TRAINEE GUIDE

FOR

BASIC DIVISION OFFICER COURSE (BDOC)

A-4N-0003

PREPARED FOR

DIRECTOR, LEARNING AND DEVELOPMENT (NETC N7)
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CHANGE RECORD

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The below Course Master Schedule is notional, and is useful for giving the student an indication of the scope and flow of material covered during their 8 week course of instruction. No two BDOC wardrooms will execute this schedule in the same manner. Each wardroom will have an individualized schedule based on instructor, classroom, laboratory, and trainer availability. It is the responsibility of the Student to be engaged and have completed their homework prior to each scheduled lesson or lab. Select modules of the Division Officer Study Guide (DOSG) are included as part of your homework. After each DOSG module assignment there is a time in parenthesis (e.g. 1 Hour). This is the time you should allocate to completing this particular lesson. The homework for some modules may exceed your capacity to complete in one evening (i.e. Maritime Warfare & NSS). Look ahead at your schedule and plan accordingly.

Make no mistake, BDOC is rigorous. There is a lot of material to cover in a short period of time. Each of you comes to BDOC with some amount of pre-commissioning training, whether USNA, ROTC, OCS, STA-21, etc. -- BDOC capitalizes on those foundational theories and asks you to dig deeper in to the Fundamentals and Systems of YOUR NAVY. Enjoy the Basic Division Officer Course (BDOC)!!!

COURSE MASTER SCHEDULE WEEKS 1 & 2

	DIVO FUNDAMENTALS				SHIPHANDLING
	WEEK 1				
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00	ADMIN Check-In (TSC)	Homework Review	Homework Review	Homework Review	Test Review
7:30		Inport Watchstanding Officer of the Deck	Supply Fundamentals	CASREPs	Standard Commands (Lecture / Practical)
8:00	OIC Welcome				
8:30		Inport Watches - Emergencies/Alarms/ ATFP		SFRM	
9:00	DIVO Fundamentals				
9:30		Inport Watches - Honors & Ceremonies			Basic Shiphandling I
10:00	SORM and DOD Organization		FITREP Practical		
10:30		Service Records		DIVO Introduction to the UCMJ	
11:00	Cyber Security				
11:30					
12:00					Man Overboard Procedures
12:30	Info Security	Enlisted Career Development	Introduction to Naval Messages	Watch and Discuss: The First 72 Hours	COVE I (Standard Commands Practical & Man Overboard) (Single Ship)
13:00	Shipboard Training				
13:30				Message Writing Practical / CASREP	
14:00					
14:30	ORM	FITREPS and EVALS	DRSS-N		
15:00					
15:30	Human Resource Fundamentals		EDVR/WTRP Practical & ODC/LORTARP Practical	Know Your Ship	
16:00					
16:30	Manpower Documents	Inspections		PORTER Case Study	
17:00					Study Time

	SHIPHANDLING		NAVIGATION		
	WEEK 2				
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00	Homework Review	Homework Review	Homework Review	ROR Quiz #1	ROR Quiz #2
7:30	DIVO Fundamentals Test (20 Questions)	U/W Watchstanding & Bridge Watch Organization	Rules of the Road I	Rules of the Road IV	Harbor Nav Package
8:00					
8:30				Pilotting (Visual Fixes, DRs, Set, & Drift, GPS & Radar Fixes, Radar Navigation)	Chart Plotting Intro Exercise (WPs, Tracks, ATON) / Home Ports)
9:00		NAVDORM			
9:30	MoBoards - Tracking/CPA		Rules of the Road II		
10:00		Aids to Navigation			GPS
10:30					
11:00			Rules of the Road III	Electronic Navigation and VMS	
11:30					
12:00					
12:30	Basic Shiphandling II - UNREP	Nautical Charts and Pubs			Intro to DIVTACS
13:00					
13:30			COVE II (Pierwork and Environmentals Onsetting) (Single Ship - Homeport)	COVE III (Pierwork and Environmentals Offsetting) (Single Ship - Home Port)	COVE IV DIVTACS (Integrated)
14:00					
14:30	MoBoards - Change of Station/DIVTACS				
15:00					
15:30		Time			
16:00					
16:30	MoBoards - Winds	Compass			
17:00					Study Time

COURSE MASTER SCHEDULE WEEKS 3 & 4

NAVIGATION			SEAMANSHIP		MAINTENANCE UNIVERSITY			DAMAGE CONTROL	
WEEK 3					WEEK 4				
	Monday	Tuesday	Wednesday	Thursday	Friday		Monday	Tuesday	Wednesday	Thursday	Friday
7:00	ROR Quiz #3	ROR Quiz #4	Test Review	Homework Review	Test Review	7:00	Test Review	Homework Review	Homework Review	Homework Review	Homework Review
7:30	Tides and Currents	COVE Assessment - Navigation Practical (CAPSTONE NAV COVE Event) / (Bahrain Single Ship)	Rules of the Road Exam	Deck Seamanship / Safety	Small Boat Operations	7:30	NSS Test (50 Questions)	3M Intro & PMS	Executing Availabilities	DC Organization / Administration	Stability / Watertight Integrity
8:00						8:00					
8:30	Pilotting Exercise		Navigation Brief Student Prep (SDGO/NFK transit)		Anchoring / Moor to a Buoy	8:30		MDS and Configuration		DC Comms / Symbology	
9:00				Line Snap-Back VID		9:00					
9:30				CONREP	Mooring	9:30				Personal Protective Equipment	Fixed DC Systems and their Extinguishing Agents
10:00						10:00					
10:30			Student Navigation Brief for NYC	Pollution Control and Marine Mammal Protection	Well Deck Operations	10:30	Intro to MU		Maintenance Availabilties and Work Packages	Firemain and Drainage System	
11:00						11:00					
11:30				Pollution VIDEO		11:30					
12:00						12:00					Basic Gas Free Engineering
12:30	ARPA Operation (Lecture / Lab)	Watch and Discuss: I Relieve You, Sir			Flight Deck Operations	12:30	Maint Policies, Levels, and Organization			Spotcheck / Zone Inspection Lab	
13:00				Towing		13:00					CBR-N
13:30	Intro to VMS	Navigation Brief Lecture	COVE V - Harbor Navigation Package (FCA COVE Event) / (Integrated)	COVE VI - UNREP (Integrated)	DECK LAB / PIER VISIT (Comine with CCAT visit)	13:30	3M Intro & PMS	Integrated and Fleet Maintenance Module	3M Spotchecks (SWOS)		CMC/SEA/CPO Panel
14:00						14:00					
14:30	VMS Operation & Practical (VMS Lab) / (Includes Voyage Plan)	SDGO/NFK Navigation Practical Chart Prep				14:30			Zone Inspections (SWOS)		
15:00						15:00					
15:30						15:30			PORT ROYAL Case Study		
16:00						16:00					
16:30	Tides and Currents Lab	Weather				16:30			Study Time	Study Time	
17:00						17:00		Study Time			Study Time

