World Academy of Safety & Health
INTERNATIONAL

# STCW BASIC SAFETY TRAINING

Personal Survival Techniques, Personal Safety &
Social Responsibility, Elementary First Aid

# Purpose:

This *World Academy of Safety & Health (WASH) International STCW Basic Safety Training Manual, v.2021* is exclusively intended to provide guidance and information on the delivery and administration of the World Academy of Safety & Health (WASH) International Maritime Training course(s). All information contained within this manual is subject to change at any time for any reason and without notice. All updates, changes, alterations, and new editions will be published on *www.lifeguardcertifications.com*.

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# STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING FOR SEAFARERS – STCW

## BASIC SAFETY TRAINING

Seafarers employed or engaged in any capacity on board ship on the business of that ship as part of the ship's complement with designated safety or pollution-prevention duties in the operation of the ship shall, before being assigned to any shipboard duties:

1. Receive appropriate approved basic training or instruction in:
   - Personal Survival Techniques as set in table A-VI/1-1
   - Fire Prevention and Firefighting as set out in table A-VI/1-2
   - Elementary first Aid as set out in table A-VI/1-3, and
   - Personal Safety and Social Responsibilities as set out in table A-VI/1-4

2. Be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in column 1 of tables A-VI/1-1, A-VI/1-2, A- VI/1-3, A-VI/1-4 through:
   - Demonstration of competence, in accordance with the methods and the criteria for evaluating competence tabulated in columns 3 and 4 of those tables, and
   - Examination or continuous assessment as part of an approved training program.

3. Seafarers shall be required every five years to provide evidence of having maintained the required standard of competence, to undertake the tasks, duties and responsibilities described by personal Survival Techniques and Fire Prevention and Firefighting.

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# STCW Basic Safety Training Course

## Combined Course Framework

**Course Duration:** 63.5 Hours

**Modules:** 1.19 Personal Survival Techniques A-VI/I-1; 1.20 Fire Prevention & Firefighting A-VI/I-2; 1.13 Elementary First Aid A-VI/I-3; 1.21 Personal Safety & Social Responsibility A-VI/I-4

| The training and passed examination complies with the following standards: |
| --- |
| Section A-VI/I of the STCW Code |

## A. Course Framework

### A.1 Scope

This model course aims to provide the training necessary and required for participants to working or engaged in any capacity on board a ship. It is designed to meet the requirements of and in accordance with Section A-VI/I of the STCW Code 2010 Basic Safety Training requirements.

## A.2 Objectives

| |
|---|
| Participants who successfully complete this course will be able to demonstrate competency in each of the above-listed modules. They each will be able to demonstrate competency in surviving at sea; how to minimize the risk of fire onboard; being able to take immediate and lifesaving action in the event of an accident and/or medical emergency; complying with all emergency protocols, procedures, and action plans; effective communication; and observance of safe practices while working onboard a ship. |

## A.3 Entry Standards

| | |
|---|---|
| **General Requirements** | This course is available to any and all seafarers who may serve on board sea-going merchant ships.<br><br>**Must Present:** 1) Passport or government Issued Photo ID Card; 2) two (2) color passport photographs |
| **Age** | 18 years of age |
| **Health status** | Participants must not have any health condition that might impact his/her ability to demonstrate required skills |
| **Trainees of the course** | The maximum number of participants id dependent upon the availability of certified course instructors and not to exceed twenty-four (24) - ratio is 12:1 |
| **Experience** | There are no specific experience or educational requirements or pre-requisites |

## A.4 Course Content

| | |
|---|---|
| **Personal Survival Techniques A-VI/I-1** | Introduction; Safety & Survival; Emergency Protocols & Procedures; Evacuation; Survival Craft, Lifeboats, Rescue Boats; Personal Lifesaving Tools & Techniques; Survival at Sea; Emergency Radio Usage; Helicopter Rescue |
| **Fire Prevention & Firefighting A-VI/I-2** | Introduction; Principles of; Minimizing the Risk of Fire; Maintaining a State of Readiness with Regard to Responding to Fire; Firefighting & Extinguishment |
| **Elementary First Aid A-VI/I-3** | General Principles; Anatomy Structure & Function; Patient Assessment; Positioning of Patient; Level of Consciousness (LOC); Choking; Rescue Breathing; CPR/AED; Bleeding Emergencies; Shock Management; Burns; Rescue & Transport |
| **Personal Safety & Social Responsibility A-VI/I-4** | Human Relationships; Safely Working Aboard a Ship; Understanding Order & Hierarchy; Emergency Protocols & Methodology; Pollution Prevention While at Sea |
| **Assessment** | Review & Final Formative Assessment |

## A.5 Course Certificate

Upon successful completion of the course, the participant will be issued a document certifying that the participant has met the standard of competence in each area/module and as outlined in Table A VI/I of STCW Code 2010. The successful participants will receive a Basic Safety Training certificate that includes: training institution name and location, student's name, course name and code, completion date, course approval agency and corresponding STCW, CFR, and/or other codes.

# 1. Course Framework

## PERSONAL SURVIVAL TECHNIQUES

### 1.1 Scope

This model course will satisfy the requirements for Personal Survival Techniques and aims to provide the training necessary and required for participants to working or engaged in any capacity on board a ship. It is designed to meet the requirements of and in accordance with Section A-VI/I of the STCW Code 2010 Basic Safety Training requirements.

### 1.2 Objectives

Participants who successfully complete this course will be able to demonstrate competency in each of the above-listed module. They each will be able to demonstrate competency in surviving at sea and demonstrate proficient knowledge and satisfy examination requirements for Personal Survival Techniques in accordance with Section A-VI/I-1 of the STCW Code as amended and US 46 CFR 11.302(a)(1) and 46 CFR 12.602(a)(1).

### 1.3 Entry Standards & Course Requirements

| | |
|---|---|
| **General Requirements** | This course is available to any and all seafarers who may serve on board sea-going merchant ships.<br><br>**Must Present:** 1) Passport or government Issued Photo ID Card; 2) two (2) color passport photographs |
| **Minimum Age** | 16 years of age |
| **Health Status** | Participants must not have any health condition that might impact his/her ability to demonstrate required skills |
| **Trainees of the Course** | The maximum number of participants is dependent upon the availability of certified course instructors and not to exceed twenty-four (24) - ratio is 12:1 |
| **Experience** | There are no specific experience or educational requirements or pre-requisites |
| **Attendance** | Students must attend all scheduled course sessions and actively participate in all course activities. A student who misses any scheduled course time will either need to schedule a make-up session with the instructor (at an additional fee) if the instructor is able to accommodate or re-enroll and start the course over again at the full tuition cost. |
| **Evaluation** | 1) Successful completion of an end of course formative written 25-question multiple choice assessment with a |

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| | minimum score of seventy percent (70%). There is a forty-five (45) minute time limit for the written formative assessment.<br>2) Satisfactorily completing all practical hands-on assessments |
| **Re-Testing** | Students are permitted to re-take non-IAMI, non-SQA exams up to two more times as needed. Each exam will be unique from all previous exams. A student must wait 24 hours between exam re-takes. All attempts must be completed within 14 days from the start date of the course.<br>Student failing the exam three times is required to repeat the course in its entirety at the full cost of tuition. |

## 1.4 Teaching Aids

| | **Description** | **Ref.** |
|---|---|---|
| **1 Videos** | STCW<br>CPR/AED/First Aid: Adult/Child/Infant<br>Administering Emergency Oxygen<br>Bloodborne Pathogens | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **2 Powerpoints** | P1: WASH STCW Overview (optional) | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| | P2: WASH Personal Survival Techniques | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **3 Photos** | Various types of life jackets, lifebuoys, life rafts, immersion suit, survival suit | |

| | | |
|---|---|---|
| **4 Technology** | Projector, Laptop, TV/Monitor, Internet/WiFi (optional) | |
| **5 Textbooks, Outline, Syllabi, & Manuals** | Personal Survival Techniques | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **6 Swimming Pool** | | |
| **7 Lesson Plans, Instructor Lecture Notes** | | |
| **8 Survival Gear** | Life Jacket, Immersion Suit, Life Raft | SOLAS Approved Type 1 |
| **9 Equipment for Demonstration** | EPIRB, SART, VHF Radio, hand-held flares, thermal protective aid, hydrostatic release unit | |

## 1.5 Teaching Facilities

**CLASSROOM:**
Traditional classroom space with projector, laptop, TV monitor, internet (if possible). Breakout room(s) or space for practical demonstration(s), practice, and skills assessment(s). Able to accommodate up to 24 students. Space equipped with desks, chairs, good lighting, emergency exits with signage, and restrooms.

## 1.6 Course Certificate

Upon successful completion of the course, the participant will be issued a document certifying that the participant has met the standard of competence in the area/module and as outlined in Table A VI/I of STCW Code 2010. The certificate will include: training institution name and location, student's name, course name and code, completion date, course approval agency and corresponding STCW, CFR, and/or other codes.

