## MDK 445 - LIQUID CARGO STOWAGE

**Course Description** 

A study of the tanker industry and the operational aspects of the tank vessel, pollution, prevention, precautions and procedures; layouts of different types of tankers; operations sequence and oil tanker construction and terminology. USCG and OPA '90 regulations will be covered. STCW.

## **Credit Hours**

**Contact Hours** 

# Lecture Hours

## **Required Prerequisites**

All prerequisites for all GLMA courses are satisfied by following the approved Course Sequence Guide and any deviation from this guide needs to be approved by the cadet's adviser.

## **Recommended Prerequisites or Skills Competencies**

ENG 111 and MTH 111

### **Course Learning Outcomes**

#### Knowledge:

- · Describe general principles of tank ship construction.
- · Describe tank ship design criteria for hull superstructure.
- Describe the loading and unloading processes for vessels that carry of liquid cargo.
- Describe the applicable regulations, both domestic and international, that pertain to carriage of liquid cargoes by vessel.

#### Application:

- · Recognize tank ship hull nomenclature.
- · Apply regulations to specific liquid cargoes.
- Articulate pollution reporting requirements.

#### Integration:

- · Load a vessel taking into consideration hull characteristics.
- Properly load a tank vessel making use of the cargo compatibility tables contained in applicable regulations.

#### Human Dimension:

- Recognize the relationship between government regulations and shore side operations including MARPOL international treaties.
- · See themselves as professional merchant marine officers.
- See themselves as liquid cargo officers as well as officers in charge of a navigational watch.

#### Caring - Civic Learning:

• Recognize their responsibilities as a marine environment stewards to report environmental issues to appropriate agencies.

#### Learning How to Learn:

• Demonstrate the STCW Code Knowledge, Understanding and Proficiencies (KUPs) for Officer in Charge of a Navigation Watch: 12.1.A, 12.2.A, 12.3.A.