COURSE MASTER SCHEDULE WEEKS 5 & 6

DAMAGE CONTROL / ENGINEERING					
WEEK 5					
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00	Homework Review	Homework Review	Homework Review	Homework Review	Homework Review
7:30	DC Elctrical	**Wet Trainer** (Ensure Wet Trainer occurs prior to ENG/DC Exam)	**Basic F/F** (Ensure Firefighting occurs prior to ENG/DC Exam)	Power Transmission Fundamentals	Refrigeration Fundamentals
8:00					
8:30				Tagout	Steering
9:00					
9:30	Engineering Organization			Potable Water	Steam / Diesel / Gas Turbine Fundamentals (Split up)
10:00					
10:30	NAVOSH			High Pressure Air	
11:00					
11:30					
12:00					Engineering for the OOD (Split up)
12:30	Mechanical Fundamentals			Low Pressure Air	
13:00					
13:30	Electrical Fundamentals			TAGOUT Practical	JO PANEL
14:00					
14:30	Lube Oil				
15:00					
15:30	Fuel Oil			Study Time	
16:00					
16:30	Study Time	Study Time	Study Time		Study Time
17:00					

NAVAL WARFARE					
WEEK 6					
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00	Test Review	Homework Review	Homework Review	Homework Review	Homework Review
7:30	MU / DC / ENG Test (50 Questions)	U.S Navy Aircraft Caps and Lims	Student Pres Brief	Anti-Submarine Warfare	Expeditionary Warfare
8:00			Comms Practical		
8:30					Student Presentations
9:00					
9:30		Radio Telephone Procedures		Mine Warfare	
10:00					
10:30	Ships C&L				
11:00					
11:30					
12:00	U.S. Navy Ships Caps and Lims				
12:30		CIC Familiarization	Surface Warfare	VBSS and MIO	CO Panel
13:00					
13:30		Basic Radar			
14:00					
14:30			Air Warfare	Ship Tour (CIC + Top-side walkaround)	
15:00					
15:30	Command and Control	Electronic Warfare			Study Time
16:00					
16:30		IFF / TADIL	CSOSS		
17:00					

COURSE MASTER SCHEDULE WEEKS 7 & 8

ATFP					
WEEK 7					
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00	Homework Review	Homework Review	Homework Review	Homework Review	Homework Review
7:30	Maritime Warfare Test (50 Questions)	IED	9mm Gun Range	Watch Standing	ATFP Test (20 Questions)
8:00					
8:30		Search / Inspection Fundamentals		Anti-Terrorism Watch Officer Roles and Responsibilities - Shipboard Organization - Intelligence - Communications	ASDM / Personnel / Vehicle Inspections (Instructor Led Walkthrough)
9:00					
9:30		Pesonnel Inspection			
10:00					
10:30	Safety / ORM	Vehicle Inspection			
11:00					
11:30					
12:00					
12:30	Subject Communications	Range Safety Fundementals		Tactics and Techniques	Performance Test # 7 & 8 9ASDM / Personnel / Vehicle Inspections
13:00					
13:30		M9 Pistol Operation		DH PANEL	
14:00					
14:30	Use of Deadly Force				
15:00					
15:30	Intro to Terrorism	Pistol Marksmanship Fundementals			Study Time
16:00					
16:30	Warning Shots		Study Time	Study Time	
17:00					

DIVISION OFFICER LEADERSHIP					
WEEK 8					
	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
7:30	Division Officer Responsibility	On My Watch	XO Project Debrief	Meeting the COC	Action Plan II
8:00					
8:30			Return on Investment	Personal / Professional Development	
9:00					
9:30		Working Climate			
10:00	Routine Activities				
10:30			Working Together	Selling Change	
11:00					
11:30					
12:00					
12:30	Status of the Apparatus				Leader of Character
13:00		Keeping the Best			
13:30			All in a Day	Doing Well by Doing Good	
14:00					BDOC GRADUATION
14:30	Leader of Character	XO Project			
15:00					
15:30				Action Plan	
16:00					
16:30	Study Time	Study Time	SWO Career Path Brief		
17:00					

TERMINAL OBJECTIVES

UNIT 1: DIVISION OFFICER FUNDAMENTALS

1.0 **DESCRIBE** the Division Officer's function aboard ship, including typical daily routine and the expectations as a Surface Warfare Division Officer.

2.0 **DESCRIBE** the general organization of the Department of Defense and the Navy.

3.0 **DISCUSS** the importance of shipboard computer information assurance and network security awareness.

4.0 **IDENTIFY** the procedures to handle classified information.

5.0 **DESCRIBE** the shipboard training opportunities and responsibilities.

6.0 **DETERMINE** the Risk Assessment Code and mitigation factors.

7.0 **IDENTIFY** the Support Programs, Resources and Facilities available to the command, service member and dependents.

8.0 **IDENTIFY** the purpose and content of the ship's manpower documents.

9.0 **IDENTIFY** the watch organization, means of communication, and the duties and responsibilities of the Officer of the Deck Inport.

10.0 **IDENTIFY** the duties and responsibilities of the Officer of the Deck inport in response to shipboard emergencies.

11.0 **IDENTIFY** the duties and responsibilities of the Officer of the Deck Inport in response to force protection and shipboard security threats.

12.0 **DENTIFY** the procedures executed by the Officer of the Deck inport for honors and ceremonies.

13.0 **DESCRIBE** the components of a properly maintained Enlisted Service Record (ESR).

14.0 **DESCRIBE** the components of a properly maintained Officer Service Record (OSR).

15.0 **DESCRIBE** the components and importance of a well maintained Division Officer Notebook (Div-O Notebook).

16.0 **DESCRIBE** the Division Officer's duties and responsibilities concerning enlisted advancement.

17.0 **IDENTIFY** the components of the Enlisted Evaluation Report.

18.0 **IDENTIFY** the components of a Chief Petty Officer Evaluation Report.

19.0 **IDENTIFY** the components of the Officer Fitness Report.

20.0 **DESCRIBE** all inspections conducted by ship's personnel and inspections conducted by shorebased organizations during the FRTP.