## 1.7 Bibliography

### IMO/ILO References

| | Description | Ref. |
|---|---|---|
| **ILO/IMO/WHO** | **International Medical Guide for Ships** | IMGS, 3rd ed., (Geneva, World Health Organization, 2007) (ISBN 978 92 4 068231 3) |
| | **International Code of Signals** | Medical Section of (pages 111-148), 1987 ed., (IMO Sales No 994E) |
| | **Medical First Aid Guide for use in Accidents Involving Dangerous Goods** | MFAG (IMO Sales No 251E) |
| **IMO/ILO** | **Document for Guidance** | 2010 (IMO Sales No 935E) |
| | **Assembly Resolution** | A.438(XI) – Training and qualification of persons in charge of medical care aboard ship |
| | **The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers** | 1995 (STCW 1995), 1998 ed., (IMO Sales No 938E) |
| **IMO** | **R1: STCW 2010: Section A-VI, Table A-VI/I-1** | |

# Course Outline, Timetable and Teaching Syllabus

## 1.8 Course Outline – 1.19 Personal Survival Techniques A-VI/I-1

| n/n | Training Areas | Lecture (hours) | Simulator/Practical (hours) | Total (hours) |
|---|---|---|---|---|
| 1 | **Intro -Safety Principles of Survival** | **1.0** | **0** | **1.0** |
| 2 | **Emergency Protocols & Procedures** | **1.0** | **0** | **1.0** |
| 3 | **Evacuation** | **1.0** | **.5** | **1.5** |
| 4 | **Survival Craft, Lifeboats, Rescue Boats** | **2.0** | **0** | **2.0** |
| 5 | **Personal Lifesaving Tools & Techniques** | **2.5** | **.5** | **3.0** |
| 6 | **Survival at Sea** | **2.0** | **0** | **2.0** |
| 7 | **Emergency Radio Usage** | **.5** | **0** | **.5** |
| 8 | **Helicopter Rescue** | **1.0** | **0** | **1.0** |
| 9 | **Hands-On Practice/Drills/Skills** | **0** | **2.5** | **2.5** |
| 10 | **Review & Formative Assessment** | **.5** | **0** | **.5** |
| | **Total hours** | | | **15.0** |

## 1.9 Course Timetable – 1.19 Personal Survival Techniques A-VI/I-1

| Day | Period (time) | Training Areas |
|---|---|---|
| | | |
| **Day 1** | .75 | Introduction – Safety Principles of Survival |
| | 1.5 | Emergency Protocols & Procedures |
| | 1.0 | Evacuation |
| | 2.25 | Survival Craft, Lifeboats, Rescue Boats |
| | .75 | Personal Lifesaving Tools & Techniques |
| **Day 2** | | |
| | 3.75 | Personal Lifesaving Tools & Techniques (demonstrations/practical) |
| | | BREAK |

| | | |
|---|---|---|
| | 1.0 | Survival at Sea |
| Day 3 | | |
| | 1.0 | Emergency Radio Usage |
| | 1.5 | Helicopter Rescue |
| | 1.5 | Review & Final Formative Assessment |

## 1.10 Teaching Syllabus – 1.19 Personal Survival Techniques A-VI/I-1

| n/n | Subjects | IMO/STCW Regulations | Textbook | Teaching Aids |
|---|---|---|---|---|
| **I. Introduction – Safety Principles of Survival** | | | | |
| 1 | **Safety guidance - states the safety rules laid down by the chief instructor, which must be obeyed during the course (especially during practical drills)** | **R1 – Table A-VI/I-1** | **1.4.5 pp. 4-5** | **1.4.2.P1-P2 1.4.3-1.4.9** |
| 2 | **Principles of Survival at Sea - states the principles of survival at sea as:**<br>• **initial on-board familiarization**<br>• **regular training and drills**<br>• **preparedness for any emergency**<br>• **knowledge of actions to be taken:**<br>  ◦ **when called to survival craft stations**<br>  ◦ **when required to abandon ship**<br>  ◦ **when ·required to jump in the water**<br>  ◦ **when in the water**<br>  ◦ **when aboard a survival craft**<br>• **knowledge of the main dangers to survivors** | **R1 – Table A-VI/I-1** | **1.4.5 pp. 4-5; 10** | **1.4.2.P1-P2 1.4.3-1.4.9** |
| 3 | **Definitions, Survival Craft, Lifeboats, Rescue Boats and Tools - defines & distinguishes:**<br>• **Survival craft**<br>• **Lifeboat**<br>• **Rescue boat**<br>• **Float-free launching** | **R1 – Table A-VI/I-1** | **1.4.5 pp. 14-25** | **1.4.2.P1-P2 1.4.3-1.4.9** |

| | | | | |
|---|---|---|---|---|
| | • Free-fall launching<br>• Immersion suit<br>• Inflatable tool<br>• Thermal protection aid and/or anti-exposure suit<br>• Launching tool(s) | | | |
| 4 | SOLAS Training Manual – states training that specific to the ship is documented in the ship's SOLAS Training Manual | R1 – Table A-VI/I-1 | 1.4.5 p. 4 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 5 | Safety Symbols – identifies IMO safety symbols used aboard ships | R1 – Table A-VI/I-1 | 1.4.5 pp. 6-8 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **II. Emergency Protocols & Procedures** | | | | |
| 6 | Types of Emergencies – lists the emergencies leading to fires or the foundering of ships as:<br>• Collision<br>• Stranding<br>• Adverse reaction of dangerous goods or hazardous bulk materials<br>• Shifting of cargo<br>• Engine room explosion and/or fire<br>• Hull failure | R1 – Table A-VI/I-1 | 1.4.5 p. 7 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 7 | Precautions – lists the precautions taken against such emergencies | R1 – Table A-VI/I-1 | 1.4.5 p. 8 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 8 | Fire Provisions – describes generally the means provided to combat fire | R1 – Table A-VI/I-1 | 1.4.5 pp. 8-9 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 9 | Foundering – describes generally the means provided in case of foundering | R1 – Table A-VI/I-1 | 1.4.5 p. 10 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 10 | Expertise of Crew – explains that the effectiveness of the lifesaving equipment/gear depends upon the expertise of crew members | R1 – Table A-VI/I-1 | 1.4.5 pp. 10-11 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 11 | Muster List & Emergency Signals – explains the need for:<br>• Muster list<br>• Emergency signals<br>• Emergency drills/practice | R1 – Table A-VI/I-1 | 1.4.5 p. 12 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 12 | Instructions for Crew & Emergencies – states that after person joins crew/ship | R1 – Table A-VI/I-1 | 1.4.5 pp. 12-13 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

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| | knowledge of the following must be acquires ASAP:<br>• Meaning of emergency signals<br>• Instructions on the muster list & their duties/responsibilities<br>• Location & use of lifesaving equipment/gear<br>• Location & use of firefighting equipment/gear<br>• Escape/evacuation routes & equipment/gear<br>• Emergencies involving the sinking of the ship<br>• Means provided for survival on a ship & survival craft/lifeboats | | | |
| 13 | Extra Equipment/Gear & Survival – lists extra equipment/gear which is to be taken from the ship to the survival craft if time permits | R1 – Table A-VI/I-1 | 1.4.5 pp. 10-27 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 14 | Abandoning Ship Complications – explains the complications in abandoning ship caused by:<br>Some of the survival craft/lifeboat not capable of being launched<br>Absence of adequate lighting<br>Absence of personnel assigned to certain duties | R1 – Table A-VI/I-1 | 1.4.5 pp. 10-27 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| III. | Evacuation | | | |
| 15 | Abandoning Ship Last Resort – states the ship is usually the best chance of survival. Abandoning ship should only be undertaken if all other measures fail | R1 – Table A-VI/I-1 | 1.4.5 pp. 12-13 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 16 | Personal Preparation for Abandoning Ship – explains how to prepare oneself for abandoning ship | R1 – Table A-VI/I-1 | 1.4.5 p1p 12. | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 17 | Prevention of Panic – explains how to prevent panic | R1 – Table A-VI/I-1 | 1.4.5 pp. | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

