-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

Hanover House
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- **0068617** **-Session-1986-87**

-Superclass- **RF**

-Title- **BASIC METEOROLOGY AND INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA (x $^{1}/_{2}$)**

-DESCRIPTION-

Type and Purpose

A general module ($^{1}/_{2}$)which enables the student to acquire a knowledge of meteorology, tides and the Collision Regulations sufficient to ensure safe movement of vessels.

Preferred Entry Level

08610 Introduction to Small Boats

Learning Outcomes

The student should:

1. know and use terminology associated with weather forecasting and tidal information;
2. know factors affecting wind, weather and tide;
3. know and use a variety of information sources on wind, weather and tide;
4. know and use regulations and systems for safe movement of vessels.

Content/ Context

Corresponding to the Learning Outcomes:

1. (a) Terms associated with weather forecasting: rain, sun, fog, mist, sea smoke; atmospheric pressure, depression, anticyclone, frontal systems, occlusions; wind scales.

   (b) Terms associated with tide: spring tides, neap tides, high tides, low tides; the meaning of tides.

2. (a) Wind and weather: basic knowledge of weather systems; understanding of localised factors affecting wind and/or tide (e.g. mountains, large structures, constricted water).

   (b) Tides: causes and reasons for particularly high or low tides.

3. Sources of information: interpretation of visual weather signs, interpretation of broadcast weather forecast, local tidal information (both anecdotal and printed).

4. International Regulations for Preventing Collisions at Sea: lights carried by vessels, steering and sailing rules, IALA buoyage systems, light and sound systems, distress signals.

Suggested Learning and Teaching Approaches

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.

Group investigations and projects would be useful techniques to employ in this module.

The students' own local knowledge should be utilised where appropriate.

The importance of safety should be emphasised throughout.

Assessment Procedures

Learning outcomes 1,2 and 3 should be assessed by a series of oral questions, involving the forecasting of weather and tides from a range of information. This information should take the form of, for example, pictures of cloud types, observation of the actual weather and cloud patterns, real or simulated radio broadcasts, pictures of local topography and built structures, tidal information obtained from different sources. The student should be required, on the basis of the information presented, to predict likely weather, wind and tidal conditions and to describe the effect of these factors on his/her craft. Satisfactory performance will be two reasoned predictions. Testing should take place no later than 2/3 of the way through the module to allow time for remediation and retesting. The tutor must exercise

his/her professional judgement on the student's ability to communicate.

A checklist should be used for formative assessment of learning outcome 4. The student should be kept informed of progress throughout and remedial tuition should be provided in a suitable form when appropriate. Learning outcome 4 should be summatively assessed by the following checklist. A tick or cross should be used to record satisfactory/unsatisfactory performance. Satisfactory performance in all items of the checklist on three successive occasions should be considered as adequate evidence that the student has achieved the learning outcome.

Checklist

The student correctly:

1. recognises a buoy from a coloured picture, model or light;

2. recognises a day signal or night light arrangement;

3. makes an appropriate sound signal;

4. indicates route to be followed along a buoyed channel;

5. indicates which of two vessels has right of way.