21.0 **IDENTIFY** onboard supply systems, parts management, and supply organization support roles.

22.0 **IDENTIFY** onboard supply systems, parts management, and supply organization support roles.

23.0 **IDENTIFY** onboard supply systems, parts management, and supply organization support roles.

24.0 **DETERMINE** if a naval message is required.

25.0 **SUMMARIZE** the process of drafting and routing a naval message.

26.0 **EXPLAIN** the purpose of 4 types of Naval Messages.

27.0 **EXPLAIN** all parts and requirements of the Naval message format.

28.0 **DESCRIBE** the impact on the DRRS-N Commander's Assessment.

29.0 **DESCRIBE** the structure and purpose of all Casualty Reports.

30.0 **DESCRIBE** the notional lifecycle of a ship from CNO Availability to CNO Availability.

31.0 **IDENTIFY** the role of the Uniform Code of Military Justice in the duties and responsibilities of the Division Officer.

UNIT 2: SHIPHANDLING

32.0 **DEMONSTRATE** the use of standard seamanship commands.

33.0 **EXPLAIN** Basic Shiphandling Fundamentals and concepts.

34.0 **DENTIFY** the procedures for recovering a Man Overboard.

35.0 **DEMONSTRATE** proper use of a MOBOARD to avoid shipping.

36.0 **DEMONSTRATE** approach, maintain station and breakaway from delivery ship.

37.0 **DEMONSTRATE** the proper station techniques using MOBOARDS.

38.0 **IDENTIFY** the procedures to solve wind problems on the maneuvering board.

UNIT 3: NAVIGATION

39. **IDENTIFY** the duties and responsibilities of the underway watch organization.

40. **IDENTIFY** the procedures to maintain a safe watch and turnover a watch.

41. **IDENTIFY** the tasks and responsibilities for relieving the watch.

42. **DESCRIBE** the NAVDORM as it applies to the Officer of the Deck and bridge watchstanding.

43. **IDENTIFY** fixed aids to navigation and their purpose

44. **IDENTIFY** floating aids to navigation (buoys).

45. **IDENTIFY** the general information on a chart, and interpret the symbols and abbreviations used to represent features on charts.

46. **IDENTIFY** the main concepts of nautical charts and publications in navigation.

47. **IDENTIFY** how time is used in terrestrial navigation and time conversions.

48. **DENTIFY** the history, principles, notations, components, and uses of the magnetic compass, including the fluxgate compass.

49. **IDENTIFY** the principles of the gyrocompass.

50. **CALCULATE** magnetic compass error.

51. **APPLY** the applicable Inland and International Regulations for Preventing Collisions at Sea(Rules of the Road)

52. **IDENTIFY** the role of the navigational plot and navigational plotting terms and symbols.

53. **IDENTIFY** the procedures to plot the ship’s dead reckoning position.

54. **IDENTIFY** the procedures to plot a fix using three bearings, three tangents, or three radar ranges.

55. **IDENTIFY** the procedures for computing the course to steer.

56. **IDENTIFY** the common uses of the Global Positioning System and its importance in navigation.

57. **IDENTIFY** the principles of Global Positioning System theory.

58. **IDENTIFY** factors that affect Global Positioning System accuracy and errors

59. **IDENTIFY** the procedures to use the Global Positioning System at sea to fix the ship’s position and to save the position for later use.

60. **IDENTIFY** the effect of chart datums on navigation.

61. **IDENTIFY** the limitations of commercial Global Positioning System receivers.

62. **DETERMINE** if a risk of collision exists by using ARPA functions.

63. **PLOT** a fix using radar ranges, bearings, or tangents

64. **IDENTIFY** the types of weather experienced by mariners and the duties, responisibilities, and information available on a naval vessel.

65. **DESCRIBE** special underway evolutions

66. **EXECUTE** a restricted waters safe navigation through a designated harbor using all available means to navigate.

67. **MAKE** all navigational preparations and successfully anchor your vessel.

68. **MANAGE** the preparations of a voyage and develop all required messages.

69. **IDENTIFY** the legal aspects of ECDIS-N and the requirements and challenges of an ECDIS-N compliant voyage management system.

70. **IDENTIFY** the principal types of electronic charts.

71. **IDENTIFY** the components and features of the Voyage Management System.

72. **CALULATE** tide and tidal current predictions.

73. **CONDUCT** a navigation brief.

UNIT 4: SEAMANSHIP

74. **DETERMINE** the appropriate line or equipment to accomplish the task.

75. **DISCUSS** the fundamentals of executing a Connected Underway replenishment (CONREP).

76. **DISCUSS** the pollution abatement procedures and marine mammal protection methods utilized by the Navy.

77. **DISCUSS** the fundamentals of towing as they relate to both the vessel towing and the vessel being towed.

78. **DESCRIBE** the parts of the craft and safety precautions.

79. **DISCUSS** the proper procedures of a small boat to include: lowering/hoisting, start up/shut down, maneuvering while underway.

80. **DISCUSS** the small boat etiquette.

81. **DESCRIBE** the duties and procedures of a rescue boat.

82. **DESCRIBE** the components and functions of the anchor and anchor windlass.

83. **DISCUSS** the proper procedures for anchoring and weighing anchor.

84. **EXPLAIN** the procedures and precautions for buoy mooring

85. **DISCUSS** the components and procedures involved in mooring a Naval vessel.

86. **DESCRIBE** the fundamentals of wet well operations.

87. **DISCUSS** the fundamentals of flight deck operations.

88. **IDENTIFY** seamanship equipment.

UNIT 5: MAINTENANCE UNIVERSITY

89. **DEMONSTRATE** an understanding of the relevant Navy, Fleet, and Surface Force maintenance requirements in the context of the Division Officer.

90. **EXPLAIN** the purpose and organization of the Navy's 3M and Spotcheck Program

91. **UNDERSTAND** the Zone Inspection program, and its impact on material readiness.

UNIT 6: DAMAGE CONTROL

92. **DISCUSS** DC organization fundamentals, positions, and functions.

93. **IDENTIFY** the different DC symbols used for plotting.

94. **DISCUSS** the functions, locations, and components of DC Communication System.

95. **DISCUSS** the functions, locations, and components of watertight closure and hull fittings.

96. **DISCUSS** the functions, locations, and components of the firemain and drainage systems.

97. **EXPLAIN** stability fundamentals, equipments, and operations onboard. (CTTL item # 511)

98. **DISCUSS** the functions, locations, and components of the installed fire extinguishing system.

