

**K to 12 BASIC EDUCATION CURRICULUM**  
**SENIOR HIGH SCHOOL TECHNICAL-VOCATIONAL-LIVELIHOOD MARITIME SPECIALIZATION**  
**NAVIGATIONAL WATCH 2**

**Grade:** 11  
**Subject Title:** Navigational Watch 2

**Semester:** 2<sup>nd</sup> Semester  
**No. of Hours:** 80 hours  
**Prerequisite:** Navigational Watch 1 and Safety 1

**Subject Description:**

This course in Navigational Watch 2 is an introduction to Standards of Training, Certification, and Watchkeeping for Seafarers (STCW), 1978, as amended. This also complies with the International Rules for Preventing Collision at Sea (COLREG). This is designed for Senior High School (SHS) students to enhance their knowledge, understanding, and proficiency in accordance with maritime workplace standards.

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCIES	CODE
<b>LESSON 1: DEMONSTRATE HOW TO KEEP A PROPER LOOK-OUT BY SIGHT AND HEARING (PLSH) (20 hrs)</b>				
1. Basic Principles of Navigational Watch	The learners demonstrate an understanding of the basic concepts and underlying principles of proper lookout by sight and hearing	The learners shall be able to carry out proper lookout by sight and hearing as prescribed in the STCW regulations	<b>LO1: Explain navigational watch (8 hrs)</b> 1.1 Explain the watchkeeping arrangements in maintaining a safe navigational watch 1.2 Discuss the ratings forming part of a navigational watch in obtaining the ultimate purpose of safe navigational watch	<b>TVL_MNW211PLSH-IIIa-b-1</b>
1. Importance of keeping a watch at sea and in port 2. Composition of the watch team 3. Points to consider for the watch officer during his duty			<b>LO2: Explain watch arrangements (8 hrs)</b> 2.1. Discuss the importance of watchkeeping at sea, in port, and other circumstances 2.2 Explain the bridge team composition of a navigational watch at sea and watch duty in port	<b>TVL_MNW211PLSH-IIIc-d-2</b>
1. Mental and health requirements of a watch team personnel			<b>LO3. Assess watchkeeper's fitness for duty (4 hrs)</b> 3.1 Discuss standard procedures in assessing watchkeeper's condition	<b>TVL_MNW211PLSH-IIIE-3</b>
<b>LESSON 2: EXPLAIN BRIDGE WATCHKEEPING (BWCH) (20 hrs)</b>				
1. Navigational aids a. lighthouse b. beacons c. buoys 2. Navigational equipment: a. Compasses (gyro and magnetic)	The learners demonstrate an understanding of the basic concepts and underlying principles in navigation	The learners shall be able to independently demonstrate an understanding of the competencies in navigation as prescribed in the STCW regulations	<b>LO 1. Prepare for bridge watch keeping (8 hrs)</b> 1.1 Explain the importance of navigational aids 1.2 Assist in checking the operational condition of navigational equipment 1.3 Identify the navigational hazards that may be encountered during the watch	<b>TVL_MNW211BWCH-IIIf-g-1</b>

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<ul style="list-style-type: none"> <li>b. Radar</li> <li>c. Speed and distance log</li> <li>d. Chart/ electronic Chart Display Information System (ECDIS)</li> <li>e. Global Positioning System (GPS)</li> <li>f. Navtex</li> <li>g. Updated charts</li> <li>h. Vessel traffic System</li> <li>i. Lights and radio information</li> <li>j. Captain's daily special order/night order book</li> <li>k. Signal lights</li> </ul> <p>3. Navigational hazards</p> <ul style="list-style-type: none"> <li>a. Weather condition</li> <li>b. Traffic density</li> <li>c. Drifted and uncharted objects</li> </ul>				
<p>4. Navigational Duties and Responsibilities</p> <ul style="list-style-type: none"> <li>a. Master</li> <li>b. Officer on Watch (OOW)</li> <li>c. Lookout</li> <li>d. Helmsman</li> <li>e. Pilot (if on board)</li> </ul>			<p><b>LO 2. Explain responsibilities of a Bridge Team Management (8 hrs)</b></p> <p>2.1 Enumerate bridge levels I, II, III, and IV</p> <p>2.2 Explain the duties and responsibilities of the bridge team management under levels I, II, III, and IV</p>	<p><b>TVL_MNW211BWCH-IIIh-i-2</b></p>
<p>5. Standard procedures in reporting system</p>			<p><b>LO 3. Practice methods of reporting (4 hrs)</b></p> <p>3.1 Explain the standard procedures in reporting contacts or objects by points or in degrees</p>	<p><b>TVL_MNW211BWCH-IIIj-3</b></p>