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|---|---|---|---|---|
| 18 | Crew Explains Duties to Passengers – describes duties as they apply to passengers | R1 – Table A-VI/I-1 | 1.4.5 p. 12 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 19 | Crew Duties: Launching Survival Craft/Lifeboat – describes duties as they apply to launching survival craft/lifeboat | R1 – Table A-VI/I-1 | 1.4.5 p. 13 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 20 | Master's Orders to Abandon Ship – states the order to abandon ship always comes from the master | R1 – Table A-VI/I-1 | 1.4.5 p. 12 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 21 | Means of Survival – describes the following as essential for survival after the ship has been abandoned:<br>• Means of remaining afloat<br>• Means of keeping warm<br>• Drinking water & eating food<br>• Means of communicating with ships and/or rescue agencies | R1 – Table A-VI/I-1 | 1.4.5 p. 13 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **IV. Survival Craft, Lifeboats, Rescue Boats** | | | | |
| 22 | Lifeboats –<br>1) identifies the different types of lifeboats:<br>• Open<br>• Partially enclosed<br>• Self-righting partially enclosed<br>• Totally enclosed<br>• Totally enclosed with a self-contained air support system<br>• Fire protected<br>2) States that for passenger ships the capacity of the lifeboat(s) is/are generally twice the number of persons on board<br>3) States that for cargo ships the capacity of the lifeboat(s) is/are generally twice the number of persons on board | R1 – Table A-VI/I-1 | 1.4.5 pp. 14-17 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 4) Demonstrates how lifeboat(s) is/are launched by:<br>• Davits<br>• Free fall method<br>5) Demonstrates precautions which have to be taken to ensure personal safety while launching lifeboat(s).<br>6) Demonstrates embarkation from ship & from water. | | | |
| 23 | Life Rafts – lists two main types of life rafts:<br>1) Inflatable<br>2) rigid | R1 – Table A-VI/I-1 | 1.4.5 pp. 17-19 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 24 | Rescue Boats –<br>1) states the minimum number of rescue boats for a:<br>• Passenger ship<br>• Cargo ship<br>2) Describes the requirements which allow a lifeboat to be classified as a rescue boat | R1 – Table A-VI/I-1 | 1.4.5 p. 20 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **V.** | **Personal Lifesaving Tools & Techniques** | | | |
| 25 | Life Buoys –<br>1) describes how life buoys are distributed over the ship<br>2) describes the requirements for additional equipment/gear attached to lifebuoys | R1 – Table A-VI/I-1 | 1.4.5 p. 21 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 26 | Lifejackets –<br>1) States the total number lifejackets provided for:<br>• Passenger ship<br>• Cargo ship<br>2) States the lifejacket buoyancy may be achieved by:<br>• Packing with buoyant material<br>• inflating<br>3) Identifies equipment/gear on lifejackets as:<br>• Fixed or flashing light<br>• Whistle firmly secured by a cord | R1 – Table A-VI/I-1 | 1.4.5 p. 22 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 27 | Immersion Suit –<br>1) describes an immersion suit | R1 – Table A-VI/I-1 | 1.4.5 p. 22 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 2) states that an immersion suit should be available to every person assigned to crew a rescue boat<br>3) states that for passenger & cargo ships with non-enclosed lifeboat(s) at least three (3) immersion suits shall be carried for each lifeboat | | | |
| 28 | Thermal Protective Aids –<br>1) states the main purpose of a thermal protective aid<br>2) states that for passenger & cargo ships with non-enclosed lifeboats a thermal protective aid must be provided for persons not provided with an immersion suit. | R1 – Table A-VI/I-1 | 1.4.5 p. 23 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **VI. Survival at Sea** | | | | |
| 29 | Dangers to Survivors – describes dangers as:<br>Heat stroke, sun stroke, hypothermia, seasickness, dehydration, effects of drinking seawater, fire and/or oil on water surface, sharks | R1 – Table A-VI/I-1 | 1.4.5 pp. 28-29 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 30 | Best Use of Survival Craft Facilities –<br>1) describes how to clear away from ship<br>2) explains protective measures against heat stroke & hypothermia<br>3) states effects of seasickness & how to mitigate these effects<br>4) explains rationing of freshwater & food & need to avoid dehydration<br>5) explains measures for survival in case of fire and/or oil on water surface<br>6) explains means of survival in shark infested waters<br>7) explains correct use of drogue and/or seaanchor to reduce drift<br>8) lists duties of a lookout | R1 – Table A-VI/I-1 | 1.4.5 pp. 30-31 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 9) describes means of facilitating detection by others/rescuers<br>10) lists the means of maintain good morale<br>11) describes use & function of shark repellents<br>12) explains means of survival if in water & not in lifeboat and/or life raft | | | |
| **VII. Emergency Radio Usage** | | | | |
| 31 | Portable Radio for Survival Craft<br>1) demonstrates the use of keying devices for transmitting alarm & distress signals<br>2) demonstrates how to support the antenna at maximum practical height<br>3) demonstrates use of receiver | R1 – Table A-VI/I-1 | 1.4.5 p. 32-35 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 32 | Emergency Position Indicating Radio Beacons (EPIRBS) –<br>1) states the purpose of EPIRBS<br>2) states how many are provided & where they are stowed<br>3) demonstrates how they are activated<br>4) describes dangers of accidental use<br>5) differentiates between EPIRB & a SART | R1 – Table A-VI/I-1 | 1.4.5 p. 34-35 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 33 | Search & Rescue Transponders (SART's) –<br>1) states the purpose of SART's<br>2) states how many are provided & where they are stowed<br>3) demonstrates how they are activated<br>4) describes dangers of accidental use<br>5) differentiates between SART EPIRB | R1 – Table A-VI/I-1 | 1.4.5 p. 27 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **VIII. Helicopter Rescue** | | | | |
| 34 | Communication with Helicopter<br>1) demonstrates the hand & arm signals used | R1 – Table A-VI/I-1 | 1.4.5 pp. 36-38 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 2) explains how to communicate with the helicopter through a shore station if the appropriate equipment is available | | | |
| 35 | Evacuation from Ship and/or Survival Craft –<br>1) explains the need to have a pick up space on the ship which is clear of masts, rigging, and other impediments<br>2) describes the means of evacuation from lifeboats & life rafts | R1 – Table A-VI/I-1 | 1.4.5 pp. 36-38 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 36 | Helicopter Pick Up -<br>1) describes methods of pick up by harness, by stretcher, by rescue net<br>2) explains hand & arm signals used for safe lifting/hoisting<br>3) describes how a member of helicopter crew can assist in pick up<br>4) explains the importance of obeying instructions given by helicopter pilot and/or deputy | R1 – Table A-VI/I-1 | 1.4.5 pp. 36-38 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 37 | Proper Use of Helicopter Harness –<br>1) describes harness<br>2) demonstrates the correct method to don the harness & adopt a safe posture while in it | R1 – Table A-VI/I-1 | 1.4.5 pp. 36-38 | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **IX. Hands-On Practice/Drills/Skills** | | | | |
| 38 | Lifebuoys – takes a life buoy from stowage, tosses it into the water and checks:<br>• Flotation<br>• Self-igniting lights<br>• Self-activating smoke signals<br>• Buoyant lifelines | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 39 | Life Jackets –<br>1) dons a non-inflatable life jacket correctly within a period of one (1) minute & without assistance | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 2) jumps into the water from a height while wearing the life jacket<br>3) swims a short distance while wearing the life jacket<br>4) tests the whistle on the life jacket<br>5) operates the flashing light if fitted | | | |
| 40 | Inflatable Life Jackets –<br>1) dons an inflatable life jacket correctly within a period of one (1) minute & without assistance<br>2) jumps into the water from a height while wearing the life jacket<br>3) swims a short distance while wearing the life jacket<br>4) tests the whistle on the life jacket<br>5) tests the non-automatic methods of inflation of the life jacket | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 41 | Immersion Suits –<br>1) unpacks & dons an immersion suit without assistance<br>2) while wearing the immersion suit & life jacket:<br>• Climbs up & down vertical ladder at least 5meters in length/height<br>• Jumps from a height of not less than 4.5 meters into the water<br>• Swims a short distance & boards a survival craft<br>• Performs assigned duties during a simulated abandonment<br>• Tests the whistle<br>• Operates the flashing light if fitted | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 42 | Thermal Protective Aids –<br>1) unpacks & dons a thermal protective aid without assistance while in a survival craft and/or rescue boat & while wearing a life jacket | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |

| | | | | |
|---|---|---|---|---|
| | 2) removes a thermal protective aid which impedes swimming in not more than two (2) minutes<br>3) puts a thermal protective aid on a person simulating unconsciousness in a life raft | | | |
| 43 | Personal Survival without Life Jacket – demonstrates how to keep afloat without the use of a life jacket, immersion suit or anti-exposure suit | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| 44 | Boarding a Survival Craft –<br>1) boards a life raft from the ship & from the water while wearing a life jacket<br>2) helps others board<br>3) demonstrates use of equipment/gear including drogue and/or seaanchor<br>4) rights an inverted life raft while wearing a life jacket<br>5) demonstrates how to abandon a life raft | R1 – Table A-VI/I-1 | | 1.4.2.P1-P2<br>1.4.3-1.4.9 |
| **X. Review & Formative Assessment** | | | | |

# 2. Course Framework

## FIRE PREVENTION & FIREFIGHTING

## 2.1 Scope

This model course will satisfy the requirements for Fire Prevention and Firefighting and aims to provide the training necessary and required for participants to working or engaged in any capacity on board a ship. It is designed to meet the requirements of and in accordance with Section A-VI/I of the STCW Code 2010 Basic Safety Training requirements.

## 2.2 Objectives

Participants who successfully complete this course will be able to demonstrate competency in each of the above-listed module. They each will be able to demonstrate competency in surviving at sea and demonstrate proficient knowledge and satisfy examination requirements for Fire Prevention and Firefighting in accordance with Section A-VI/I-2 of the STCW Code as amended and US 46 CFR 11.302(a)(1) and 46 CFR 12.602(a)(1).

## 2.3 Entry Standards & Course Requirements

| | |
|---|---|
| **General Requirements** | This course is available to any and all seafarers who may serve on board sea-going merchant ships.<br><br>**Must Present:** 1) Passport or government Issued Photo ID Card; 2) two (2) color passport photographs |
| **Minimum Age** | 16 years of age |
| **Health Status** | Participants must not have any health condition that might impact his/her ability to demonstrate required skills |
| **Trainees of the Course** | The maximum number of participants is dependent upon the availability of certified course instructors and not to exceed twenty-four (24) - ratio is 12:1 |
| **Experience** | There are no specific experience or educational requirements or pre-requisites |
| **Attendance** | Students must attend all scheduled course sessions and actively participate in all course activities. A student who misses any scheduled course time will either need to schedule a make-up session with the instructor (at an additional fee) if the instructor is able to accommodate or |

| | |
|---|---|
| | re-enroll and start the course over again at the full tuition cost. |
| **Evaluation** | • Successful completion of an end of course formative written 25-question multiple choice assessment with a minimum score of seventy percent (70%). There is a forty-five (45) minute time limit for the written formative assessment.<br>• Satisfactorily completing all practical hands-on assessments |
| **Re-Testing** | Students are permitted to re-take non-IAMI, non-SQA exams up to two more times as needed. Each exam will be unique from all previous exams. A student must wait 24 hours between exam re-takes. All attempts must be completed within 14 days from the start date of the course.<br>Student failing the exam three times is required to repeat the course in its entirety at the full cost of tuition. |

## 2.4 Teaching Aids

| | **Description** | **Ref.** |
|---|---|---|
| **1 Videos** | STCW | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **2 Powerpoints** | P1: WASH STCW Overview (optional) | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| | P2: WASH Fire Prevention and Firefighting | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **3 Photos** | | |

| | | |
|---|---|---|
| **4 Technology** | Projector, Laptop, TV/Monitor, Internet/WiFi (optional) | |
| **5 Textbooks, Outline, Syllabi, & Manuals** | Fire Prevention and Firefighting | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **6 Lesson Plans, Instructor Lecture Notes** | | |
| **7 Firefighting Equipment** | Hoses, Nozzles, Hand-Held Fire Extinguishers, Fire Suppression System, Fire Detection System | |
| **8 Equipment for Demonstration** | EPIRB, SART, VHF Radio, hand-held flares, thermal protective aid, hydrostatic release unit | |

## 2.5 Teaching Facilities

**CLASSROOM:**
Traditional classroom space with projector, laptop, TV monitor, internet (if possible). Breakout room(s) or space for practical demonstration(s), practice, and skills assessment(s). Able to accommodate up to 24 students. Space equipped with desks, chairs, good lighting, emergency exits with signage, and restrooms.