99. **DISCUSS** the functions, locations, and components of personal protective clothing equipment.

100. **DISCUSS** the function, equipment, and components of Gas Free Engineering.

101. **DISCUSS** CBR-N defense fundamentals, methods, and equipment used for detection and decontamination.

102. **DISCUSS** the functions, locations, and components for casualty power distribution system.

103. **PERFORM** as a member of a Damage Control Repair Team combating various types of shipboard damage (except fire).

104. **ASSESS** fires aboard a ship.

105. **LEAD** firefighting team

106. **OPERATE** portable firefighting equipment.

107. **PERSONEL** protective equipment.

108. **OPERATE** SCBA firefighting equipment.

109. **FIGHT** fire under emergency hose conditions.

110. **COMBAT** fires involving weapons.

111. **COMBAT** an interior fire.

UNIT 7: ENGINEERING

112. **IDENTIFY** and explain the Engineering Department’s organization, programs, publications, logs, and records.

113. **IDENTIFY** the basic principles of mandatory NAVOSH programs.

114. **IDENTIFY** the function, component parts, operation, interfaces, and safety precautions for mechanical systems.

115. **IDENTIFY** the terminology, principles, equipment, and basic elements of shipboard electrical equipment and shipboard electrical safety.

116. **DESCRIBE** the principles, construction, function, components, control and monitoring systems, and operation of the lube oil storage and service systems.

117. **DESCRIBE** the principles, construction, function, components, control and monitoring systems, and operation of the fuel oil storage and service systems.

118. **IDENTIFY** the function, location, component parts, operation, interfaces, and safety precautions for the propulsion drive train system.

119. **COMPLETE** a Tag-out.

120. **IDENTIFY** the types, terms, components, and operation of distilling and desalination plants and the purpose, components, and safety precautions of potable water systems.

121. **EXPLAIN** the theory, components, operation and ship interfaces of the high pressure air system.

122. **EXPLAIN** the theory, components, operation and ship interfaces of the Low Pressure Air System.

123. **EXPLAIN** the theory, components, operation and ship interfaces of the refrigeration system.

124. **IDENTIFY** and describe the location, function, components, and operation of the steering control system and describe the importance of the steering control system to the safe operation of a ship.

125. **DESCRIBE** the operation, components, and governing principles of shipboard steam propulsion systems.

126. **GAIN** a baseline introductory knowledge and understanding of the diesel engine and supporting systems including diesel fuel oil service system, lube oil system, jacket water cooling system, and propulsion control system.

127. **IDENTIFY** the terms, functions, components, operation interfaces, and safety precautions of the gas turbine module, engine, and support systems.

128. **DESCRIBE** the immediate and controlling actions from the perspective of the Officer of the Deck (OOD) to include: engine casualties, shaft casualties, steering, casualties, and electrical casualties.

129. **DESCRIBE** the immediate and controlling actions from the perspective of the Officer of the Deck (OOD) to include: engine casualties, shaft casualties, steering, casualties, and electrical casualties.

130. **DESCRIBE** the immediate and controlling actions from the perspective of the Officer of the Deck (OOD) to include: engine casualties, shaft casualties, steering, casualties, and electrical casualties.

UNIT 8: NAVAL WARFARE

131. **IDENTIFY** the characteristics and capabilities of the US Navy Vessels.

132. **IDENTIFY** the characteristics and capabilities of Naval Weapons Systems.

133. **IDENTIFY** the agencies, organizations, command structures, and relationships responsible for planning and executing military operations.

134. **IDENTIFY** the primary missions and features of US military aircraft and weapons.

135. **IDENTIFY** the elements, requirements, and purpose of shipboard communications systems.

136. **IDENTIFY** the elements and requirements of shipboard signals security.

137. **IDENTIFY** the missions of CIC, watchstander roles, special evolutions, and functions of various CIC equipment.

138. **IDENTIFY** the basic principles of radio waves and factors that affect their transmission and reception.

139. **IDENTIFY** the fundamental principles and operating limits of radar systems.

140. **IDENTIFY** the elements of electronic warfare.

141. **IDENTIFY** the characteristics and capabilities of electronic warfare systems.

142. **IDENTIFY** the elements of Military Deception, Navy Operational Deception and Counter-Deception.

143. **IDENTIFY** the characteristics of Identification Friend or Foe and Tactical Air Communication and Navigation Systems.

144. **IDENTIFY** the terminology, duties and responsibilities, and capabilities of the tactical data link system.

145. **IDENTIFY** the capabilities, components, duties, and responsibilities of the Naval Tactical Data System and Combat Direction System.

146. **IDENTIFY** the elements of surface warfare.

147. **IDENTIFY** the elements of air defense.

148. **LIST** and DESCRIBE the conditions related to threat warnings and weapon status and determine their impact.

149. **IDENTIFY** the capabilities, components, duties, and responsibilities of the Naval Tactical Data System and Combat Direction System.

150. **IDENTIFY** the elements of undersea warfare.

151. **EXPLAIN** the principles of Mine Warfare and IDENTIFY the active and passive mine countermeasures.

152. **IDENTIFY** procedures for Maritime Interdiction Operations, including personnel responsibilities and appropriate use of force.

153. **IDENTIFY** the elements of amphibious operations.

UNIT 9: ATFP

154. **OBSERVE** safety requirements for employment of non-lethal weapons (NLW) , small arms and associated equipment.

155. **USE** guidelines and policies regarding the Standing Rules for the Use of Force (SRUF) and deadly force.

156. **CONDUCT** safe handling and employment of small arms.

157. **PERFORM** force protection duties.

158. **CONDUCT** proper inspection techiques of motor vehicles and personnel for controlling access to government facilities.

159. **IDENTIFY** the tactics and techniques utilized by the Ship's Reaction Force.

160. **DISCUSS** search and inspection techniques and fundamentals.

161. **EXPLAIN** the function and duties of the ATTWO.

ASSIGNMENT SHEET

DIVISION OFFICER FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE an example daily in-port routine for a Division Officer.

2. DESCRIBE an example daily at-sea routine for a Division Officer.

3. DESCRIBE Division Officer responsibilities.

4. DISCUSS the Division Officer relationship with XO and CO.

5. DISCUSS the Division Officer to Department Head relationship.

6. DISCUSS the Division Officer to LCPO relationship.

7. DISCUSS some "best practices" for supporting the Division.

8. DISCUSS the importance of time management and prioritization for the Division Officer.

9. DISCUSS the importance of command-wide collateral assignments.

C. STUDY ASSIGNMENT:

1. Read New Guy 101: Your First Tour of Duty. Pages 1-2.

2. Read Chapters 361-369 of the OPNAVINST 3120.32D SORM (pp. 3-145 to 3-155).

3. Read Chapter 11, Section 2 (Standards of Conduct) of the U.S. Navy Regulations (pp. 77 - 89).

4. Read Chapter 10, Sections 1, 2, and 3 of the U.S. Navy Regulations (pp. 101 – 102).

5. Read Chapter 3 of the Naval Officer's Guide (First Station) (pp. 29 – 50) (HARD COPY).

D. STUDY QUESTIONS:

1. What do you do as a Division Officer?

2. Why does the Navy have Division Officers?

ASSIGNMENT SHEET

SORM AND DOD ORGANIZATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE the responsibilities and authority of the Department Head, Division Officer, Leading Chief Petty Officer, Leading Petty Officer, and Work Center Supervisor.

2. DISCUSS the purpose and manning requirements for the different conditions of readiness (Condition I, III, and IV).

3. DISCUSS the Navy Operational and Administrative Chain of Commands to include the responsibilities of the Unified Commands and Fleet Commanders.

C. STUDY ASSIGNMENT:

1. Read pages 1 and 2 of the SORM (11 April 1994); Purpose, Applicability, Enforceability and Scope, Guidance, and Action.

2. Scan the Title Page of the SORM (pp. v to xviii)

3. Read Chapters 130 to 142.2 of the SORM (pp. 1-2 to 1-11); Organization, and Command and Control.

4. Read the CNO's Sailing Directions.

5. Read the CNO's Nav Plan.

D. STUDY QUESTIONS:

1. What is "unity of command" and "span of control"?
2. What is the difference between "authority" and "accountability"?

3. When you arrive onboard your ship, what will be your Administrative and Operational Chains of Command?

ASSIGNMENT SHEET

CYBER SECURITY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE core concepts of between information assurance (IA).

2. IDENTIFY the roles and responsibilities of the key personnel involved in shipboard computer IA.

3. IDENTIFY threats to the Department of Defense (DOD) Networks.

4. DESCRIBE procedures to handle cyber security incidents.

5. DISCUSS how a division officer is directly involved with upholding good cyber security measures.

C. STUDY ASSIGNMENT:

1. Complete the latest version of the Navy Knowledge Online course "DOD Information Assurance Awareness".

2. Read Admiral Harvey's letter to Commanders in the Commander's Cyber Security and Information Assurance Handbook (pp. iii).

3. Read Chapter 1 Sections 1, 2, and 3 of the Commander's Cyber Security and Information Assurance Handbook (pp. 1-1 to 1-7).

D. STUDY QUESTIONS:

1. What is the difference between Computer, Network, and Physical Security?

2. Describe Information Assurance's "Defense in Depth".

ASSIGNMENT SHEET

INFORMATION SECURITY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY procedures followed for controlling classified material

2. IDENTIFY and discuss the three categories of classified materials.

3. IDENTIFY access and need to know.

4. IDENTIFY and discuss security clearances.

5. DISCUSS procedures for marking classified materials and required physical controls.

C. STUDY ASSIGNMENT:

1. Scan the Table of Contents of the Department of the Navy Information Security Program [SECNAVINST M-5510.36] (pp. i to vii).

2. Read Chapter 1, Section 1-1 of the Department of the Navy Information Security Program [SECNAVINST M-5510.36] (pp. 1-1 and 1-2).

3. Read Chapter 2, Section 2-1, 2-2, and 2-5 of the Department of the Navy Information Security Program [SECNAVINST M-5510.36] (pp. 2-1 to 2-6).

D. STUDY QUESTIONS:

1. Who does the Department of the Navy Information Security Program apply to?

ASSIGNMENT SHEET

SHIPBOARD TRAINING

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the responsibilities of a ship's leadership in the development and execution of a Divisional Training Program.

2. DISCUSS the function and composition of the Planning Board for Training (PB4T).

3. DESCRIBE the application of training publications in the development of the Divisional Training Program.

4. STATE the purpose of the following types of training: OJT, Indoctrination, Shore-based schools, GMT, Team Training, PQS, Rating entry training (Strikers), and the FRTP.

5. DESCRIBE the purpose and function of TORIS-TFOM.

C. STUDY ASSIGNMENT:

1. Read Section 304.16 of the SORM (pp. 3-53 to 3-54); Planning Board for Training.

2. Read Chapter 8 of the SORM (pp. 8-1 to 8-12); Training.

D. Study Questions:

1. What are the Division Officer's roles and responsibilities with regards to the Divisional Training Program?

ASSIGNMENT SHEET

OPERATIONAL RISK MANAGEMENT

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the Operational Risk Management (ORM) 5 step process

2. DESCRIBE the elements of the Risk Assessment Code (RAC)

3. DISCUSS the different levels of ORM

C. STUDY ASSIGNMENT: NONE

1. Complete the Navy Knowledge Online (NKO) course "Operational Risk Management" CPPD-GMT-ORM-1.0.

D. Study Questions:

1. Name some instances in which the Division Officer might apply ORM.

ASSIGNMENT SHEET

HUMAN RESOURCE FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. EXPLAIN the elements and functions of the ship's Command Managed Equal Opportunity (CMEO) Program.

2. EXPLAIN the resources available to the Drug and Alcohol Program Advisors (DAPA) and the effect it can have on retention.

3. DISCUSS the methods of identifying drug and alcohol abuse used by the Navy.

4. DISCUSS the function of the Command Fitness Program (CFL) and it's effect on evaluation and retention.

5. DISCUSS the naval policy on fraternization, pregnant servicewomen, single parents, military couples and sexual harassment.

