Knots, bends and hitches: overhand knot/hitch, round turn and two half hitches, fisherman's bend, rolling, timber and clove hitches, reef knot, bowlines, sheet bends, sheepshank, figure of eight.

(N.B. for particular purposes, e.g. fish farmers, highly specialised knots, bends and hitches may be included, such as side knot, double sheet bend and waggoners' and truckers' hitches.)

- (c) Anchors: various types, including drogues and sea anchors; their usefulness and limitations.

Suggested
Learning and
Teaching
Approaches

All learning outcomes are interdependent and should overlap continuously throughout the teaching of the module.

Active learning and teaching approaches should be used throughout.

Films, videos, diagrams and models should be used as extensively as possible.

Films and video should be used to stimulate discussion, not simply to convey information.

The importance of safety should be emphasised throughout.

Corresponding to the Learning Outcomes:

1. A practical approach in boats, supported by lectures, discussion, films and video.
2. Lectures, demonstrations and discussions supported by visual presentation of various construction methods.
3. Practical participation by students with "hands-on" control in a variety of situations.
4. Use of films, with practical experience based on observation and discussion.
5. Practical participation by students should be repeated at frequent intervals throughout the module to reinforce learning. A high standard will be necessary to ensure safe use of knots, bends and hitches.

Assessment
Procedures

Learning outcome 1 should be assessed by observation of the student's behaviour in a boat. Satisfactory performance should be decided by the tutor.

Learning outcomes 2 and 4 should be assessed by a series of oral questions which, for learning outcome 2, require recognition of the various types of small boat construction material and, for learning outcome 4, recognition of prevailing local weather, wind and tidal conditions and the significance of these for the safe operation of small boats. Satisfactory performance will be 70% or better depending on the difficulty of the test set. Testing should take place no later than 2/3 of the way through the module to allow time for remediation and retesting.

Checklists should be used for formative assessment of learning outcomes 3 and 5. The student should be kept informed of progress throughout and remedial tuition should be provided in a suitable form when appropriate. Learning outcomes 3 and 5 should be summatively assessed by checklists such as the ones below. A tick or cross should be used to record satisfactory/unsatisfactory performance. Satisfactory performance in all items of each checklist on two successive occasions should be considered as adequate evidence that the student has achieved the learning outcomes.

Learning outcome 3

Checklist

The student:

1. correctly uses oars for propulsion;
2. correctly uses oars for steering;
3. starts the motor;
4. leaves the berth under power acceptably;
5. comes alongside under power acceptably.

Learning outcome 5

Checklist

The student correctly:

1. recognises a knot by name;
2. ties a knot as directed;
3. selects a knot for a specific purpose;

4. recognises an anchor by name;
5. selects an anchor for a specific purpose.