## 2.6 Course Certificate

Upon successful completion of the course, the participant will be issued a document certifying that the participant has met the standard of competence in the area/module and as outlined in Table A VI/I of STCW Code 2010. The certificate will include: training institution name and location, student's name, course name and code, completion date, course approval agency and corresponding STCW, CFR, and/or other codes.

## 2.7 Bibliography

## IMO/ILO References

| | Description | Ref. |
|---|---|---|
| **ILO/IMO/WHO** | **International Medical Guide for Ships** | IMGS, 3rd ed., (Geneva, World Health Organization, 2007) (ISBN 978 92 4 068231 3) |
| | **International Code of Signals** | Medical Section of (pages 111-148), 1987 ed., (IMO Sales No 994E) |
| | **Medical First Aid Guide for use in Accidents Involving Dangerous Goods** | MFAG (IMO Sales No 251E) |
| **IMO/ILO** | **Document for Guidance** | 2010 (IMO Sales No 935E) |
| | **Assembly Resolution** | A.438(XI) – Training and qualification of persons in charge of medical care aboard ship |
| | **The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers** | 1995 (STCW 1995), 1998 ed., (IMO Sales No 938E) |
| **IMO** | **R1: STCW 2010: Section A-VI, Table A-VI/I-2** | |

## 2.8 Course Outline – 1.20 Fire Prevention & Firefighting A-VI/I-2

| n/n | Training Areas | Lecture (hours) | Simulator/Practical (hours) | Total (hours) |
|---|---|---|---|---|
| 1 | **Introduction – General Principles** | **.5** | **0** | **.5** |
| 2 | **Minimizing Risk of Fire** | **2.5** | | **2.5** |
| 3 | **Maintaining State of Readiness** | **3.0** | | **3.0** |
| 4 | **Firefighting & Extinguishment** | **9.0** | | **9.0** |
| 5 | **Practical Skills with Equipment** | | **1.5** | **1.5** |
| | **Total hours** | | | **16.5** |

## 2.9 Course Timetable – 1.20 Fire Prevention & Firefighting A-VI/I-2

| Day | Period (time) | Training Areas |
|---|---|---|
| | | |
| Day 1 | 3.0 | Minimizing Risk of Fire |
| | | BREAK |
| | 3.0 | Maintaining State of Readiness |
| | | |
| | | |
| Day 2 | | |
| | 3.0 | Firefighting & Extinguishment |
| | | BREAK |
| | 3.0 | Firefighting & Extinguishment |
| Day 3 | | |
| | 3.0 | Firefighting & Extinguishment |
| | | |

## 2.10 Teaching Syllabus – 1.20 Fire Prevention & Firefighting A-VI/I-2

| n/n | Subjects | IMO/STCW Regulations | Text Book | Teaching Aids |
|---|---|---|---|---|
| | **INTRODUCTION, SAFETY, PRINCIPLES** | | | |
| 1 | **Identify the objectives and goals of the course** | **R1 – Table A-VI/I-2** | **2.4.5** | **2.4.2.P1-P2 2.4.7-8** |

| | | | | |
|---|---|---|---|---|
| 2 | Introduction | R1 – Table A-VI/I-2 | 2.4.5 p. 4 | 2.4.2.P1-P2 2.4.7-8 |
| 3 | Safety Rules | R1 – Table A-VI/I-2 | 2.4.5 p. 5 | 2.4.2.P1-P2; 2.4.7-8 |
| 4 | Principles of Survival as it Relates to Onboard Fires | R1 – Table A-VI/I-2 | 2.4.5 p. 6 | 2.4.2.P1-P2; 2.4.7-8 |
| 5 | Fire Control Plan & Muster List | R1 – Table A-VI/I-2 | 2.4.5 p. 7 | 2.4.2.P1-P2; 2.4.7-8 |
| I. | MINIMIZING RISK OF FIRE | | | |
| 6 | Concept & Application of the Fire Triangle to Fire & Explosion | R1 – Table A-VI/I-2 | 2.4.5 p. 8 | 2.4.2.P1-P2; 2.4.7-8 |
| 7 | Conditions for Fires | R1 – Table A-VI/I-2 | 2.4.5 p. 14 | 2.4.2.P1-P2; 2.4.7-8 |
| 8 | Ignition Sources | R1 – Table A-VI/I-2 | 2.4.5 p. 14-15 | 2.4.2.P1-P2; 2.4.7-8 |
| 9 | Spread of Fire | R1 – Table A-VI/I-2 | 2.4.5 p. 16 | 2.4-2.P1-P2; 2.4.7-8 |
| 10 | Mitigating & Blocking Spread of Fire | R1 – Table A-VI/I-2 | 2.4.5 p. 16 | 2.4.2.P1-P2; 2.4.2.P1-P2 |
| 11 | Onboard Fire Hazards | R1 – Table A-VI/I-2 | 2.4.5 p. 23 | 2.4.2.P1-P2; 2.4.7-8 |
| 12 | Safe Practices | R1 – Table A-VI/I-2 | 2.4.5 p. 21 | 2.4.2.P1-P2; 2.4.7-8 |
| 13 | Need for Vigilance | R1 – Table A-VI/I-2 | 2.4.5 p. 22 | 2.4.2.P1-P2; 2.4.7-8 |
| II. | MAINTAINING STATE OF READINESS | | | |
| 14. | Organization of Shipboard Firefighting | R1 – Table A-VI/I-2 | 2.4.5 p. 34 | 2.4.2.P1-P2; 2.4.7-8 |
| 15 | Alarms & Actions | R1 – Table A-VI/I-2 | 2.4.5 p. 34 | 2.4.2.P1-P2; 2.4.7-8 |
| 16 | Communications | R1 – Table A-VI/I-2 | 2.4.5 p. 6-7 | 2.4.2.P1-P2; 2.4.7-8 |
| 17 | Shipboard Safety & Response Drills | R1 – Table A-VI/I-2 | 2.4.5 p.5 | 2.4.2.P1-P2; 2.4.7-8 |
| 18 | Locations of Firefighting Tools, Appliances & Emergency Escape Routes | R1 – Table A-VI/I-2 | 2.4.5 p. 41 | 2.4.2.P1-P2; 2.4.7-8 |
| 19 | Ship Construction Arrangements | R1 – Table A-VI/I-2 | 2.4.5 p. 41 | 2.4.2.P1-P2; 2.4.7-8 |
| 20 | Emergency Fire Pump – on Cargo Ships | R1 – Table A-VI/I-2 | 2.4.5 pp. 82-86 | 2.4.2.P1-P2; 2.4.7-8 |
| 21 | Chemical Powder Applications | R1 – Table A-VI/I-2 | 2.4.5 pp. 82-84 | 2.4.2.P1-P2; 2.4.7-8 |
| 22 | Fire & Smoke Detection Systems | R1 – Table A-VI/I-2 | 2.4.5 pp. 34-39 | 2.4.2.P1-P2; 2.4.7-8 |
| 23 | Fire Classification & Extinguishing Agents | R1 – Table A-VI/I-2 | 2.4.5 pp. 82-84 | 2.4.2.P1-P2; 2.4.7-8 |
| III. | FIREFIGHTING & EXTINGUISHMENT | | | |

| | | | | |
|---|---|---|---|---|
| 24 | Portable Fire Extinguishers | R1 – Table A-VI/I-2 | 2.4.5 p. 62 | 2.4.2.P1-P2<br>2.4.7-8 |
| 25 | Fire Hoses & Nozzles | R1 – Table A-VI/I-2 | 2.4.5 p. 64 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 26 | Mobile Apparatus | R1 – Table A-VI/I-2 | 2.4.5 p. 64-65 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 27 | Fireman's Outfit | R1 – Table A-VI/I-2 | 2.4.5 p. 66 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 28 | Fire Blankets | R1 – Table A-VI/I-2 | 2.4.5 p. 82 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 29 | Smothering Effect Systems – Carbon Dioxide & Foam | R1 – Table A-VI/I-2 | 2.4.5 pp. 83-84 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 30 | Inhibitor Effect Systems | R1 – Table A-VI/I-2 | 2.4.5 p. 85 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 31 | Cooling Effect Systems | R1 – Table A-VI/I-2 | 2.4.5 p. 86-87 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 32 | Firefighting Procedures | R1 – Table A-VI/I-2 | 2.4.5 p. 88 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 33 | Small Fires | R1 – Table A-VI/I-2 | 2.4.5 p. 62;<br>pp. 27-29 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 34 | Large Fires | R1 – Table A-VI/I-2 | 2.4.5 pp. 27-29; p.62 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 35 | Self-Contained Breathing Apparatus (SCBA) | R1 – Table A-VI/I-2 | 2.4.5 p. 89 | 2.4.2.P1-P2;<br>2.4.7-8 |
| 36 | Safety & Drills in Smoke Filled Spaces | R1 – Table A-VI/I-2 | 2.4.5 | 2.4.2.P1-P2;<br>2.4.7-8 |

# 3. Course Framework

## ELEMENTARY FIRST AID

### 3.1 Scope

This model course will satisfy the requirements for Elementary First Aid and aims to provide the training necessary and required for participants to working or engaged in any capacity on board a ship. It is designed to meet the requirements of and in accordance with Section A-VI/I of the STCW Code 2010 Basic Safety Training requirements.

### 3.2 Objectives

Participants who successfully complete this course will be able to demonstrate competency in each of the above-listed module. They each will be able to demonstrate competency and demonstrate proficient knowledge and satisfy examination requirements for Elementary First Aid in accordance with Section A-VI/I-3 of the STCW Code as amended and US 46 CFR 11.302(a)(1) and 46 CFR 12.602(a)(1).

