

Sea Term IV EN-4231

Winter 2016

Cruise Coordinator: LT K. McClellan

Office: Engineering Training Office

Requisite:

Sea Term III or Commercial Sea Term

Text:

Excerpts from DOE Fundamentals Handbook

Engineering Training Manual TS Kennedy (Haynes)

USCG books

Entrance Requirements:

- Demonstrate marine engineering knowledge by achieving a 70% or higher on the Cadet Oiler's Qualification Exam
- Respond to shipboard emergency signals
- Safely evacuate engine room when required
- Use hand tools for maintenance and repair of shipboard equipment
- Conduct oneself safely in a shipboard environment

Course Description:

EN-4231 provides an opportunity for cadets to obtain sea service and engineering watchstanding experience in a structured shipboard training program, which is compliant with Chapter III of STCW and the requirements of 46 CFR. The training uses a building-block approach bringing the cadet up to an acceptable level of proficiency in each area of required competence. Shipboard training is closely integrated with the shore-based academic curriculum at the Massachusetts Maritime Academy, which includes a range of simulation and practical laboratory experiences. STCW Qualified Instructors and Designated Examiners will conduct all phases of training.

Learning Objectives:

Demonstrate knowledge and understanding of the following STCW elements:

- AB-E-A4.1 Ability to communicate with the officer of the watch
- AB-E-A4.2 Procedures for the relief and handover of a watch
- AB-E-A4.2 Procedures for maintenance of an engineering watch
- AB-E-A4.3 Information required to maintain a safe engineering watch
- AB-E-A9.1 Different voltages on board
- OICEW-A1.1 Duties associated with taking over and accepting a watch
- OICEW-A1.1 Routine duties undertaken during a watch
- OICEW-A1.1 Maintenance of the machinery space logs
- OICEW-A1.1 Significance of the machinery space reading taken
- OICEW-A1.1 Duties associated with handing over a watch
- OICEW-A1.2 Watchstanding safety and emergency procedures
- OICEW-A1.3 Safety precautions to be observed during a watch

Demonstrate proficiency in the following skills:

- OICEW-3-1C Detect location of grounds
- OICEW-3-1D Measure insulation resistance
- OICEW-3-1E Determine phase rotation
- OICEW-4-1A Inspect machinery spaces before assuming watch
- OICEW-4-1B Watch Relief
- OICEW-5-1A Steering gear test
- OICEW-5-1F Start fresh water generator
- OICEW-5-1G Shut down fresh water generator
- OICEW-5-1L Prepare main steam turbine for operation
- OICEW-5-1N Secure main steam turbine operation

Additional Learning Objectives:

- Demonstrate engineering knowledge by achieving a 70% or higher on the Cadet Engineer's Qualification Exam
- Perform duties of the Cadet Engineer of the Watch
- Perform shipboard maintenance duties as assigned by the ship's Officers
- Display competence in how to use the CFR's
- Exhibit knowledge in responding to causality control issues
- Identify components associated with the main switchboard
- Comprehend the USCG Electronics diagrams

Attendance:

- Attendance is mandatory for all class lectures and lab instruction.

Grading:

Reference the Engineering Training Program Manual

Note:

During cruise you will have to successfully complete and pass your CE Exam with above a 70% and pass all assessments before the end of Cruise 2016.

Dress Code:

You are expected to be in the proper uniform of the day as announced by the Commandant of Cadets.

Cheating:

Cheating will not be tolerated!!!!

Disability Accommodation:

Massachusetts Maritime Academy is committed to providing reasonable accommodations to students with documented disabilities. Students who believe they may need accommodations in this class are required to contact the Director of Disability Compliance.

USCG Practice:

Every Monday during Cruise a practice exam will be placed out in the Engineering Training space, accompanied with a blank scantron. The completed scantron will be due on Friday. This is designed to help you begin studying for the Coast Guard exam.

Reading Assignments:

Will be given out to cadets during class time. It is strongly recommended that all cadets read the Engineering Training Manual to become familiar with the assessments.

Student Learning Outcomes:

Success in this course will be measured through examination and assessments. These will take place during Cruise 2016.

STCW Qualified Instructors and Designated Examiners:

- LT McClellan
2016
Engineering
Coordinator
- CDR Haynes
- LT Splaine
- CDR Murray
- Mr.
Coleman
- Mr.
Schreiber
- Mr. Cruse
- Mr.
Shepard
- Mr. Collins
- LT Trudeau
- CDR Bausch
- LCDR Pulis