

Proposal to modernise the Methodology of Teaching, Assessment/ Examination

Nautical - STCW II/2 CoC			
Competency/ Module: Management of Bridge Operations	Competencies: -- Establish watchkeeping arrangements and procedures -- Manoeuvre and handle a ship in all conditions		
Knowledge, understanding and proficiency	Recommendation of working group regarding the outcome and objective.	Rationale	Action required
Outcome 1: Establish watchkeeping arrangements and operational and safety procedures to comply with statutory and international requirements regarding navigation	Contextualise	While the core material is clear, it is important to make sure Cadets clearly understand how this outcome relates to work at sea and it is essential to make sure that this context is given with reference to current and future seagoing technologies and practices.	Ensure Cadets understand the context of this outcome in a practical sense by using case studies and practical examples, including reference to Bridge Resource Management.
1.1 Statutory and international regulations regarding watchkeeping arrangements on board ship	Contextualise	It is important to make sure Cadets clearly understand how this outcome relates to work at sea and it is essential to make sure that this context is given with reference to current and future seagoing technologies and practices	Include the link between regulation and best practice, to show how these regulations would impact watchkeeping arrangements.
1.2 Masters standing and night orders and general watchkeeping duties	Include a greater understanding of the human factors impacting this outcome.	To provide seafarers with a contextualised understanding of the Human Element in the context of bridge management, showing how they can put theory into practice in the work they carry out at sea.	Include the topics of fatigue, situational awareness, circadian rhythms, blind spots/limitations of eyesight & night vision?
1.3 Position fixing systems	Keep	Relevant	None
1.4 Master/pilot relationship	Include a greater understanding of the human factors impacting this outcome.	To provide seafarers with a contextualised understanding of the Human Element of bridge management, showing how they can	Ensure this is covered from both a legal perspective and from the human element point of view including the communication and leadership/followership skills needed.

Proposal to modernise the Methodology of Teaching, Assessment/ Examination

		put theory into practice in the work they carry out at sea.	
1.5 Bridge procedures prior to arrival, departure, encountering heavy weather/ice, at sea and in port	Keep	Relevant	None
Outcome 2: Explain how to manoeuvre and handle the ship in all conditions	Contextualise	It is important to make sure Cadets clearly understand how this outcome relates to work at sea and it is essential to make sure that this context is given with reference to current and future seagoing technologies and practices	Add more time in the simulator to allow for practical experience and the implementation of Bridge Resource Management practices.
2.1 Propulsion and steering systems	Keep	Relevant	None
2.2 Factors affecting manoeuvring	Keep	Relevant	None
2.3 Manoeuvring characteristics	Keep	Relevant	None
2.4 Berthing and unberthing manoeuvres	Keep	Relevant	None
2.5 Anchoring	Keep	Relevant	None
2.6 Routine and emergency manoeuvres	Include a greater understanding of the human factors impacting this outcome.	To provide seafarers with a contextualised understanding of the Human Element during ship handling, showing how they can put theory into practice in the work they carry out at sea.	Discussion of preparedness for emergency manoeuvres, the importance of drills and Bridge Resource Management skills.

Proposal to modernise the Methodology of Teaching, Assessment/ Examination

Outcome 3: Analyse the principles of the operation and errors of a marine gyro compass	Keep	Relevant	None
3.1 The controlled gyroscope	Keep	Relevant	None
3.2 North settling gyroscope	Keep	Relevant	None
3.3 Gyrocompass errors	Keep	Relevant	None
3.4 Gyrocompass interfaces	Keep	Relevant	None
Proposal submitted by:	Any other outcomes for this competency, above and beyond STCW which would be needed due to use of modern technology and impact of future fuels onboard:		
	Objective	Reason Why	Action required
Cadet Training & Modernisation Working Group	Include Human Element Factors throughout the syllabus	To provide seafarers with a contextualised understanding of the Human Element in the maritime industry, showing how they can put theory into practice in the work they carry out at sea.	Raise awareness throughout the Cadet's training of the areas in which human element factors will have an impact. Recommendations on where this can be included have been noted throughout the entire syllabus. Not every template has Human Element Factor recommendations but please do add any you feel may have been missed.
Cadet Training & Modernisation Working Group	Include Data Science skills throughout the syllabus	Data Science Skills (Comprehension, Analysis, Presentation, etc...) are already required within much of the syllabus. A further, specific focus on these skills needs to be taught where relevant.	A specific topic will need to be introduced to improve Cadets' Data Science skills. Practical application of data science skills should be highlighted throughout the syllabus. Not every template has Data Science recommendations but please do add any you feel may have been missed.

Proposal to modernise the Methodology of Teaching, Assessment/ Examination

<p>Cadet Training & Modernisation Working Group</p>	<p>Ensure all outcomes are contextualised to help Cadets understand what they are learning in relation to what they will experience at sea.</p>	<p>While some outcomes are intrinsically linked to work carried out at sea, some need to be contextualised to show how they apply to work on board. Where this is the case, it is important to make sure Cadets clearly understand how the outcome relates to work at sea and it is essential to make sure that this context is given with reference to current and future seagoing technologies and practices.</p>	<p>Where outcomes do not specifically cover a topic which relates to work carried out at sea, more must be done to contextualise the outcome and make it relevant to the maritime industry, giving specific shipping examples of how the outcome may be applied in a modern shipping context. Not every template has contextualisation recommendations but please do add any you feel may have been missed.</p>
---------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------