6. EXPLAIN the fundamentals of the Fleet and Family Support Center (FFSC).

7. EXPLAIN the role of the Ombudsman.

8. DISCUSS the purpose of the Navy and Marine Corps Relief Society (NMCRS).

C. STUDY ASSIGNMENT:

1. Read paragraphs 1 to 7 of the Navy's Equal Opportunity Policy (OPNAVINST 5354.1F)

2. Read the Navy's Fraternization Policy (OPNAVINST 5370.2C)

3. Read the Department of the Navy Diversity Policy Statement (27 August 2007).

4. Read the CNO's Diversity Vision.

5. Read the Navy's Diversity Strategy.

D. Study Questions:

1. What is the purpose of the CMEO Program?

2. Why would you direct a sailor to the FFSC?

ASSIGNMENT SHEET

MANPOWER DOCUMENTS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the purpose and contents of the ship's manpower authorization documents

2. IDENTIFY the purpose of the ship's divisional manning documents

3. STATE the purpose and contents of the Enlisted Distribution and Verification Report

C. STUDY ASSIGNMENT:

1. Read Section 1 to 7 of the EDVR Manual

D. Study Questions:

1. Describe the Ships Manpower Document, and what information it contains.

2. What is the ODCR, and what does it contain?

ASSIGNMENT SHEET

IN-PORT WATCHSTANDING (OFFICER OF THE DECK)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the watch organization and the duties and responsibilities of each in-port watchstander

2. DISCUSS the relationship between the in-port watchstanders and the Chain of Command

3. IDENTIFY the standard communications equipment used by the Officer of the Deck In-port

4. STATE the procedures for maintaining the ship's logs in-port

5. LIST the tasks and responsibilities for assuming a watch in-port

6. DISCUSS the procedures for special evolutions in-port

7. DISCUSS the procedures for routine evolutions in-port

8. EXPLAIN the purpose and content of the Pre-underway Checkoff List

C. STUDY ASSIGNMENT:

1. Read Chapter 12, Watch Officer's Guide (HARDCOPY)

2. Read COMNAVSURFLANT REGULATIONS SHIPS ROUTINE MESSAGE 311554Z JUL 12

3. Read COMNAVSURFLANT REGULATIONS TOPSIDE APPEARANCE 291633Z AUG 12

D. Study Questions:

1. List the duties of the OOD Inport.

2. Describe the process of relieving the watch as OOD Inport, and what are some of the key topics that should be turned over?

ASSIGNMENT SHEET

IN-PORT WATCHSTANDING (EMERGENCIES, ALARMS, ATFP)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the duties and responsibilities of the Officer of the Deck In-port in response to damage control emergencies.

2. LIST the duties and responsibilities of the Officer of the Deck In-port in response to emergencies involving personnel.

3. STATE the duties and responsibilities of the Officer of the Deck In-port in response to a hazardous material emergency.

4. EXPLAIN the duties and responsibilities of the Officer of the Deck In-port in response to shipboard security threats.

5. STATE the purpose and organization of the in-port security force.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Division Officer Fundamentals Module 1.3, (Introduction to Shipboard Emergencies).

D. Study Questions:

1. During any shipboard emergency, what is the primary responsibility of the OOD Inport?

2. What are the five Force Protection Conditions and their descriptions?

ASSIGNMENT SHEET

IN-PORT WATCHSTANDING (HONORS AND CEREMONIES)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. LIST the terms, flags, and pennants associated with honors and ceremonies.

2. STATE the procedures for morning and evening colors.

3. EXPLAIN the proper honors for arriving and departing senior Officers.

4. DESCRIBE the procedures for passing honors.

C. STUDY ASSIGNMENT:

1. Read Chapters 15 (Honors and Ceremonies) and 16 (Flags, Pennants, and Boat Hails) of the Watch Officer's Guide. (HARDCOPY)

2. Read Chapter 12 of the U.S. Navy Regulations (Flags, Pennants, Honors, and Ceremonies) (pp. 117 – 154).

3. Complete the DOSG Division Officer Administration Module 1.6, (Introduction to Honors and Ceremonies).

4. Read Chapter 5 of the Naval Officer's Guide (Military Courtesy, Honors, and Ceremonies) (pp. 65 – 88). (HARDCOPY)

D. Study Questions:
1. When is the Commissioning Pennant flown?

2. Do arriving/departing senior officers NOT attached or embarked on a ship receive a STINGER?

ASSIGNMENT SHEET

SERVICE RECORDS

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B.ENABLLING OBJECTIVES

1. LIST the elements of an ESR.

2. SUMMARIZE the procedures to maintain an ESR.

3. LIST the elements of an OSR.

4. SUMMARIZE the procedures to maintain an OSR.

5. LIST the elements of a Div-O Notebook.

6. SUMMARIZE the procedures to maintain a Div-O Notebook.

C. STUDY ASSIGNMENT:

1. Read Chapter 817 of the SORM (pp. 8-21); The Division Officer's Notebook.

D. STUDY QUESTIONS:

1. What are the OMPF and EFSJ?

2. What information is contained in the Division Officer's Notebook?

ASSIGNMENT SHEET

ENLISTED CAREER DEVELOPMENT

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the general requirement for enlisted advancement.

2. STATE the requirements for normal advancement in enlisted paygrades.

3. DISCUSS the final multiple score and its factors.

4. LIST the circumstances that render enlisted personnel ineligible for advancement.

5. IDENTIFY methods for advancement other than the normal requirements.

6. DESCRIBE the Career Development Board.

7. EXPLAIN Perform-To-Serve program.

8. DISCUSS reenlistment incentives.

9. DISCUSS commissioning programs for enlisted personnel.

10. IDENTIFY the types of separations and transfers.

C. STUDY ASSIGNMENT:

1. Read Chapter 8 of the Naval Officer's Guide, The American Sailor (pp. 120 – 135). (HARDCOPY)

2. Complete the DOSG Division Officer Fundamentals Module 1.2 (Enlisted Rating Structure).

3. Read Chapter 11 of BUPERSINST 1430.16F (Navy Advancement Manual), Command Advancement Program (pp. 11-1 to 11-5)

D. Study Questions:

1. Be able to identify Enlisted ratings and pay grades.

ASSIGNMENT SHEET

FITNESS REPORTS AND EVALUATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE the components of an Enlisted Evaluation Report.

1. STATE the components of an E-7 Fitness Report.

2. DEFINE the components of an Officer Fitness Report.

C. STUDY ASSIGNMENT:

1. Read Enclosure 1 (Navy performance evaluation system overview for Commanding Officers, delegated reporting seniors, and raters) of BUPERSINST 1610.10C (Navy Performance Evaluation System) (pp. 1 – 12).

