

# MNG 271 - MARITIME WELDING

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- Demonstrate the STCW Code Knowledge, Understanding and Proficiencies (KUPs) for Officer in Charge of an Engineering Watch: 8.1.B, 8.1.C.

## Course Description

A welding theory and practice course. Manipulative skills are emphasized for the Gas Metal Arc and Shielded Metal Arc Welding processes. Plasma Arc and Oxy-Fuel Cutting are also introduced. Appropriate reading assignments are included.

## Credit Hours

2

## Contact Hours

2

## Lecture Hours

1

## Required Prerequisites

Completion of first academic year. 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.

## Corequisites

MNG 271L

## Recommended Prerequisites or Skills Competencies

ENG 111 and MTH 111

## General Education Outcomes supported by this course

Critical Thinking - Direct

## Course Learning Outcomes

### Knowledge:

- Perform butt, lap, and tee welds in the flat and horizontal positions.
- Demonstrate safe welding practices.
- Satisfactory SMAW welds in the flat and horizontal positions.

### Application:

- Recognize the uses and draw backs of SMAW welding in a shipboard or shipyard environment.
- Evaluate what makes a sound SMAW weld.

### Integration:

- Demonstrate manipulative skills for various welding processes; Gas Metal Arc, Shield Metal Arc, Plasma Arc and Oxy-Fuel Cutting.

### Human Dimension:

- See themselves as engineering officers who possess a broad spectrum of skills.
- Demonstrate safe SMAW welding practices with teammates.

### Caring - Civic Learning:

- Demonstrate safe SMAW welding practices.

### Learning How to Learn: