

Massachusetts Maritime Academy  
**GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM**

**COURSE MT 4122** (Credits - 3)

REVISED: February 13, 2013

Spring Semester Academic Year 12-13

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## 1. Instructors

Professor: Dr. James J. Fitzpatrick, USCG MASTER UNLIMITED

Professor: CAPT Kurt DeCicco; CAPT Robert Buckley, USN ret.

OFFICE: 3<sup>rd</sup> Deck Bresnahan Building Room C303

I can be reached by telephone at extension 2109 or in the Lab at 2148. If you can't reach me at the above number you may leave a message and I will return the call. If you need to reach me in an emergency please call my cell phone number: 508-736-5113. I can also be reached via email at [jfitzpatrick@maritime.edu](mailto:jfitzpatrick@maritime.edu)

Mass Maritime 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 Dr. Fran Tishkevich, Director of Disability Compliance, within the first two weeks of class. Dr. Tishkevich can be reached at [ftishkevich@maritime.edu](mailto:ftishkevich@maritime.edu) and at ext 2208.

MMA Health Services realizes that students may encounter situations which could impede their academic, personal and social development and success. Counseling services are designed to help students address these concerns, increase their self-awareness and empower them to manage challenging areas in their lives. To schedule a confidential appointment please email [kshineobrien@maritime.edu](mailto:kshineobrien@maritime.edu) or call ext 1480.

## 2 Catalog Description

### **Pre-requisite: MT3221**

Students will be taught to operate the radio communications equipment required on board GMDSS-compliant vessels. Students will become proficient with GMDSS equipment and procedural operation along with developing knowledge of radio wave propagation. The GMDSS courses contain all of the elements contained in

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the GMDSS model course developed in the United States. This course satisfies the requirements necessary to earn the classroom and laboratory STCW-95 endorsement as a Global Maritime Distress and Safety System Operator.

**3. Text**

T1 - Introduction to GMDSS, J. Patrick Allen, Mercomms unlimited, 2<sup>nd</sup> edition 2007

**4. Supplementary Reading**

47 CFR Part 80.

Marine Radio navigation and Communications, Monroe and Bushy, 1998.

[http://wireless.fcc.gov/commoperators/index.htm?job=question\\_pools](http://wireless.fcc.gov/commoperators/index.htm?job=question_pools)

Examinations Question Pools Elements 1&7

**5. Class Format**

Role playing, Critical Thinking and Lecturettes with group discussions. Class participation includes: class attendance, attentiveness, good behavior and respect for classmates and the instructor. All these factors are considered for your class participation grade.

**6. Learning Objectives**

As per US GMDSS Task Force syllabus

This course is designed to meet all GMDSS STCW 95 knowledge based and competency assessments, which form part of the requirement for Officer in Charge of a Navigation Watch (STCW 95).

The aim of the course is to provide the student with a comprehensive and practical understanding and operation of the GMDSS.

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#### Learning Outcomes

Upon completion of the course the student will be able to operate and stand a radio watch for a shipboard GMDSS station. The student will be able to send distress, safety and urgency messages to ship and shore based radio stations. The student will be exposed to sufficient theoretical knowledge of GMDSS to successfully pass the FCC GMDSS General Operators license (element 7).

#### GMDSS Competencies

There will be 2 chances to demonstrate competencies on each piece of equipment set forth by the US GMDSS Task Force.

A student that passes the competencies on the first attempt will receive a mark of 100. A student that passes on the second attempt will receive a mark of 75. A student that passes on the third attempt will receive a zero (0) for that competency grade but will be given STCW credit for passing the competency.

- \* **Should a student fail to demonstrate competency during the third attempt on any piece of equipment s/he will receive a zero (0) for that competency and will fail the course.**

There will be no exceptions made to this policy.

- \* Make-up competencies will be scheduled by appointment only. A student that fails to make up a competency by **1600 June 11, 2013** will receive a zero for the competency missed.

**Examinations and Quizzes:** There will be one quiz per week covering all material addressed in the course prior to the quiz. A passing grade of **75%** is required for issuance of the STCW'95 endorsement and FCC GMDSS General Operator License.

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**Final Grade Calculation:**

1) Average of Quiz grades	30%
2) Exam 1	15%
3) Exam 2	15%
4) GMDSS Competencies	30%
5) Attendance and Class Participation	<u>10%</u> 100%

The following is a breakdown of the final course letter grading:

89.0 - 100.0	A
87.0 – 88.9	A - minus
85.0 – 86.9	B+
83.0 – 84.9	B
81.0 – 82.9	B - minus
79.0 – 80.9	C+
77.0 – 78.9	C
75.0 – 76.9	C- minus
<b><i>73.0 – 74.9</i></b>	<b><i>D+</i></b>
<b><i>71.0 – 72.9</i></b>	<b><i>D</i></b>
<b><i>69.0 – 70.9</i></b>	<b><i>D-</i></b>
<b><i>Below 69.0</i></b>	<b><i>F</i></b>

A final course grade below C- minus (indicated in red italic) does not satisfy the STCW requirement and constitutes retaking of the entire course for STCW credit.

