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| Course Title | **Naval Architecture - Design** | | | | | | |
| Course Code | MANS-133 | | | | | | |
| Course Type | Required | | | | | | |
| Level | 1st Cycle | | | | | | |
| Year / Semester | 1st Year, Spring Semester | | | | | | |
| Teacher’s Name |  | | | | | | |
| ECTS | 4 | Theory | | Laboratory | Simulation | | Tutorial |
| 2 | | 1 | --- | | --- |
| Course Purpose and Objectives | The main objectives of the course are to:   * introduce all the major structural parts and elements of the vessel * explain the most important watertight subdivision issues * demonstrate the ship’s blueprints * present the terminology of the various types of rudders and screws * present the basic drawing tools and materials * display the typical ways that an object can be represented on paper * exhibit the basics on mechanical and architectural design | | | | | | |
| Learning Outcomes | After completion of the course students are expected to be able to:   * name all the major structural parts and elements of the vessel * comprehend the basic details of any vessel’s watertight subdivision, drawing information out of the ship’s plans and manuals * locate any structural point on the blueprints and vice versa * name the major parts of the various types of rudders and screws * handle all basic drawing tools and materials * represent simple objects and components on paper exercising the basic principles of mechanical and architectural design | | | | | | |
| Prerequisites | None | | Required | | | None | |
| Course Content | * Vessel reinforcement systems * Double bottoms, purpose and construction * Structural solution to the problem of pounding * Structural reinforcement to confront the head on stresses * Upper deck constructions * Stern construction * Upper deck construction * Section plans * Piping networks * Corrosion and similar problems * Underwater hull pollution prevention * General description of rudders * General description of screws * Generalities about design * Axonometric presentation * Drawing with orthographic projections * Vess Lectures, in-class assignments, sound and video equipment, computer, projector el’s blueprints | | | | | | |
| Teaching Methodology | Lectures, in-class assignments, sound and video equipment, computer, projector | | | | | | |
| Bibliography | 1. **Required Textbooks/Reading:**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Authors** | **Title** | **Publisher** | **Year** | **ISBN** | | Eyres, D., J. | Ship construction | Butterworth - Heinemann | 2001 | 0 7506 4887 2 |  1. **Recommended Textbooks/Reading:**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Authors** | **Title** | **Publisher** | **Year** | **ISBN** | | Dr D. A. Taylor  Dr Alan ST Tang | Merchant Ship Naval Architecture | IMAREST | 2006 | 1-902536-56-8 | | Dr D. A. Taylor | Merchant Ship Construction 4th | IMAREST | 2000 | 1-9022536-00-2 | | | | | | | |
| Assessment | Homework, in-class assignments, projects, exams, final exam. | | | | | | |
| Language | English | | | | | | |