

# HBB330 - Seamanship

## Présentation

### Objectifs pédagogiques

#### Module Outline:

#### 1. SHIP CONSTRUCTION

- determine the vessel's main construction components
- recognize the terminology for locations on a vessel
- identify the major equipment systems
- identify different ship types and their major differences
- determine the engines on board
- determine the effect of engines on board (noise, interference)
- explain the purpose of derricks, davits, A-frames, cranes, winches and capstans

#### 2. STABILITY

- basic stability principles
- list factors affecting ship stability and how to react

#### 3. ROPES AND WIRES

- Recognize different types of wire, natural, and synthetic rope
- Tie a square knot, clove hitch, and bowline
- Give examples where each might be used on a boat or aboard ship
- Describe the purpose and use of block and tackle
- Describe methods for securing equipment for heavy weather

## Compétences

#### Learning Outcomes:

The aim is to gain basic knowledge about seamanship.

Ability to interpret ship's plans, dangers and tools to perform good seamanship

The student will obtain an idea of the different actions that can cause dangers to the stability of the vessel.

## Programme

### Contenu

#### Lecture 1 Ship construction

Different types of vessels.

Construction of small boat.

Relation between boat size and manoeuvring characteristics.

Mis à jour le 02-04-2021



#### Code : HBB330

Unité d'enseignement de type mixte

3 crédits

Volume horaire de référence (+/- 10%) : **30 heures**

#### Responsabilité nationale :

EPN08 - Institut national des sciences et techniques de la mer (INTECHMER) / Claire MARION

Watertightness at the propeller shaft

## **Lecture 2** Ship construction

Characteristics of an outboard engine.

Construction of derricks and frames on the vessel.

Moon pools in vessels.

Vibrations on board vessels

## **Lecture 3** Stability

Flotation law.

Relation in the position of the centre of gravity and the centre of buoyancy.

Reaction when shifting or adding weights on board a vessel.

Effect of free surfaces

## **Lecture 4** Stability

Influence on the stability when using cranes and derricks.

Stability curve and angle of Loll.

## **Lecture 5** Ropes and wires

Different types of ropes and their characteristics

## **Lecture 6** Ropes and wires

Practice on different knots and splices

## Modalités de validation

- Contrôle continu
- Projet(s)
- Examen final