|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course Title | **Marine Engines** | | | | | | |
| Course Code | MANS-215 | | | | | | |
| Course Type | Required | | | | | | |
| Level | 1st Cycle | | | | | | |
| Year / Semester | 2nd Year, Fall Semester | | | | | | |
| Teacher’s Name |  | | | | | | |
| ECTS | 3 | Theory | | Laboratory | Simulation | | Tutorial |
| 2 | | --- | --- | | --- |
| Course Purpose and Objectives | The main objectives of the course are to:   * present the operational and constructional principles of the marine main engines and the auxiliary machinery * provide the terminology of marine mechanology * offer details on remote controls, automation and engine room operational observation * explain the basics on fuels and lubricants | | | | | | |
| Learning Outcomes | After completion of the course students are expected to be able to:   * comprehend the basic working principles of a modern engine room * name all the major machinery parts, components and networks in the engine room * recognize the automated way a modern engine room is run * identify the major characteristics of the fuels and lubricants used in marine engines | | | | | | |
| Prerequisites | None | | Required | | | None | |
| Course Content | * Operational description of the vessel’s propulsion system * Main engine systems * Auxiliary machinery and installations * Engine room safety plans * Remote control systems, automations, engine room operation’s observation systems * Distance, speed, consumption * Deck machinery * Pumps, pumping net * Steering system * Systems failures | | | | | | |
| Teaching Methodology | Lectures, in-class assignments, sound and video equipment, computer, projector, simulation software | | | | | | |
| Bibliography | * + - 1. **Required Textbooks/Reading:**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Authors** | **Title** | **Publisher** | **Year** | **ISBN** | | McGeorge, H., D. | General engineering knowledge | Routledge | 2011 | 9780750600064 |  * + - 1. **Recommended Textbooks/Reading:**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Authors** | **Title** | **Publisher** | **Year** | **ISBN** | | Embleton, W. | Instruments & control systems for deck officers | Reeds | 2002 | 9780901281159 | | Taylor, D., A. | Introduction to marine engineering | Butterworth-Heinemann | 1996 | 9780750625302 | | | | | | | |
| Assessment | Homework, in-class assignments, projects, exams, final exam. | | | | | | |
| Language | English | | | | | | |