

-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

**Hanover House
24 Douglas Street
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NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- 0075746 **-Session-1987-88**
-Superclass- XQ

-Title- **MARINE PLUMBING: INTRODUCTION TO PIPEWORK SYSTEMS (x 1/2)**

-DESCRIPTION-

Type and Purpose A specialist module which provides an introduction to marine pipework systems.

Preferred Entry Level No formal entry requirements.

Learning Outcomes The student should:

1. know the function of each of the main piped systems aboard ship for carrying liquids and gases, and for sounding;
2. identify pipe lines in accordance with BS 1710;
3. sketch in diagrammatic form the layout of a basic pipe system used on a ship.

Content/Context Safety, safe working practices and care in use of equipment should be an integral part of all module activities.

Corresponding to Learning Outcomes 1-3:

1. To include the main systems of pipe installation for hull, accommodation and machinery spaces, such as pipes to and from double bottoms and other tanks. Reasons for the types of systems, main statutory requirements, basic elements in pipe sizing and material selection.
2. Colour coding standards.

3. Use of general arrangement and other plans to develop ability in understanding installations with regard to position, isolation and route.

Suggested Learning and Teaching Approaches

The lecturer should cover each of the learning outcomes by use of the appropriate selection from the following: prepared notes and student worksheets, prepared OHP material, blackboard drawing/sketching of details, examples of materials and components, manufacturers catalogues and other trade literature, video tapes, films and slides, models of systems where available.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each Learning Outcome.

Where cutting scores are stated these are intended to be guidance. The precise cutting score for a test will depend on the difficulty of the test and will have to be decided by the Tutor aided by the Assessor.

The following abbreviations are used below:

- LO Learning Outcome
- IA Instrument of Assessment
- PC Performance Criteria

LO1 IA Written exercise - the student is given a list of 15 systems including hot and cold fresh water; scuppers and discharges; fuel and ballast systems; air, sounding, salt water and ventilation pipes and is required to state the function of each.

PC The cutting score will be 80%.

LO2 IA Identification exercise - the student is shown the coded colours for 15 systems including those specified in the assessment instrument for LO1 and is required to state to which system each colour is applied.

PC The cutting score will be 80%.

LO3 IA Graphical exercise - the student is required to produce a plan view sketch of a given system.

PC The performance criteria will be based on the student.

(I) positioning the pipes so that they do not interfere with cargo accommodation or other services;

(ii) recognising the need for isolation and preventing contamination;

(iii) providing flexibility where required.

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