

CONTAINERIZATION AND MODERN CARGO STOWAGE

MT-3261 Spring 2012

COURSE

Containerization and Modern Cargo Stowage

CREDITS

3 / 28 - 1h 15m Lectures, 2 per week

COURSE INFORMATION

Description: The course covers the information, knowledge and use of practical skills necessary for a junior deck officer to stand an effective cargo watch on board a variety of modern dry cargo vessel types. Load planning, preparation of holds, operation of ships' cargo gear, and the importance of adequately securing cargo to prevent damage to the ship or cargo are covered. Detailed materials on cargo containers including proper handling of refrigerated cargo containers are included. Proper stowage and segregation of hazardous cargo and the IMDG Code are addressed. Dry bulk cargo stowage including the associated hazards and precautions needed for safe loading and unloading is introduced.

STCW Knowledge-Based Elements: The course will address the following STCW knowledge-based elements; 1) Basic knowledge of and precautions to observe in connection with particular types of cargo, 2) Identification of IMDG labeling, 3) Procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids, and 4) Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship.

Prerequisites: Basic Seamanship & Ship Construction

COURSE OBJECTIVES

After completing this course, students should:

- Have the knowledge necessary to supervise the loading and unloading of cargo on board various types of dry cargo vessels
- Fully understand the modern cargo container, its proper handling, stowage, and securing including proper handling of refrigerated containers
- Be able to identify dangerous goods and know they are to be stowed, segregated, and labeled.
- Know proper dry bulk handling practices

COURSE OUTCOMES

As a result of completing the course and successfully passing the associated examinations, Cadets will be able to:

- Stand an effective cargo watch on deck of various types of dry cargo vessels
- Comprehend the basics of cargo load planning including cargo documentation and cargo claim prevention
- Know how to operate ship's cargo handling equipment
- Understand the details of cargo containers; proper handling, stowage and lashing including proper handling of refrigerated cargo containers as well as labeling, stowage, and segregation of hazardous cargo
- Display an understanding of dry bulk cargo operations

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MT-3261 Spring 2012

COURSE CONDUCT

It is expected all students will soon be ship's officers. They will be addressed and treated as such.

Course conduct will be in accordance with the MMA regimental system. All students shall wear the appropriate uniform to each class.

The MMA honor code will be strictly followed.

ATTENDANCE

Regular attendance is expected and is a key to success in the course. More than four (4) absences from a lecture period for ANY reason will result in an incomplete or failing grade. It is the individual student's duty to keep up with the material, and to arrange to make up any quizzes, tests or material missed *in advance* or a zero will be recorded for that work.

Mass Maritime Academy is committed to providing reasonable accommodations to students with documented disabilities. Students who believe that they may need accommodations in this class are required to contact Professor Fran Tishkevich, Director of Disability Compliance. ftishkevich@maritime.edu MMA Tel. ext. 2208 Room H-311A (Harrington Building).

Thereafter, you must make me aware of any determined accommodations so that they may be implemented within our classroom.

GRADING POLICY

A minimum of three (3) unit examinations/tests will be administered during lecture meetings. Tests will be announced and given during a full or partial lecture period the duration of each will be determined by the instructor.

Segment quizzes may be announced or unannounced and of such duration as required for completion at the discretion of the instructor.

A single final examination will be held at the conclusion of the course. It will be a cumulative capstone examination covering all of the content of the course.

Examinations, tests, and quizzes may utilize written materials consisting of any of the following or a combination of such; multiple choice questions, fill in the blank, true or false, short answer, or technical sketches.

STCW knowledge-based assessments will be conducted as part of this course and incorporated into the tests and examination. Students are required to achieve a minimum grade of 70% in this course to satisfy the knowledge components of STCW. Students failing to achieve a minimum grade of 70% will be required to retake this course and achieve a minimum grade of 70% prior to graduation.

Class Participation:	5%
Unit Examinations, tests, and quizzes:	60%
Final Examination:	35%

Final Course Grading:

100 - 93%	A	76.9 - 73%	C
92.9 - 90%	A-	72.9 - 70%	C-
89.9 - 87%	B+	69.9 - 67%	D+
86.9 - 83%	B	66.9 - 63%	D
82.9 - 80%	B-	62.9 - 60%	D-
79.9 - 77%	C+	Below 60%	F

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TEXT MATERIALS

Marine Cargo Operations – A Guide to Stowage, 4th ed., Meurn, 2011
Additional Materials may be posted on Blackboard

REFERENCES

Materials used to develop course content in addition to the text will be identified in lecture notes and slides.

INSTRUCTOR

Capt. Dave DeCastro

ddecastro@maritime.edu

LDCR John Belle

Office # 321A

jbelle@maritime.edu

Office Hours: Mon & Wed 1000-1050 & Wed 1400-1450 or **any other time by appointment.**

My duty is to:

- guide you through the material,
- answer all your questions, e-mails, texts, etc.,
- be available should you need further explanation, and
- promptly return and comment on assignments, quizzes and tests.

It is your responsibility to:

- Come to class prepared to discuss the reading and subject matter for that day,
- Actively participate in classroom discussions and labs,
- Stop me at any point that you don't understand as I will be glad to go over it again, and
- Learn the material.

Your comprehension of the material can only come from your active involvement in the reading assignments and the lectures.

It is my personal goal to see each and every one of you to succeed with this material. If you feel you are falling behind or are having trouble understanding some of the subject matter, and I have not detected this on my own, be sure to contact me or stop by my office for extra help. I will be available for as long as it takes to help you.

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TOPICS / LESSON PLAN:

LECTURE 1	Course Introduction Dry Cargo Introduction - Types of Cargos and Ships
LECTURE 2	Cargo Containers – History & the Intermodal System
LECTURE 3	Cargo Containers – McLean Video
LECTURE 4	Cargo Containers – Types
LECTURE 5	Cargo Containers - Terminals and Ships
LECTURE 6	Cargo Containers - Emma Maersk Video
LECTURE 7	Cargo Containers - Handling Securing
LECTURE 8	Cargo Containers – Refrigerated Cargo
LECTURE 9	TEST 1
LECTURE 10	Hazardous Cargo
LECTURE 11	Hazardous Cargo - IMDG
LECTURE 12	Cargo Operations - Officer Responsibilities
LECTURE 13	Cargo Handling Equipment - Derricks, Cranes, Hatches
LECTURE 14	Cargo Handling Equipment - Derricks, Cranes, Hatches
LECTURE 15	TEST 2
LECTURE 16	General Cargo Stowage Principals
LECTURE 17	Load Planning
LECTURE 18	Load Planning - Stowage Factors / Preparing Holds & Ship
LECTURE 19	Roll On / Roll Off Cargo
LECTURE 20	Special Cargo - Heavy Lift
LECTURE 21	Special Cargo - Miscellaneous
LECTURE 22	TEST 3
LECTURE 23	Bulk Cargo
LECTURE 24	Bulk Cargo
LECTURE 25	Caring for the Cargo - Responsibilities
LECTURE 26	Cargo Documentation incl. security
LECTURE 27	Claims & Claim Prevention
LECTURE 28	Review
FINAL EXAMINATION	

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MT-3261 Spring 2012

This syllabus and course schedule is tentative and may be adjusted as required to meet the goals and objectives of the course. Notification of any changes will be made as soon as possible.