2. Scan the Table of Contents of BUPERSINST 1610.10C (Navy Performance Evaluation System) (pp. i –vii).

D. Study Questions:

1. When are E-6 Evaluations due?

2. What is Block 40 on an Officer Fitness Report?

ASSIGNMENT SHEET

INSPECTIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the purpose and frequency of Quarters, Informal Inspections, and Formal Inspections with ship personnel

2. DISCUSS the purpose of the following inspections: Seabag, Safety, Health and Welfare, Zone, Daily Messing and Berthing, Divisional Officer Daily Material

3. DEFINE and DESCRIBE how the following inspections are integrated into your ship's operational cycle:

- Maintenance and Material Management (3-M)
- Inspection and Survey (INSURV)
- Light Off Assessment (LOA)
- Engineering Operational Certification (EOC)
- Supply Management Certification (SMC)
- Aviation Readiness Qualification (ARQ)
- Aviation Facility Certification (AVCERT)
- Cruise Missile Tactical Qualification (CMTQ)

C. STUDY ASSIGNMENT:

1. Read COMNAVSURFLANT Regulations Ships Routine (311554ZJUL 12).

D. Study Questions:

1. Why is holding and attending morning quarters important to you as a division officer?

2. Why does the Navy have inspections?

ASSIGNMENT SHEET

SUPPLY FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the major functions of a ship's supply organization.

2. DESCRIBE the types of material management funding available to ships.

3. STATE the purpose and content of the Coordinated Shipboard Allowance List (COSAL).

4. EXPLAIN the various methods of using the COSAL.

5. DISCUSS the function and importance of the Allowance Parts List (APL) and the Allowance Equipage List (AEL).

6. DISCUSS the procedures for submission of an Allowance Change Request (ACR) as it relates to the COSAL and the Fleet COSAL Feedback Report (FCFBR).

7. DISCUSS the purpose and use of the Federal Catalog System (FEDLOG).

8. DISCUSS the purpose of National Stock Number (NSN) and Cognizance Code (COG).

C. STUDY ASSIGNMENT

1. Review NAVEDTRA 43463-1B Division Officer Afloat PQS.

2. Read Ch. 1 of NAVSUP P-485 Volumes I, Supply Afloat Procedures.

D. Study Questions:

1. What items are listed in the COSAL?

2. What are some reasons for Supply to cancel a part request?

3. Why are DLR carcasses important?

ASSIGNMENT SHEET

INTRODUCTION TO NAVAL MESSAGES

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. Given specific situations or evolutions, DETERMINE if a naval message is required IAW NWP 1-03.1, CJCSM 3150.05C, and OPNAVINST 3100.6

2. Given a scenario that requires a naval message, SUMMARIZE the process of drafting and routing a naval message IAW NWP 1-03.1, CJCSM 3150.05C, and OPNAVINST 3100.6

3. EXPLAIN the purpose of 4 types of Naval Messages IAW NWP 1-03.1, CJCSM 3150.05C, and OPNAVINST 3100.6

4. EXPLAIN all parts and requirements of the Naval message format IAW NWP 1-03.1, CJCSM 3150.05C, and OPNAVINST 3100.6

C. STUDY ASSIGNMENT:

1. Review NWP 1-03.1 Operational Reports.

2. Read OPNAVINST 3100.6J Change 1

3. Read OPNAVINST 3100.6J Change 2

4. Read OPNAVINST 3100.6J Urgent Change 3

D. Study Questions:

1. What is the timeframe for submitting a MOVREP for getting underway?

2. What information should be included in the initial message of a special incident report (OPREP-3)?

ASSIGNMENT SHEET

DRRS-N

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS why the Navy utilizes DRRS-N.

2. DISCUSS the basic requirements for a DRRS-N Unit Commander's Assessment.

3. DESCRIBE the inter-relationship between the shipboard resource reporting systems, ashore Figure of Merit (FOM) databases, DRRS-N, and DRRS-Strategic (S).

4. DISCUSS the difference between Mission Essential Tasks (METs), Capabilities, Core, and Organizational and Resource Status (OARS) Unit Commander Assessments.

C. STUDY ASSIGNMENT:

1. Read OPNAVINST 3501.360, Defense Readiness Reporting System-Navy (DRRS-N) Pages 1-8.

D. Study Questions:

1. Why does the Navy use DRRS-N?

2. What are the 5 PESTO deficiencies?

ASSIGNMENT SHEET

CASREPS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE the information contained in the four types of Casualty Reports (CASREP).

2. DISCUSS the inter-relationship between the CASREP System and the 3-M System, Defense Readiness Reporting System-Navy (DRRS-N) System and Supply System.

3. DISCUSS the time requirements for submission of each type of CASREP.

4. DESCRIBE the information contained in the Military Standard Requisitioning and Issue Procedures (MILSTRIP) MANUAL.

5. DISCUSS the routing procedures from generation to submission of a Casualty Report.

6. LIST applicable publications and fleet guides for casualty reporting based on geo-location.

C. STUDY ASSIGNMENT:

1. Read NWP 1-03.1 Operational Reports, Chapter 4 (Casualty Reports); pp 4-1 to 4-59.

2. Read CASREP Guidance Message 291500ZDEC11.

D. Study Questions:

1. What are the three CASREP Categories?

2. What are the 4 types of CASREPS?

ASSIGNMENT SHEET

SURFACE FORCE READINESS MANUAL

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. EXPLAIN the goals and methods of the SFRM.
2. DISCUSS how the SFRM complements the Fleet Readiness Training Plan (FRTP).
3. IDENTIFY the stages in a ship's lifecycle.
4. DISCUSS the Basic Phase and its components.
5. DISCUSS shipboard and Afloat Training Group (ATG) roles in training.
6. DISCUSS the Division Officers role throughout.

C. STUDY ASSIGNMENT:

1. Read the Surface Force Readiness Manual Chapters 1-2.
2. View the video at:

http://www.dvidshub.net/video/144227/surface-forces-readiness-manual-signed

D. Study Questions:

1. What is the SFRM?

2. What is the Division Officer's role during the Basic Phase of integrated readiness?

ASSIGNMENT SHEET

INTRODUCTION TO THE UCMJ

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the major concepts of the Uniform Code of Military Justice

2. IDENTIFY the duties and responsibilities of the Division Officer in maintaining good order and discipline

3. IDENTIFY the basic procedures for non-judicial punishment

C. STUDY ASSIGNMENT:

1. Read United States v. Jackson case file.

2. Read SUBCHAPTER III, NON-JUDICIAL PUNISHMENT, 815, Art. 15, Commanding Officer's non-judicial (pp A2-4 to A2-5) of the Uniform Code of Military Justice (UCMJ).

D. Study Questions:

1. What are Commanding Officer's options for disciplinary punishments for minor offenses without the intervention of a court-martial?