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CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCIES	CODE
<b>LESSON 3: APPLY BASIC KNOWLEDGE OF COLLISION AVOIDANCE AS PER INTERNATIONAL RULES OF THE ROAD (CARR) (40 hrs)</b>				
6. Part A – General Provisions of International Rules of the Road (COLREGS 1972) 7. Rules 1, 2, and 3	The learners demonstrate an understanding of the basic concepts and principles of applying collision avoidance as per International Rules for Preventing Collision at Sea (COLREG, 1972)	The learners shall be able to demonstrate collision avoidance as per International Rules for Preventing Collision at Sea (COLREG, 1972)	<b>LO 1. Explain Part A - General Provisions of COLREGS 1972 (2 hrs)</b>	<b>TVL_MNW211CARR-IVa-1</b>
8. Part B – Steering and Sailing Rules Section 1 of International Rules of the Road (COLREGS 1972)			<b>LO 2. Apply Part B (Steering and Sailing Rules Section 1) of COLREGS 1972 (4 hrs)</b> 2.1 Explain Rule 5 – Lookout 2.2 Discuss Rule 7 – Risk of Collision 2.3 Discuss Rule 8 - Action to Avoid Collision	<b>TVL_MNW211CARR-IVa-b-2</b>
9. Part B – Steering and Sailing Rules Section 2 of the International Rules of the Road (COLREGS 1972)			<b>LO 3. Apply Part B (Steering and Sailing Rules-Section 2) of COLREGS 1972 (2 hrs)</b> 3.1 Discuss Rule 14 – Head-on 3.2 Discuss Rule 15 – Crossing Situation 3.3 Discuss Rule 16 - Action by Give-way Vessel 3.4 Discuss Rule 17 – Action by Stand-on Vessel	<b>TVL_MNW211CARR-IVb-3</b>
10. Part C– Lights and Shapes of the International Rules of the Road (COLREGS 1972)			<b>LO 4. Identify lights and shapes signals (16 hrs)</b> 4.1 Discuss Part C (LIGHTS AND SHAPES) of COLREGS 1972	<b>TVL_MNW211CARR-IVc-f-4</b>
11. Part D– Sounds and Lights Signals of the International Rules of the Road (COLREGS 1972)			<b>LO 5. Identify sounds and lights signals (16 hrs)</b> 5.1 Discuss Part D (SOUNDS AND LIGHT SIGNALS) of COLREGS 1972	<b>TVL_MNW211CARR-IVg-j-5</b>

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**Glossary**

<b>Abaft the beam</b>	Said of the bearing of an object which bears between the beam and the stern (further back than the ship's middle)
<b>Abaft</b>	A relative term used to describe the location of one object in relation to another, in which the object described is farther aft than the other. Thus the mainmast is abaft the foremast (in back of).
<b>Abandon ship</b>	Get away from the ship, as in an emergency
<b>Abeam</b>	The bearing of an object 90 degrees from ahead (in a line with the middle of the ship)
<b>Able-bodied seaman</b>	The next grade above the beginning grade of ordinary seaman in the deck crew
<b>Aboard</b>	In the vessel (on the ship)
<b>Beam wind</b>	A wind at right angles to a vessel's course (wind blowing at the ship's side)
<b>Bear a hand</b>	To assist or help
<b>Bear down</b>	To approach (overtake or come up to)
<b>Bearing</b>	The direction of an object (with reference to you, your ship, another object)
<b>Becalmed</b>	A sailing vessel dead in the water due to lack of wind (not moving)
<b>Becket</b>	A rope eye for the hook of a block; a rope grommet used in place of a rowlock. Also, a small piece of rope with an eye in each end to hold the feet of a sprit to the mast. In general, any small rope or strap used as a handle.
<b>Belay</b>	To make fast as to a pin or cleat; to rescind an order (tie up)
<b>Chief mate</b>	Another term for first mate
<b>Chief Engineer</b>	Head of the engine department
<b>Cradle</b>	A stowage rest for a ship's boat
<b>Crossing the line</b>	Crossing the equator
<b>Crow's nest</b>	The platform or tub on the mast for the lookout
<b>Cut-water</b>	The foremost part of the stem, cutting the water as the vessel forges ahead
<b>Field day</b>	A day for general ship cleaning
<b>Fog horn</b>	A sound signal device (not necessarily mechanically operated)
<b>Officer of the watch</b>	The officer in charge of the watch
<b>Keel-haul</b>	To tie a rope about a man and, after passing the rope under the ship and bringing it up on deck on the opposite side, haul away, dragging the man down and around the keel of the vessel. As the bottom of the ship was always covered with sharp barnacles, this was a severe punishment used aboard sailing ships long ago; today, a reprimand.
<b>Keep a sharp lookout</b>	A lookout is stationed in a position to watch for danger ahead; to be on guard against sudden opposition or danger

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**Glossary**

<b>Kink</b>	A twist in a rope
<b>Knock off</b>	To stop, especially to stop work
<b>Old man</b>	The captain of the ship
<b>Watch cap</b>	A canvas cover secured over a funnel when not in use; sailor's headwear, woolen type, capable of covering the ears in cold weather
<b>Watch officer</b>	An officer taking his turn as officer of the watch

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**Code Book Legend**

**Sample TVL\_MNW211PLSH-III-a-b-1**

LEGEND		SAMPLE		DOMAIN/ COMPONENT	CODE
<b>First Entry</b>	Learning Area and Strand/ Subject or Specialization	Technical-Vocational-Livelihood Maritime Track Navigational Watch 2	<b>TVL_M NW2 11</b>	Proper Look-out by Sight and Hearing	PLSH
	Grade Level	Grade 11		Bridge Watchkeeping	BWCH
<b>Uppercase Letter/s</b>	Domain/Content/Component/ Topic	PROPER LOOK-OUT BY SIGHT AND HEARING	<b>PLSH</b>	Collision Avoidance as per International Rules of the Road	CARR
<b>Roman Numeral</b> <i>*Zero if no specific quarter</i>	Quarter	Third Quarter	<b>III</b>		
<b>Lowercase Letter/s</b> <i>*Put an en dash (–) in between letters to indicate more than a specific week</i>	Week	Week One to Two	<b>a-b</b>		
			-		
<b>Arabic Number</b>	Competency	Explain navigational watch	<b>1</b>		

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**References**

**Main Reference:**

International Maritime Organization. *International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) and STCW Code including the 2010 Manila Amendments*. London: International Maritime Organization, 2011.

**Other References:**

International Chamber of Shipping. *Bridge Procedures Guide*. 5<sup>th</sup> ed. Marisec Publications, 2016.

International Maritime Organization. *The Convention on the International Regulations for Preventing Collisions at Sea*. London: International Maritime Organization, 1972.