MASSACHUSETTS MARITIME ACADEMY
DEPARTMENT OF MARINE TRANSPORTATION
Bridge Resource Management (MT4131)
RANGER COMPONENT

Learning Objectives

The students who have successfully completed Bridge Resource Management will have gained experience in handling vessels in actual and simulated conditions and thereby will be able to make a more effective contribution to the bridge team during ship maneuvering operations. In particular, students will gain familiarization in the use of engines and helm for ship maneuvering, an understanding of the effects on the behavior of the ship due to wind, current, s narrow channels, and condition of loading. The student will also gain a greater awareness of the importance of passage planning or maneuvering, vessel operations, navigation, use of radar, bouyage systems, piloting, application of the COLREGS, docking, contingency planning, and a greater understanding of efficient bridge procedures.

This program is designed to provide the students with the opportunity to develop skills and proficiency in topics of study offered in the following prerequisites: MT1221 (Coastal Nav I), MT2231 (Basic Seamanship), MT2161 (Rules), MT3222 (ARPA), and MT3231 (Applied Ship I)

Demonstrate knowledge and understanding of the following STCW elements:
- OICNW-A2.4 The use of information from navigational equipment for maintaining a safe navigational watch
- OICNW-A2.6 The use of reporting in accordance with VTS procedures
- OICNW-A2.7 BRM allocation, assignment, and prioritization of resources
- OICNW-A2.7 BRM effective communication
- OICNW-A2.7 BRM assertiveness and leadership
- OICNW-A2.7 BRM obtaining and maintaining situational awareness
- OICNW-A2.7 BRM consideration of team experience
- OICNW-C7.4 BRM allocation, assignment, and prioritization of resources
- OICNW-C7.4 BRM effective communication onboard and ashore
- OICNW-C7.4 BRM assertiveness and leadership, including motivation
- OICNW-C7.4 BRM obtaining and maintaining situational awareness
- OICNW-C7.5 Decision Making: situation and risk assessment
- OICNW-C7.5 Decision Making: identify and consider generated options
- OICNW-C7.5 Decision Making: selecting course of action

Demonstrate proficiency in the following skills:
- OICNW-1-2A Fix by two bearings

- OICNW-1-5A Determine gyro compass error by bearing of range
- OICNW-1-5B Determine magnetic compass error
- OICNW-1-5C Determine magnetic compass deviation
- OICNW-5-1A Maneuver for man overboard
- OICNW-5-1B Course change of more than 45°

Other Objectives

After successfully completing the course the student will:

- Satisfactorily perform the duties of an Officer in Charge of a Navigational Watch.
- Demonstrate knowledge of principles of ships' maneuvering characteristics
- Demonstrate ability to perform simple maneuvers and operations with varying vessels
- Demonstrate ability to be a successful member of a Bridge Team

Instructor

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Office Hours; Monday & Tuesday: 1200 - 1400

Text

APPLIED SHIPHANDLING RANGER MANUAL**, 12th Edition** Captain Patrick J. Modic

Grading

A. The instructor intends to administer four short tests while on board the T/V Ranger. The first will be given during the second lab and will include material from both labs. The weekly tests are intended to assess the student's preparedness to execute the scheduled training evolution for that particular day. **Questions on the tests will be based on material and lessons found in the assigned readings, prerequisite courses, and prior labs.**

B. In the process of executing the tasks that comprise the scheduled learning objectives, students will be individually assessed on their attitude and

aptitude. This weekly participation grade is a qualitative assessment in five major areas: timeliness, attitude, preparation, initiative, and demonstrable skills. Each area listed above is worth 2 points for a possible total of 10 points for any given lab.

C. The Ranger component of the Bridge Resource Management grade will be comprised of the average of weekly tests weighted 70% and weekly participation 30%. There will be both RANGER and Simulator questions on the final exam.

D. The final Bridge Resource Management grade will be comprised of your simulator grade, Ranger grade, and final exam.

E. There are seven performance-based assessments (STCW) associated with this course (these are described in appendix 1). The performance-based assessments are Pass/Fail. These performance-based assessments will be administered during the academic semester. Per departmental policy individuals will be allowed two opportunities during the lab period to demonstrate proficiency. Individuals failing to pass the performance-based assessments will be issued an incomplete for the semester if they otherwise pass the course.

Learning Outcomes

Upon successful completion of Bridge Resource Management the student will be familiar with the safe operation of a vessel. This will include navigation, linehandling, emergency procedures, vessel operational and lifesaving systems, anchoring, radar navigation and collision avoidance and operating within the COLREGS. The students will have operated the T/V RANGER in coastwise exercises and docking evolutions. They will have successfully completed six STCW competencies demonstrating some of the aforementioned evolutions. The student will have the knowledge, and some experience, in getting a vessel underway, completing a voyage through proper voyage planning and safely arriving back in port.

Miscellaneous

A. The Academic Code of Conduct will be strictly enforced.

B. Each student is responsible for assignments and work covered in the scheduled training evolution whether he/she is present or not.

C. It is not the purpose of this program to reintroduce the student to basic navigational elements such as bouyage systems, tides and currents, set

and drift, the use of a D.R., the concepts of the rules of the road (to include lights shapes and sounds), radar operation etc. Although these subjects will be discussed in the lab, students are expected to be competent in the above areas as a condition for entry into this program. Students will be tested weekly in these subject matters to insure that these skills if not already attained, are achieved in order to support more demanding labs in the future.

D. Attendance is a course requirement. Because of the sea time connected with the completion of this program, there are no unauthorized absences. More than one emergency absence, for **whatever reason**, will result in an incomplete. A Cadet who misses a lab **due to an emergency** or **MMA Function** shall report to the instructor ASAP to arrange a makeup lab. An incomplete will turn into a failure two weeks into the next semester.

E. Office hours are established to allow the student the opportunity to consult with the instructor. Office hours are the ideal forum to discuss individual professional progress and to answer additional questions. Students schedules may conflict with the posted office hours, therefore the instructor will make themselves available around the students schedule when necessary. If you are having a problem, do not hesitate to see your instructor.

F. If you are a student with a documented learning disability, and feel you will need accommodations in this class, please contact the Disability Resource Officer Professor Tishkevich at ext 2208 or e-mail her at ftishkevich@maritime.edu to discuss appropriate accommodations as allowed by the ADA/USCG.

G. You will be treated and expected to behave as the professionals you are aspiring to be.