### 3.3 Entry Standards & Course Requirements

| | |
|---|---|
| **General Requirements** | This course is available to any and all seafarers who may serve on board sea-going merchant ships.<br><br>**Must Present:** 1) Passport or government Issued Photo ID Card; 2) two (2) color passport photographs |
| **Minimum Age** | 16 years of age |
| **Health Status** | Participants must not have any health condition that might impact his/her ability to demonstrate required skills |
| **Trainees of the Course** | The maximum number of participants is dependent upon the availability of certified course instructors and not to exceed twenty-four (24) - ratio is 12:1 |
| **Experience** | There are no specific experience or educational requirements or pre-requisites |
| **Attendance** | Students must attend all scheduled course sessions and actively participate in all course activities. A student who misses any scheduled course time will either need to schedule a make-up session with the instructor (at an additional fee) if the instructor is able to accommodate or re-enroll and start the course over again at the full tuition cost. |
| **Evaluation** | • Successful completion of an end of course formative written 25-question multiple choice assessment with a |

| | |
|---|---|
| | minimum score of seventy percent (70%). There is a forty-five (45) minute time limit for the written formative assessment.<br>• Satisfactorily completing all practical hands-on assessments |
| **Re-Testing** | Students are permitted to re-take non-IAMI, non-SQA exams up to two more times as needed. Each exam will be unique from all previous exams. A student must wait 24 hours between exam re-takes. All attempts must be completed within 14 days from the start date of the course.<br>Student failing the exam three times is required to repeat the course in its entirety at the full cost of tuition. |

## 3.4 Teaching Aids

| | **Description** | **Ref.** |
|---|---|---|
| **1 Videos** | STCW<br>CPR/AED/First Aid: Adult/Child/Infant<br>Administering Emergency Oxygen<br>Bloodborne Pathogens | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **2 Powerpoints** | P1: CPR/AED/First Aid: Adult/Child/Infant<br>Administering Emergency Oxygen<br>Bloodborne Pathogens | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| | P2: WASH STCW Overview (optional) | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **3 Photos** | | |
| **4 Technology** | Projector, Laptop, TV/Monitor, Internet/WiFi (optional) | |

| | | |
|---|---|---|
| **5 Textbooks, Outline, Syllabi, & Manuals** | HSI | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **6 Lesson Plans, Instructor Lecture Notes** | | |
| **7 First Aid Equipment for Demonstration** | BVM, CPR Mask, Fully Equipped Backboard, Triangular Bandages, PPE, Gauze, c-collar | |

## 3.5 Teaching Facilities

**CLASSROOM:**
Traditional classroom space with projector, laptop, TV monitor, internet (if possible). Breakout room(s) or space for practical demonstration(s), practice, and skills assessment(s). Able to accommodate up to 24 students. Space equipped with desks, chairs, good lighting, emergency exits with signage, and restrooms.

## 3.6 Course Certificate

Upon successful completion of the course, the participant will be issued a document certifying that the participant has met the standard of competence in the area/module and as outlined in Table A VI/I of STCW Code 2010. The certificate will include: training institution name and location, student's name, course name and code, completion date, course approval agency and corresponding STCW, CFR, and/or other codes.

## 3.7 Bibliography

### IMO/ILO References

| | Description | Ref. |
|---|---|---|
| **ILO/IMO/WHO** | **International Medical Guide for Ships** | IMGS, 3rd ed., (Geneva, World Health Organization, 2007) (ISBN 978 92 4 068231 3) |
| | **International Code of Signals** | Medical Section of (pages 111-148), 1987 ed., (IMO Sales No 994E) |
| | **Medical First Aid Guide for use in Accidents Involving Dangerous Goods** | MFAG (IMO Sales No 251E) |
| **IMO/ILO** | **Document for Guidance** | 2010 (IMO Sales No 935E) |
| | **Assembly Resolution** | A.438(XI) – Training and qualification of persons in charge of medical care aboard ship |
| | **The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers** | 1995 (STCW 1995), 1998 ed., (IMO Sales No 938E) |
| **IMO** | **R1: STCW 2010: Section A-VI, Table A-VI/I-3** | |

| | Description | Ref. |
|---|---|---|
| **1 HSI** | HSI Adult First Aid/CPR/AED Skill Guide | HSI, 1st ed., (United States of America, Health & Safety Institute 2021) (ISBN 978 1 945991 39 4) |
| **2 HSI** | HSI Pediatric First Aid/CPR/AED Skill Guide | HSI, 1st ed., (United States of America, Health & Safety Institute 2022) (ISBN 978 1 945991 42 4) |

## 3.8 Course Outline – 1.13 Elementary First Aid A-VI/I-3

| n/n | Training Areas | Lecture (hours) | Simulator/Practical (hours) | Total (hours) |
|---|---|---|---|---|
| 1 | **General Principles** | **1.0** | **0** | **1.0** |
| 2 | **Anatomy Structure & Function** | **2.0** | **0** | **2.0** |
| 3 | **Patient Assessment** | **.25** | **.25** | **.5** |
| 4 | **Positioning of Patient** | **.25** | **.25** | **.5** |
| 5 | **Conscious Patient** | **.25** | **.25** | **.5** |
| 6 | **Unconscious Patient** | **.25** | **.25** | **.5** |
| 7 | **Conscious & Unconscious Choking** | **.75** | **.75** | **1.5** |
| 8 | **Resuscitation - Rescue Breathing** | **.5** | **1.0** | **1.5** |
| 9 | **Resuscitation - CPR/AED** | **.5** | **1.0** | **1.5** |
| 10 | **Bleeding Emergencies** | **.25** | **.75** | **1.0** |
| 11 | **Shock Management** | **.25** | **.75** | **1.0** |
| 12 | **Burns** | **.5** | **.5** | **1.0** |
| 13 | **Rescue & Transport of Patient** | **.5** | **1.0** | **1.5** |
| 14 | **Other Topics** | **.5** | **.5** | **1.0** |
| | **Review & Final Assessment** | | | |
| | **Total hours** | | | **15** |

## 3.9 Course Timetable – 1.13 Elementary First Aid A-VI/I-3

| Day | Period (time) | Training Areas |
|---|---|---|
| **Day 1** | 1.0 | General Principles |
| | 2.0 | Anatomy Structure & Function |
| | .5 | Patient Assessment |
| | .5 | Positioning of Patient |
| | .5 | Conscious Patient |

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| | .5 | Unconscious Patient |
| Day 2 | 1.5 | Conscious & Unconscious Choking |
| | 1.5 | Resuscitation – Rescue Breathing |
| | 1.5 | Resuscitation – CPR/AED |
| | 1.0 | Bleeding Emergencies |
| Day 3 | 1.0 | Shock Management |
| | 1.0 | Burns |
| | 1.5 | Rescue & Transport of Casualty |
| | 1.0 | Other Topics |
| | | Review & Final Assessment |

## 3.10 Teaching Syllabus – 1.13 Elementary First Aid A-VI/I-3

| n/n | Subjects | IMO/STCW Regulations | Text Book | Teaching Aids |
|---|---|---|---|---|
| 1 | Demonstrate how to raise the alarm | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 2 | State in emergency first consideration is own safety | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 3 | Describe sequence of immediate measures to be taken during emergency | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 4 | States the content of an emergency checklist: assessment of accident scene, assessment of scene safety, LOC, CABS/ABCS, activate EAP | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 13-19; pp. 23-24 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 5 | Describe body structure: skeleton, joints, muscles, tendons, organs, systems | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 37 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 6 | State the function of parts of body structure | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 37 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 7 | Describe appropriate procedures for patient positioning: i.e. recovery & resuscitation | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 23-24 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |

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| 8 | Demonstrate correct procedure for patient positioning | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 21-25 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 9 | Recognize & Determine LOC | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 14 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 10 | Apply appropriate measures/care: open airway, proper positioning, rescue breathing/CPR/AED, no food/liquid | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 23-24 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 11 | Recognize need for resuscitation | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 23-25 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 12 | Apply resuscitation procedures: ventilations, cardiac arrest care, care for severe bleeding | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 21-29; pp. 42-46; p. 53 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 13 | In case of cardiac arrest: cardiac massage, CPR, AED | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 21-24 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 14 | Recognize risks of severe bleeding | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 42-45 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 15 | Apply appropriate bleeding control measures: internal/external bleeding, shock, gauze & pressure, patient positioning, dangers of tourniquet | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 42-45 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 16 | State causes of shock | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 46 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 17 | Recognize signs & symptoms of shock | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 46 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 18 | Apply appropriate shock management measures | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 46 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 19 | State the essential steps in managing shock: control bleeding, keep patient warm, if conscious ample fluid intake, proper patient positioning, no | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 46 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |

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| | smoking, no alcohol, no active re-warming | | | |
| 20 | Recognize signs & symptoms of burns | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 61-63 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 21 | Apply appropriate care measures for chemical burns: remove clothing, flush with water, etc | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 61-63 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 22 | Apply appropriate care measures for chemical burns of eyes: flush with water | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 61-63 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 23 | Apply appropriate care measures for electrical burns: scene safety, isolate patient, protect all from possible collapse, control vital functions | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 61-63 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 24 | Apply appropriate transport measures while accounting for confined space and varying heights aboard ship | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 6 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 25 | Identify & use: temporary & ad hoc aids for transport, stretcher/chair/triangular cloth transport | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 6-8 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 26 | Recognize risks involved with pelvic/spinal injury & demonstrate mitigation procedures | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 pp. 56-57 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |
| 27 | Bandaging, closed spaces, infectious diseases, PPE | R1: STCW 2010: Section A-VI, Table A-VI/I-3 | 3.4.5 p. 39; p. 47; p. 52; pp. 54-55 | 3.4.1; 3.4.2.P1-P2; 3.4.7 |

# 4. Course Framework

## PERSONAL SAFETY AND SOCIAL RESPONSIBILITY

### 4.1 Scope

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| This model course will satisfy the requirements for Personal Safety and Social Responsibility and aims to provide the training necessary and required for participants to working or engaged in any capacity on board a ship. It is designed to meet the requirements of and in accordance with Section A-VI/I of the STCW Code 2010 Basic Safety Training requirements. |

### 4.2 Objectives

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| Participants who successfully complete this course will be able to demonstrate competency in each of the above-listed module. They each will be able to demonstrate competency and proficient knowledge and satisfy examination requirements for Personal Safety and Social Responsibility in accordance with Section A-VI/I-4 of the STCW Code as amended and US 46 CFR 11.302(a)(1) and 46 CFR 12.602(a)(1). |

