

Massachusetts Maritime Academy

MT-4253 Watchkeeping for Undergraduates using Full-Mission Bridge Simulator

A capstone assessment program allowing deck, undergraduate students an opportunity to demonstrate competency in Bridge Resource Management and Watchstanding for STCW 95 and USCG licensing requirements. Students successfully completing these competencies are capable of undertaking all of the duties and responsibilities expected of a deck watchkeeping officer. Upon successful completion of this course, a U.S. Coast Guard approved certificate is issued certifying that the holder demonstrates appropriate competence in watchkeeping, bridge team management, and bridge resource management, meeting the standards prescribed by IMO/STCW and the Coast Guard

Prerequisite: MT-4131

STCW: Practical

MT-4253 WATCHKEEPING FOR UNDERGRADUATES USING FULL –MISSION BRIDGE SIMULATOR

This course is designed for assessment purposes only. These assessments verify competency in BRM (Bridge Resource Management) procedures and watchkeeping for STCW 95/USCG licensing requirements.

Students successfully completing these competencies are capable of undertaking all of the duties and responsibilities expected of a deck watch standing officer.

Upon successful completion of this course, a U.S. Coast Guard approved certificate is issued certifying that the holder demonstrates appropriate competence in watchkeeping, bridge team management, and bridge resource management, meeting the standards prescribed by IMO/STCW and the U.S. Coast Guard.

PREREQUISITE: MT-4131 APPLIED SHIPHANDLING II

THE FOLLOWING IS A LIST OF THE ASSESSMENTS EVALUATED IN MT-4253

ASSESSMENT #	TASK:
OICNW-1-3A	CORRECTION OF CHARTS AND PUBLICATIONS
OICNW-2-1D	DETERMINE RISK OF COLLISION
OICNW-2-1E	MANEUVER TO AVOID RISK OF COLLISION--MEETING
OICNW-2-1F	MANEUVER TO AVOID RISK OF COLLISION--OVERTAKING
OICNW-2-2B	KEEP A SAFE NAVIGATION WATCH
OICNW-2-2C	NOTIFY MASTER WHEN APPROPRIATE
OICNW-2-2D	KEEP A SAFE ANCHOR WATCH
OICNW-2-2E	NAVIGATE IN RESTRICTED VISIBILITY
OICNW-2-2F	TURN OVER A WATCH
OICNW-2-3A	VOYAGE PLANNING
OICNW-2-3B	EXECUTE A VOYAGE PLAN
OICNW-2-3C	WATCH AUGMENTATION
OICNW-2-3D	BRM CONDITION III--COLLISION AVOIDANCE
OICNW-2-3E	BRM CONDITION III-NAVIGATION
OICNW-2-3F	BRM CONDITION II OR III ERROR TRAPPING
OICNW-2-3G	BRM CONDITION II OR III --NAVIGATION AND COLLISION AVOIDANCE
OICNW-2-3H	BRM CONDITION III- ESTABLISH A BRIDGE TEAM

Students:

Arrive at the ABS FMSS 10-15 minutes before your scheduled simulation time.

Be familiar with the “Deep Sea Standing Orders” document prior to your scheduled simulation.

Upon completion of the simulation you will receive a debrief. Each student will be scheduled for two simulations. The first, will be a Watch Condition I simulation and the second will be a Watch Condition III simulation with a small bridge team. Additional simulations will be scheduled as needed upon the outcome.

Bring pencils, plotting tools (dividers, compass, parallel ruler or triangles), speed/distance/time calculator, eraser, radar plotting sheets for transfer plotting and scrap paper.

YOU ARE EXPECTED TO BE FAMILIAR WITH THE CORRECT OPERATION OF EQUIPMENT IN THE BRIDGE SIMULATOR. FOR EXAMPLE...RADARS, ECDIS, GPS, DEPTHSOUNDER, AND STEERING STAND.

IN THE WATCHKEEPING EXERCISE YOU WILL BE EVALUATED IN PERFORMANCE ON THE FOLLOWING:

- DETERMINATION IF RISK OF COLLISION EXISTS WITH APPROACHING MEETING, CROSSING AND OVERTAKING VESSELS
- APPLY THE RULES OF THE ROAD CORRECTLY AND MANEUVER THE VESSEL TO AVOID THE COLLISION, IF REQUIRED
- PROPERLY RELIEVE THE WATCH IN ACCORDANCE WITH STCW CODE SECTION A-VIII/2, PART 3-1, PARAGRAPHS 21 AND 22
- PROPERLY KEEP A SAFE NAVIGATIONAL WATCH IN ACCORDANCE WITH STCW CODE SECTION A-VIII/2, PART 3-1, PARAGRAPH 23 TO 50
- NOTIFY THE MASTER AS INSTRUCTED, AND WHEN IN DOUBT OF OTHER VESSELS' INTENTIONS, OR IN ANY CIRCUMSTANCES THAT AFFECT THE ROUTINE NAVIGATION OF THE VESSEL IN ACCORDANCE WITH STCW CODE SECTION A-VIII/2, PART 3-1, PARAGRAPH 40
- RECOGNIZE THE RESTRICTED VISIBILITY AND TAKE THE APPROPRIATE ACTION TO NAVIGATE IN RESTRICTED VISIBILITY IN ACCORDANCE WITH THE COLREGS AND IN ACCORDANCE WITH SECTION STCW CODE A-VIII/2, PART 3-1, PARAGRAPH 45
- PROPERLY TURN THE WATCH OVER TO A RELIEVING OFFICER
- EXECUTION OF THE VOYAGE PLAN
- RECOGNIZE THE NEED FOR ADDITIONAL PERSONNEL ON THE BRIDGE AND NOTIFY THE MASTER
- IDENTIFY ALL TARGETS POSING A RISK OR DANGER OF COLLISION AND PROVIDE APPROPRIATE INFORMATION AND RECOMMENDATIONS ON VESSEL TRAFFIC AND ANY OTHER SITUATION OR CONDITION THAT MAY AFFECT THE SAFE NAVIGATION OF THE VESSEL TO THE CONNING OFFICER
- DETERMINE AND PLOT THE VESSEL'S POSITION BY ELECTRONIC AND VISUAL MEANS, COMMUNICATE AS REQUIRED ON THE VHF, AND CARRY OUT ALL ENGINE COMMANDS, ENSURE THAT ALL RUDDER COMMANDS ARE PROPERLY CARRIED OUT, AND MAKE APPROPRIATE LOG BOOK ENTRIES
- MONITOR VESSEL'S MOVEMENT, CAREFULLY FOLLOWING THE STANDING ORDERS AND VOYAGE PLAN.
- DETERMINE AND PLOT THE VESSEL'S POSITION AT SUITABLE INTERVALS, AND PLOT OR SYSTEMATICALLY OBSERVE ALL APPROACHING VESSELS AND INFORM THE BRIDGE TEAM OF DANGERS TO NAVIGATION, INTENDED COURSE CHANGES, AND VESSELS WHICH POSE A RISK OR DANGER OF COLLISION
- DETERMINE THE NUMBER OF OFFICERS REQUIRED TO SAFELY NAVIGATE THE VESSEL UNDER THE EXISTING WATCH CONDITION AND ENSURE BRIDGE TASKS ARE ASSIGNED TO SPECIFIC PERSONS