University of Montenegro

Faculty of Maritime Studies Kotor

#### Study program: Marine Electrical Engineering

Type and level of studies: Undergraduate studies

## Course unit: Fundamentals of marine electrical engineering and electronics I

Teacher in charge: Tatjana Dlabac, Associate Professor

Language of instruction: English

ECTS: **5** 

Course load: 2L+1E+1P

### Semester: Winter

### Course unit objective

To familiarize students with basic laws and principles in electrical engineering and electronics necessary for more further study levels, considering STCW'10 convention (Table A-III/6) and IMO model course 7.08 (paragraphs 1.1, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, Appendix A6).

### Learning outcomes of Course unit

Upon successful completion of this subject the student will be able to:

- Define and apply all the laws on direct, electrostatic and magnetic circuits;
- Define and apply principles of operation of p-n connections and diodes, as well as electronic diodes circuits
- Analyze and calculate complex electrostatic and electrical circuits of direct current and electronic diodes circuits;
- Plan and perform measurements on electrical circuits of direct current and diodes circuits;
- Demonstrate familiarity with relevant precautions for working with direct current.

**Teaching methods:** Lectures, exercises, laboratory exercises, homework assignments, tests, office hours, and individual work.

# Examination methods (maximum 100 points)

## METHODS OF KNOWLEDGE ASSESSMENT AND MARKING:

Test I, up to 15 points;

Test II, up to 20 points;

Laboratory exercises up to 22 points;

Homework and tests, up to 8 points;

Final exam, up to 35 points;

Positive mark requires not less than 50 points cumulatively.

| Grading system |               |                    |
|----------------|---------------|--------------------|
| Grade          | No. of points | Description        |
| А              | 90-100        | Excellent          |
| В              | 80-89         | Exceptionally good |
| C              | 70-79         | Very good          |
| D              | 60-69         | Good               |
| E              | 50-59         | Passing            |
| F              | less than 50  | Failing            |