### 4.3 Entry Standards & Course Requirements

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| **General Requirements** | This course is available to any and all seafarers who may serve on board sea-going merchant ships.<br><br>**Must Present:** 1) Passport or government Issued Photo ID Card; 2) two (2) color passport photographs |
| **Minimum Age** | 16 years of age |
| **Health Status** | Participants must not have any health condition that might impact his/her ability to demonstrate required skills |
| **Trainees of the Course** | The maximum number of participants is dependent upon the availability of certified course instructors and not to exceed twenty-four (24) - ratio is 12:1 |
| **Experience** | There are no specific experience or educational requirements or pre-requisites |
| **Attendance** | Students must attend all scheduled course sessions and actively participate in all course activities. A student who misses any scheduled course time will either need to schedule a make-up session with the instructor (at an additional fee) if the instructor is able to accommodate or re-enroll and start the course over again at the full tuition cost. |
| **Evaluation** | • Successful completion of an end of course formative written 25-question multiple choice assessment with a |

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| | minimum score of seventy percent (70%). There is a forty-five (45) minute time limit for the written formative assessment.<br>• Satisfactorily completing all practical hands-on assessments |
| **Re-Testing** | Students are permitted to re-take non-IAMI, non-SQA exams up to two more times as needed. Each exam will be unique from all previous exams. A student must wait 24 hours between exam re-takes. All attempts must be completed within 14 days from the start date of the course.<br>Student failing the exam three times is required to repeat the course in its entirety at the full cost of tuition. |

## 4.4 Teaching Aids

| | **Description** | **Ref.** |
|---|---|---|
| **1 Powerpoints** | P1: WASH STCW Overview (optional) | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| | P2: WASH Personal Safety and Social Responsibility | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |
| **2 Photos** | | |
| **3 Technology** | Projector, Laptop, TV/Monitor, Internet/WiFi (optional) | |
| **4 Textbooks, Outline, Syllabi, & Manuals** | Personal Safety and Social Responsibility | Available from World Academy of Safety & Health (WASH), PO Box 311 Riderwood, MD 21139 U.S.A., Tel: 1-800-484-0419, E-Mail: admin@lifeguardcertifications.com, URL: www.lifeguardcertifications.com |

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|---|---|---|
| **6 Lesson Plans, Instructor Lecture Notes** | | |

## 4.5 Teaching Facilities

**CLASSROOM:**
Traditional classroom space with projector, laptop, TV monitor, internet (if possible). Breakout room(s) or space for practical demonstration(s), practice, and skills assessment(s). Able to accommodate up to 24 students. Space equipped with desks, chairs, good lighting, emergency exits with signage, and restrooms.

## 4.6 Course Certificate

Upon successful completion of the course, the participant will be issued a document certifying that the participant has met the standard of competence in the area/module and as outlined in Table A VI/I of STCW Code 2010. The certificate will include: training institution name and location, student's name, course name and code, completion date, course approval agency and corresponding STCW, CFR, and/or other codes.

## 4.7 Bibliography

### IMO/ILO References


| | Description | Ref. |
|---|---|---|
| **ILO/IMO/WHO** | **International Medical Guide for Ships** | IMGS, 3rd ed., (Geneva, World Health Organization, 2007) (ISBN 978 92 4 068231 3) |
| | **International Code of Signals** | Medical Section of (pages 111-148), 1987 ed., (IMO Sales No 994E) |
| | **Medical First Aid Guide for use in Accidents Involving Dangerous Goods** | MFAG (IMO Sales No 251E) |
| **IMO/ILO** | **Document for Guidance** | 2010 (IMO Sales No 935E) |
| | **Assembly Resolution** | A.438(XI) – Training and qualification of persons in charge of medical care aboard ship |
| | **The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers** | 1995 (STCW 1995), 1998 ed., (IMO Sales No 938E) |
| **IMO** | **R1: STCW 2010: Section A-VI, Table A-VI/I-4** | |

## 4.8 Course Outline – 1.21 Personal Safety & Social Responsibility A-VI/I-4

| n/n | Training Areas | Lecture (hours) | Simulator/Practical (hours) | Total (hours) |
|---|---|---|---|---|
| 1 | **Human Relationships** | **4.0** | **0** | **4.0** |
| 2 | **Safely Working Aboard a Ship** | **3.0** | **0** | **3.0** |
| 3 | **Understanding Order & Hierarchy** | **3.0** | **0** | **3.0** |
| 4 | **Emergency Protocols & Methodology** | **2.0** | **0** | **2.0** |
| 5 | **Pollution Prevention While at Sea** | **2.0** | **0** | **2.0** |
| 6 | **Social Responsibility** | **2.0** | **0** | **2.0** |
| | **Total hours** | | | **17.0** |

## 4.9 Course Timetable – 1.21 Personal Safety & Social Responsibility A-VI/I-4

| Day | Period (time) | Training Areas |
|---|---|---|
| Day 1 | 3.0 | Safely Working Aboard a Ship |
| | 4.0 | Human Relationships |
| Day 2 | 3.0 | Understanding Order & Hierarchy Aboard Ships |
| | 2.0 | Emergency Protocols & Methodology |
| | 2.0 | Pollution Prevention While at Sea |
| Day 3 | 2.0 | Social Responsibility |
| | 1.0 | Review & Assessment |

## 4.10 Teaching Syllabus – 1.21 Personal Safety & Social Responsibility A-VI/I-4

| n/n | Subjects | IMO/STCW Regulations | Text Book | Teaching Aids |
|---|---|---|---|---|
| **I.** | **SAFELY WORKING ABOARD A SHIP** | | | |
| 1 | **Intro - Objectives of the course/training** | **R1: STCW 2010: Section A-VI, Table A-VI/I-4** | **4.4.4 pp. 1-2** | **4.4.1.P1-P2** |
| 2 | **Importance - Working on a ship is hazardous to which a person is exposed the moment aboard** | **R1: STCW 2010: Section A-VI, Table A-VI/I-4** | **4.4.4 pp. 12-20** | **4.4.1.P1-P2** |

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|---|---|---|---|---|
| 3 | Importance - Explains the need for understanding the hazards while on board a ship and the equipment & procedures to avoid such hazards | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |
| 4 | Familiar – identify hazards related to:<br>• Gangway & safety net<br>• Main deck<br>• Holds and hatches<br>• Forecastle & poop deck<br>• Anchors & Winches<br>• Cranes<br>• Manifold<br>• Accommodation<br>• Bridge<br>• Engine room | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 4-5 | 4.4.1.P1-P2 |
| 5 | Nature of Hazards – lists the hazards while aboard:<br>• Slips, trips, falls by way of slippery surfaces (i.e. oil, grease, water, ice, etc) and/or obstructions (i.e. wires, ropes, cables, etc)<br>• Head injuries related to low doorways, overhead loads, dislodged equipment<br>• Falls through manholes on deck and/or loose or missing grating<br>• Clothing & appendages getting caught in moving machinery<br>• Burns<br>• Eye injuries by way of chipping, welding, chemicals<br>• Falling from equipment during heavy weather<br>• Extreme weather conditions<br>• Oxygen deprivation inside confined spaces<br>• Toxic gases<br>• Fire<br>• Collision, grounding, sinking | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 p. 3; pp. 12-20 | 4.4.1.P1-P2 |

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| | • Pirates | | | |
| 6 | Take on board equipment and place into groups/clusters based upon which equipment will mitigate each hazard:<br>• PPE: helmet, goggles, gloves, safety shoes, masks, protective clothing, SCBA<br>• Lifesaving: lifejackets, life buoys, life rafts, lifeboats, life rings, throw bag/throw line, EPIRB/SART, immersion/survival suit<br>• Firefighting: hose, axe, detection system, handheld fire extinguisher, fixed extinguishing system<br>• Medical: CPR resuscitation masks, medical/first aid gear, stretcher/backboard, meds<br>• Oil Spill: chemical dispersant, absorbent pads, absorbent rolls, brooms | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |
| 7 | Use & Demo PPE –<br>• Head Protection: importance of helmet; structure & function of helmet; when to use helmet; maintenance of helmet<br>• Gloves: need for gloves; types of & uses of various gloves<br>• Eyes: importance of eye protection; causes of eye injuries; types of & uses of various types of eye protections<br>• Ears: excessive noise harm; types of & uses of various types of ear protection<br>• Respiratory: need for respiratory protection; types of & uses of | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | respiratory protection; SCBA checks<br>• Footwear: need for safety shoes; types of & uses of various types of safety shoes<br>• Harness | | | |
| 8 | List Onboard Operations which Can be Hazardous – Loading/Unloading; mooring; work aloft; chemical handling; hot work; anti-piracy ops; lifting loads; engine room ops | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |
| 9 | Loading/Unloading –<br>• Lists various types of ships: bulk, cargo, car & ro-ro carriers, tankers, gas carriers, passenger<br>• states that, in general, cargo vessels, bulk carriers and container ships cargo is lifted on and off the vessel by cranes or derricks. Bulk cargo is poured into the ship's hold by conveyor belts<br>• states that the hazards on these vessels, in the holds and on the jetty alongside are mainly from overhead loads, lifting gear and cargo handling equipment such as trucks and forklifts<br>• states that no unauthorized persons should be allowed into the working area<br>• states that all personnel should use the offshore side of the deck<br>• states that ro-ro ships and car carriers have several decks connected by ramps and cargo is | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | driven on and off the vessel and up to the various decks via the ramps<br>• states that cargo is driven at high speeds and any person standing in the way is likely to be run over<br>• states that in tankers, chemical carriers and gas carriers cargo is in the liquid state and is pumped into and out from the ship through pipelines<br>• states that the main hazard is from gas, which could be flammable, toxic or could cause a lack of oxygen<br>• states that personnel working on these types of vessels must have special knowledge of the hazards involved and working procedures, which is covered in the tanker familiarization training course<br>• states that passenger ships also may carry cars or other cargo, and includes terries<br>• states that in addition·to deck and engine-room staff, there may be a large number of cooks, waiters, housekeeping staff, shop and other service assistants, entertainment, medical and religious attendants, etc. and that personnel working on these ships must have a knowledge | | | |