Additionally, the FCC element 7 (GMDSS General Operator) license is required for issuance of the STCW certificate for OICNW. Students will find test centers for this license at the Federal Communications web site ([www.fcc.gov](http://www.fcc.gov)).

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**8. Attendance Policy**

**ATTENDANCE AT ALL CLASSES IS MANDATORY.** Unauthorized absence will not be tolerated. Disciplinary action and/or grade point reduction will be administered to repeat offenders. ***More than four (4) absences of any nature will result in a failure to meet the STCW '95 attendance policy and consequently means course failure.***

Tardy students will be assessed a ½ absence. Students not prepared for class (homework, course book, pen, pencil, and notebook) will be asked to leave and be marked absent.

Students asked to leave for any reason will be marked absent for the day.

***The following Scale will be used for the attendance portion of the grade in the course.***

# of Absences	Grade
0	100
1	90
2	80
3	50
4	0
5	Failure of Course

Authorized absences should be reported to me the day of the missed class, preferable by voice mail or email. Make-up examinations for authorized periods of absence will be scheduled for a mutually agreed upon time. **Authorized** absences still constitute a STCW absence and are governed by the above scale as set forth by the Academy's STCW course submittal; however, they will not count as a grade reduction when calculating the final average.

***NOTE: Examinations missed as a result of an unauthorized absence will receive a grade of ZERO.***

**9. Syllabus Changes**

The syllabus and course schedules are tentative and may be adjusted as required to meet the goals and objectives of the course and the Academy. Notice of changes will be made to students and the Academy as soon as possible.

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10. COURSE OUTLINE AND SCHEDULE

LESSON TOPICS BY CLASS MEETINGS

<i>Lesson</i>	<i>Week Ending</i>	<i>Lesson Topic</i>
1.	<b>03/08</b>	Course Overview and Review of GMDSS 1
2.	<b>03/15</b>	Part 80 Rules and Regulations / Basic Communications <b>Quiz 1</b>
3.	<b>03/22</b>	Purpose and use of Digital Selective Calling (DSC) facilities <b>Quiz 2</b>
4.	<b>03/29</b>	NBDP <b>Quiz 3</b>
5.	<b>04/05</b>	INMARSAT Systems <b>Quiz 4</b>
6.	<b>04/12</b>	Theoretical and Practical use of Ship Station Equipment MF/HF <b>Quiz 5</b>
7.	<b>04/19</b>	MF/HF <b>Quiz 6</b>
8.	<b>04/26</b>	Survival Craft Transceivers / Batteries / Fault Location / EPIRB <b>Quiz 7</b>
9.	<b>05/03</b>	SART / Marine Safety Information / Search and Rescue <b>Quiz 8</b>
10.	<b>05/10</b>	Distress, Safety, and Urgency Communications Procedures <b>Quiz 9</b>
11.	<b>05/17</b>	False Alerts, Equipment Tests, Radio Log keeping <b>Quiz 10</b>
12.	<b>05/24</b>	Radio Voyage Planning
13.	<b>05/31</b>	Sea Term Voyage Planning Workshop
14.	<b>06/07</b>	USCG Rescue 21/NTSB SAR Case Studies
15.	<b>06/14</b>	Final Recap and shipboard equipment

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11. LABORATORY OUTLINE AND SCHEDULE SECTION 41

LABORATORY TOPICS BY CLASS MEETINGS

<b>LAB#</b>	<b>Day</b>	<b>Date</b>	<b>Lesson Topic</b>
01.	THURS	03/14	GMDSS Laboratory Equipment familiarization - rules and safety
02.	THURS	03/21	VHF Radiotelephone and DSC Tutor & Manual
03.	THURS	03/28	VHF Radiotelephone and DSC competencies demonstration
04.	THURS	04/04	VHF Radiotelephone and DSC competency practice
05.	THURS	04/18	INMARSAT C Tutor & Manual
06.	THURS	04/25	INMARSAT C competencies demonstration
07.	THURS	05/02	INMARSAT C competencies practice
08.	THURS	05/09	MF/HF Radiotelephony Tutor & Manual
09.	THURS	05/16	MF/HF SITOR Tutor & Manual
10	THURS	05/23	MF/HF competency practice
11.	THURS	05/30	STCW Competency Examinations INMARSAT C & VHF DSC
12.	THURS	06/06	STCW Competency Examinations MF/HF/DSC/SITOR
	TUES	06/11	<b>Last day to complete STCW Competency Examinations</b>

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TO: CAPT. JAMES J. FITZPATRICK EDD

FROM: Enrolled Student

RE: Receipt of Course Documents

I hereby acknowledge that I am in receipt of the Course Syllabus and the Course Schedule for this course. I further acknowledge that CAPT Fitzpatrick has explain the syllabus and course schedule during class and that I have read and understand all sections including class policies.

I acknowledge that I have taken and passed the required pre-requisite course listed below:

- **Pre-requisite: MT3221 Electronic Nav**

NAME: (print) \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

STUDENT ID NUMBER \_\_\_\_\_

CLASS SECTION: \_\_\_\_\_

DATE: \_\_\_\_\_