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| | of crowd control, especially in emergency situations. | | | |
| 10 | Mooring/Unmooring –<br>• Describes mooring as the tying up of a ship to jetty, berth or pier<br>• states that the lines used to tie up the ship are known as mooring lines or mooring wires<br>• using a diagram, shows the disposition of headlines and stern lines, breastlines and backsprings<br>• states that mooring lines are extremely heavy synthetic lines around 100 mm diameter or more and wires too are heavy around 50 mm diameter, depending on the size of the ship<br>• states that all mooring equipment - ropes, wires, heaving lines, stoppers, shackles, winches and windlass, etc.- must be checked to be in good order and condition before the operation<br>• states that the ship is brought alongside by passing one or more lines ashore & heaving on these lines – using windlass & mooring winches<br>• states that these ropes & wires are risky to handle. They can be extremely dangerous to those in the vicinity, especially when stressed<br>• states that when ropes/wire experience stress they can cause whiplash, dismemberment or death<br>• states that persons | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | engaged in mooring ops must exercise extreme caution& be aware of risks while remaining clear of tensioned rope and/or wire<br>• states that these ops are more dangerous during heavy weather<br>• states that one should never stand in bight of rope and/or wire<br>• states that person heaving the rope on the drum must hold it loosely & have ability to add slack should tension cause slippage<br>• states the mooring lines must be constantly checked & kept taut<br>• states that special attention must be given when -loading/unloading at a high rate, there is a large tidal range or strong currents in port, there are strong winds or berth is exposed to sea | | | |
| 11 | Enclosed spaces –<br>• Defines enclosed spaces as spaces where ventilation is not kept running on a 24/7 basis<br>• Lists the possible enclosed spaces as forepeak tank, chain lockers, cofferdams, topside tank, cargo tank, ballast tank, duct keel, after peak tank, bunker tank<br>• States that oareless entry into such spaces has resulted in accidents if person overcome with lack of oxygen and/or is injured & not rescued in time<br>• Divides hazards into: atmospheric & physical | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp.12-20 | 4.4.1.P1-P2 |

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| | • States atmospheric hazards could result from:<br>• Hydrocarbon gas, toxic gas, oxygen deficiency<br>• States that the presence of hydrocarbon gas causes flammable hazard<br>• States that hydrocarbon vapors can be present due to:<br>• Petroleum leakage, retention in tank structure, retention in pipeline, disturbance in sludge<br>• States that other gases (i.e. NO, NO2, SO2, CO, benzene, H2S) can be toxic<br>• States that the above gases can be originate from cargo, ship's stores, ship's ops<br>• Defines a toxic hazard as harmful and/or poisonous to the human body<br>• Defines threshold limit & states that such gases should not be present in concentrations that exceed their TLV's<br>• States that the atmosphere may be rendered deficient in oxygen due to the causes here:<br>• Rusting, burning, refrigerants, hydrogen, drying paint, solvents, emulsifiers, organic decay, electrical cleaning fluids, ingress of inert gas, welding & gas cutting without proper ventilation, internal combustion engine in a confined space<br>• States that oxygen deficiency can result in anoxia<br>• States that physical hazards could cause a | | | |

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| | person to be physically or fatally injured<br>• States physical hazards could include:<br>• Darkness, unsecured ladders, slippery surfaces, obstructions, unprotected/unguarded openings, flooding, entrapment, unsecured objects<br>• States that the following precautions are to implemented: enclosed space entry permit system, space to be properly ventilated, testing of the atmosphere – sufficient oxygen, insufficient flammable gas, toxic gases less than TLV's<br>• States that the proper PPE must be used<br>• States that vigilance must be exercised, atmosphere monitored, precautions observed<br>• States that personnel must be cautioned against overconfidence and/or negligence<br>• States that protective clothing & workplace is to be cleaned<br>• Discusses contents of enclosed space entry permit | | | |
| 12 | Hot Work –<br>• Define hot work as any work that generates heat or sparks of a temperature possible of igniting a flammable gas<br>• Lists welding, cutting, burning, heating, chipping, open flame, electric arc or continuous sparks as examples | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | • Lists hot work hazards as: fire, explosion, heat injuries, strong light injuries, shock in jury<br>• Groups the areas on board a ship where hot work is conducted in ascending order of danger:<br>1) Engineer's workshop<br>2) Engine room<br>3) Poop deck<br>4) Cargo area<br>• Discusses contents of hot work permit | | | |
| 13 | Working Aloft –<br>• Describes working aloft as working above ground or deck with primary hazard of falling<br>• States working overside can also be 'working aloft'<br>• Lists examples of on board jobs requiring working aloft: painting bridge, bulkhead, masts, engine room; cleaning/painting funnel; greasing/maintenance radar scanner; crane, wires; chipping, painting, cleaning, inspecting tanks/holds; painting side of ship<br>• Lists the hazards while working aloft: falling; material falling on worker; contact with hot surfaces; emission of carbon dioxide or toxic gases from combustion, incineration, soot blowing; weather exposure; electrical/radiation hazards<br>• States that prior notice must be provided to responsible person prior to commencing working aloft | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | • **States equipment that can be hazardous to work with must be tagged/locked out**<br>• **States that checks and procedures may be covered by checklist or permit system**<br>• **Lists the equipment used while working aloft: ladders, scaffolding, hooks, shackles, gantlines, safety lines, wooden stages**<br>• **States equipment should be stowed separately away from paints/chemicals**<br>• **States equipment only used for working aloft**<br>• **States equipment to be checked each time prior to use**<br>• **States that knots, hitches & turns must be correctly made preventing slippage**<br>• **States that the stages or bosun's chairs must not be hoisted or lowered by winch**<br>• **States that anchoring points for safety lines or suspension points for gantlines be strong without movement**<br>• **States ropes must not run over hot surfaces/sharp edges**<br>• **States that the safety net should be rigged**<br>• **States that working aloft should halt when ship violently moving**<br>• **States that tools must not be passed by way of throwing – use bucket or rope**<br>• **States ladders must be used for climbing & not ropes** | | | |

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| | • States rigid ladders must be placed on a firm base<br>• States tools must always be secured & not placed in a spot where they can fall<br>• States inexperienced crew or those under 18 not work aloft or overside<br>• States work overside must not commence or take place while ship is underway<br>• States a buoyant vest be worn in addition to normal PPE<br>• States lifebuoys with heaving line & light be ready | | | |
| 14 | Engine Room Watchkeeping & Maintenance –<br>• Shows layout of engine room using videos & photos<br>• Lists machinery located in engine room: main engines, pumps, compressors, motors, boilers, generators/alternators, electrical equipment<br>• States other equipment that might be located in engine room: lead acid batteries, steering gear, hydraulic equipment, VHF, refrigeration<br>• States injuries suffered in engine room could be: burns; head injuries; trips, slips, falls; hearing loss; contact injuries (from wheels, flywheels, grinders, propellers, etc)<br>• States use of PPE needed<br>• States accidents are preventable using good work practices | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 12-20 | 4.4.1.P1-P2 |

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| | • Provides examples of good work practices: immediately deal with oil & water leaks; oil rags/cotton waste swiftly & properly disposed of to prevent spontaneous ignition; secure tools during work to prevent them from falling; tools properly stowed following completion of work; protective equipment guards properly functioning & in position; adequate lighting within engine room; bilges clean & dry; clear access to fire extinguishers, escape routes, emergency exits; emergency gear; closed gratings<br>• States safe & good working practices include: use of proper tools for each job; proper locking & tagging machinery; proper equipment checks prior to each use; proper calibration of testing equipment | | | |
| **II.** | **HUMAN RELATIONSHIPS** | | | |
| **15** | **Interpersonal Relationships – States good relationships make seafarer life comfortable & healthy & reduces accidents Describes elements that contribute to better relationships: company policies & protocols; shipboard management functions; structure, flow, function of authority; clear responsibilities while onboard; importance of understanding needs (i.e. social, company, individual, ship) States each person should respect others** | **R1: STCW 2010: Section A-VI, Table A-VI/I-4** | **4.4.4 pp. 21-27** | **4.4.1.P1-P2** |

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| | States open communication enhances interpersonal relationships<br>States shipboard environments demand better interpersonal relationships<br>Describes methods to improve interpersonal relationships on board: discipline; true appraisals & reporting; fair dealings with personnel; commitment of ship's officers; introducing & understanding each other | | | |
| 16 | Team Building –<br>States the shipboard ops is team-work & effectiveness of each team member<br>States team helps to improve decision-making<br>Describes: team goals/aims/objectives; role of individual members; need for cohesiveness<br>Lists deterrents to team ops<br>Discusses deterrents such as: handling of grievances/counseling/complaints; distortion of aims; hidden agendas; problems with communication; status/ego problems; inflexible behavior; physical/environment problems<br>Describes each in short with reference to shipboard environment | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |
| 17 | Teamwork –<br>• Explains teamwork essential to onboard ops because of: shipping company comprises a # of small mobile industrial units (the ship) which may at any moment be distributed over large distances across the world; when making a voyage the ship can undergo considerable climatic changes which may | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |

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| | adversely affect crew; ships are operational 24 hours/day & crew must be organized into a regular shift system; personnel aboard ship must be organized to safely & effectively operate the ship with numerous ops being performed simultaneously (i.e. communication, cargo ops, maintenance, crew operates with high degree of responsibility & flexibility, repair/dry-docking) | | | |
| **III.** | **UNDERSTANDING ORDER & HIERARCHY ABOARD SHIPS** | | | |
| 18 | Fundamentals of Communication –<br>• States good communication is most important element of safety & pollution prevention while onboard<br>• States cooperation can be achieved with effective communication<br>• States effective communication is basic element for human survival<br>• States language is a means of transmitting ideas/thoughts/views/instructions | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |
| 19 | Methods of Communication –<br>Lists basic elements of communication: feedback, barriers, methods, modes, sender, receiver<br>States feedback essential to ship's communication<br>Lists methods of communication<br>Classifies communication: verbal; non-verbal; iconic<br>States all three methods need to be effectively used while on board | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |

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| | States verbal communication includes everything pertaining to words<br>Staes that body language & pictorial; symbols are more powerful than only verbal | | | |
| 20 | Barriers in Communication –<br>• States there are barriers in each step of communication process<br>• Lists barriers as: mode of transmission; media of transmission; transmitter's capability; transmitter's conceptualization stage; receiver's capability; feedback stage; receipt of feedback by transmitter; receiver's understanding of concept<br>• Demonstrates barriers at each of the above listed | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |
| 21 | Effective Transmission Skills –<br>• States effectiveness of communication lies with sender<br>• States the sender should define the purpose of the communication<br>• Explains importance of time, place, person addressed in the context of initiating communication<br>• States importance of vocabulary<br>• States understanding the different kinds of barriers in communication helps to better transmission<br>• States sender must be capable of effectively speaking, writing, acting, drawing, using available sound signaling apparatus<br>• Demonstrates above skills to trainer<br>• Describes effectiveness of transmission can be | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |

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| | checked by feedback from receiver<br>• Describes the responsibility lies with sender | | | |
| 22 | Effective Listening Skills –<br>• States listening is responsibility of receiver<br>• Explains difference of hearing & listening<br>• Demonstrates difference hearing vs listening<br>• States understanding various barriers of listening will improve listening capabilities<br>• States there will be internal & external barriers to listening & appreciating effect of barriers on listening described earlier<br>• Describes humans are capable of speaking at rate of 150 words per mite whereas they can listen at rate of 1000 words per minute<br>• States this results in idle time of 850 words per minute & can cause distraction<br>• States that ideally this distracted time should be used for paraphrasing the sender's body language & other signals | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |
| 23 | Effects & Consequences of Incorrect Communication –<br>• States incorrect communication can impact safety of life, property, environment<br>• States it causes human problems & problems in onboard relationships<br>• States improper communication can cause stress, loss of time, & loss of resources | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 | 4.4.1.P1-P2 |

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| | • Demonstrates cause/effect through exercise | | | |
| 24 | Communications Summary –<br>• States effective communication creates atmosphere conducive to safe, happy, sociable working/living/relationships<br>• States habits, values, attitudes can be modified by effective communication & knowing basics of interpersonal relationships, learned skills & team skills | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 21-27 | 4.4.1.P1-P2 |
| IV. | EMERGENCY PROTOCOLS & METHODOLOGY | | | |
| 25 | Explains Term 'Emergency' –<br>• Emphasizes 'emergency' being situation with imminent danger of: loss of life; loss of property; injury; environmental damage<br>• Emphasizes need for immediate action during an emergency<br>• Lists various emergencies that may occur while onboard: fire; collision; grounding; foundering; MOB; ingress of water; heavy weather; oil spill<br>• Describes shipboard contingency plans for response to emergencies listed above<br>• States alarm systems available onboard ship & their locations: ship general alarm; fire alarm; ship whistle<br>• States various emergency signals to indicate emergency situation | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 6-8 | 4.4.1.P1-P2 |
| 26 | Drills & Muster –<br>• Describes general structure of muster lists: muster | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 6-8 | 4.4.1.P1-P2 |

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| | station; emergency headquarters; specific duties for crew; division of crew into various teams<br>• States action to be taken when hearing emergency alarm signals and/or discovering potential emergency: adequately & properly don PPE; report to muster station; determine nature of emergency; take action as per muster list and/or duty list | | | |
| 27 | Value & Need for Drills & Training –<br>States three aspects of needs of drills & training: regulatory or legislative needs (i.e. requirements of SOLAS, MARPOL, STCW, ISM); operational need to ensure correct & effective action can only be achieved by regular & realistic drills; state of mind | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 6-8 | 4.4.1.P1-P2 |
| 28 | Internal Communication –<br>• Explains various internal communications in use onboard ships especially during emergency situations (i.e. telephone, PA system, walkie-talkie, lifeboat VHF, alarms; emergency powered phone)<br>• Lists the location & operation of the above tools<br>• Describes probable location of emergency escape routes onboard ships<br>• Explains need of knowledge of number & locations of escape routes | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 6-8 | 4.4.1.P1-P2 |
| | **V. POLLUTION PREVENTION WHILE AT SEA** | | | |
| 29 | Define term 'Pollution' – | R1: STCW 2010: Section | 4.4.4 pp 9-11 | 4.4.1.P1-P2 |

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| | • Explains pollution caused by human activities & nature<br>• Lists main sources of marine pollution<br>• States pollutants discharged or likely to be discharged by ships due to operational or accidental causes<br>• Explains causes resulting in marine pollution at sea by ships as a result of: strandings & collision; lightening ops; unchecked garbage & sewage disposal; tank cleaning, washing, line flushing; unchecked chemical disposal in bulk or packaged form; deballasting | A-VI, Table A-VI/I-4 | | |
| 30 | Effects of Operational or Accidental Pollution of Marine Environment –<br>• States impact of pollution on marine life & food chain<br>• Explains hazards posed by chemical, sewage, garbage disposal<br>• Explains hazards to humans, animals, livelihood due to pollution of marine environment | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| 31 | International Measures for Pollution Prevention, Pollution Avoidance, Containment of Pollutants –<br>• Describes contents of MARPOL 73/78<br>• Describes segregated ballast tanks<br>• Describes double-hull design<br>• Describes reception facilities<br>• Explains contents & purpose of shipboard oil | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |

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| | pollution emergency plan (SOPEP)<br>• Describes garbage disposal arrangements & handling<br>• States shipboard organization to deal with pollution<br>• Describes interface between shipboard & shore-based organizations<br>• Explains obligation to report pollution incidents<br>• States when to report pollution incidents<br>• States to whom to report pollution incidents<br>• Describes structure of oil spill response team & assigned duties to officers & crew<br>• Explains measures for control of oil spills<br>• Describes shipboard response to oil spills due to various causes<br>• Explains importance of shipboard drills to deal with pollution of marine environment | | | |
| 32 | Pollution by Sewage from Ships –<br>• Defines what constitutes sewage<br>• Explains prohibition on discharge of sewage & exceptions depending upon distance from nearest landmass<br>• Defines comminuted & disinfected sewage & provides details about approved sewage treatment plant | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| 33 | Pollution by Garbage from Ships –<br>• Defines garbage | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |

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| | • Describes disposal of garbage outside special areas/prohibited zones | | | |
| 34 | Control of Oil Discharge from Machinery Spaces & Oil Fuel Tanks – Provides details of oily-water separating equipment & oil filling equipment MARPOL requirements | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| 35 | Contents of Oil Record Book – • States purpose of Oil Record Book • Lists entries which are made in the Oil Record Book | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| 36 | Control of Discharge of Oil & Special Areas – • Gives details of special areas • States requirements of regulation IX of MARPOL 73/78 • Describes provisions of methods for the prevention of oil pollution from ships while operating in special areas | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| 37 | Introduces Contents of Annex VI of MARPOL – States Annex VI sets limits on sulphur oxide & nitrogen oxide emissions from ships | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 9-11 | 4.4.1.P1-P2 |
| VI. | SOCIAL RESPONSIBILITY | | | |
| 38 | Rights & Obligations of Crew – • States each crew member has social responsibility to ship, self, colleagues, company, environment • Describes rights such as: right to convictions; right to express convictions; right to make request of another as long as he can appreciate that the other has right to say no; right to clarify communications to | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 | 4.4.1.P1-P2 |

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| | enhance interpersonal relationships<br>• Describes his obligation towards employer<br>• States shipping is a commercial entity & profit making part of operation<br>• States employee must discharge his duties sincerely to the fullest of capabilities<br>• States that he should be responsible towards the three elements of shipping operation, namely, company, government & individual<br>• States there is dignity in labor<br>• States there are responsibilities toward: obedience, respect, discipline & following orders of superiors; abiding by company's policies as laid down in the safety manuals & rules & regs governing flag State requirements & other mandatory legislation; adhering to safety & environment protection policy at all times & to assist fellow seamen in distress, search & rescue ops, oil pollution mitigation ops | | | |
| 39 | Employment Conditions – Describes employment conditions such as: contracts; rights; national & international requirements | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 27-38 | 4.4.1.P1-P2 |
| 40 | Drugs & Alcohol –<br>• States there are national & international regs against use of, carrying of, distributing of any drug or alcohol | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 pp. 27-31 | 4.4.1.P1-P2 |

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| | • States the punishment for above could be severe<br>• Describes examples of punishment from recent events & reports<br>• Describes dangers of drug & alcohol abuse: narcotics & contraband search; how drugs/alcohol impact body; dangers of involvement with drug trafficking/smuggling; company's drug/alcohol policy<br>• Describes Port State, Flag State, & other authorities' methods of detecting drug/alcohol onboard/consumed | | | |
| 41 | Health & Hygiene Onboard –<br>• States it is moral responsibility of all onboard to observe hygiene & promotion of good health<br>• States cleanliness & good housekeeping is fundamental to good health<br>• States ship's crew must be highly motivated: states there is definite relationship between human needs & motivation; states that delegation can be a powerful tool in motivating people | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | 4.4.4 27-31; 32-38 | 4.4.1.P1-P2 |
| 42 | Summary –<br>• Sums up module & importance of interpersonal relationships<br>• States delegation, trust, good relations are motivation<br>• States drug & alcohol abuse can be costly & may lead to prosecution of ship | R1: STCW 2010: Section A-VI, Table A-VI/I-4 | | 4.4.1.P1-P2 |

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| | **and/or individual & may also result in dismissal and/or permanent loss of seafarer career** | | | |

## VII. REVIEW & ASSESSMENT

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