ASSIGNMENT SHEET

STANDARD COMMANDS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. LIST the standard commands and when they apply

2. DISCUSS the purpose of issuing standard commands to ship control stations in the following format: Command, Reply, Action taken, Report, and Acknowledgement

3. IDENTIFY helm and lee helm commands and actions performed in response to the commands

C. STUDY ASSIGNMENT:

1. Read pages 144-158, Watch Officer's Guide.(HARDCOPY)

2. Complete the DOSG Officer of the Deck Fundamentals Module 1.4 (Standard Seamanship Commands).

D. Study Questions:

1. Why are commands from the Conning Officer repeated verbatim by the Helmsman?

2. If an error is made by the Conning Officer during the issuance of an order, what is the proper procedure to correct the mistake?

ASSIGNMENT SHEET

BASIC SHIPHANDLING I

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the forces that act upon a naval vessel.
2. IDENTIFY how pivot points change as inertia and momentum change.
3. IDENTIFY how hydrodynamics affect ship control.

C. STUDY ASSIGNMENT:

1. Read pages 96-111, Watch Officer’s Guide.(HARDCOPY)

D. Study Questions: NONE

ASSIGNMENT SHEET

MAN OVERBOARD PROCEDURES

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY personnel duties and responsibilities when responding to a man overboard from ownship.

2. IDENTIFY immediate actions when responding to a man overboard.

3. IDENTIFY the types of man overboard recovery maneuvers.

4. IDENTIFY the various sector searches.

C. STUDY ASSIGNMENT:

1. Read Table 6-1 of the Watch Officer's Guide (Methods of Recovering a Man Overboard). (HARDCOPY)

D. Study Questions:

1. What are the advantages and disadvantages of an Anderson Turn?

2. What are the advantages and disadvantages of a Racetrack Turn?

ASSIGNMENT SHEET

MOBOARD INTRO - TRACKING/CPA

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY types of manual and automated plotting used in navigation

2. IDENTIFY how vector equations are used to determine relative motion and true course and speed

3. USE the features of the maneuvering board to perform basic plotting techniques

4. IDENTIFY use of the maneuvering board contact management and collision avoidance

C. STUDY ASSIGNMENT: NONE

D. Study Questions: NONE

ASSIGNMENT SHEET

BASIC SHIPHANDLING II UNREP

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. UNDERSTAND basic UNREP/CONREP procedures, from coming alongside to breaking away

2. UNDERSTAND the fundamental UNREP/CONREP safety precautions and emergency conning procedures

3. CONDUCT emergency conning procedures

C. STUDY ASSIGNMENT:

1. Read pgs. 111-123 of the Watch Officer's Guide. (HARDCOPY)

D. Study Questions: NONE

ASSIGNMENT SHEET

MOBOARDS - CHANGE OF STATION/DIVTACS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEMONSTRATE taking station on a MOBOARD

2. IDENTIFY proper stationing techniques

C. STUDY ASSIGNMENT: NONE

D. Study Questions: NONE

ASSIGNMENT SHEET

MOBOARDS - WINDS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. FIND true winds using a MOBOARD
2. FIND ideal winds for landing a helicopter within the ship's wind envelope
3. DEMONSTRATE proper use of a wind wheel for finding desired winds

C. STUDY ASSIGNMENT: NONE

D. Study Questions: NONE

ASSIGNMENT SHEET

UNDERWAY WATCHSTANDING AND
BRIDGE WATCH ORGANIZATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the purpose and organization of the underway Bridge watch.
2. IDENTIFY the duties and responsibilities of the Officer of the Deck Underway.
3. STATE the duties and responsibilities of the Conning Officer Underway.
4. STATE the duties of the Helm Safety Officer.
5. IDENTIFY the duties and responsibilities of the enlisted watch teams underway.
6. IDENTIFY the physical preparations of Bridge watchstanders prior to relieving the watch.
7. STATE the information that should be obtained during a prewatch tour.
8. STATE the tasks and responsibilities for assuming a watch.
9. IDENTIFY the reports that are required during a watch.
10. IDENTIFY the principles and best practices for surface contact management and collision avoidance during a watch.
11. STATE the tasks and responsibilities for turning over a watch.
12. STATE the importance of using standard phraseology and "repeat backs" when issuing and acknowledging orders and making reports.

C. STUDY ASSIGNMENT:

1. Read Chapters 1-3 of the Watch Officer's Guide. (HARDCOPY)

2. Read OPNAVINST 3120.32 Standard Organization Regulations of the U.S. Navy (SORM) Pages 4-12 to 4-22 and 4-33 to 4-35.

D. Study Questions:

1. What is the role of the Navigator?

2. When is it required to have a Helm Safety Officer?

ASSIGNMENT SHEET

NAVDORM

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the purpose of the NAVDORM.

2. IDENTIFY the contents of each of the chapters and appendices of the NAVDORM.

3. DESCRIBE how to find information in the NAVDORM.

4. DESCRIBE the duties of watchstanders as detailed in the NAVDORM.

C. STUDY ASSIGNMENT:

1. Read Chapter 2 and Appendix C of COMNAVSURFORINST 3530.4, Navigation Department Organization and Regulations Manual (NAVDORM).

D. Study Questions:

1. What is the purpose of the NAVDORM?

2. What factors does the Navy believe to inhibit accurate navigation?

ASSIGNMENT SHEET

AIDS TO NAVIGATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the purpose and appearance of beacons and range markers.

2. IDENTIFY lights by relevant publications, color, and phase.

3. STATE buoyage systems currently in use.

4. IDENTIFY the meanings of buoy colors, sound signals, and buoy numbering and lettering.

5. DESCRIBE the types of buoys by their shapes and topmarks.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.3 (Fixed Aids to Navigation).

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.4 (Floating Aids to Navigation).

D. Study Questions:

1. What is the primary purpose of a buoy?

2. What are the five basic buoy shapes?

ASSIGNMENT SHEET

NAUTICAL CHARTS AND PUBS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY shipboard chart allowances, correction, and ordering procedures (CBT)

2. IDENTIFY the procedures used in basic navigational measurements (CBT)

3. IDENTIFY the role of chart scale in selecting the proper navigational charts.

4. IDENTIFY the reference lines and points of the terrestrial coordinate system.

5. IDENTIFY the chart projections used in terrestrial navigation.

6. STATE the purpose and use of Chart No. 1.

7. IDENTIFY the general information found on nautical charts.

8. IDENTIFY how topographic features are symbolized on nautical charts.

9. IDENTIFY how hydrographic features are symbolized on nautical charts.

10. IDENTIFY how aids to navigation are symbolized on nautical charts.

11. IDENTIFY how landmarks are symbolized on nautical charts.

12. IDENTIFY how areas, limits, tracks, and routes are symbolized on nautical charts.

13.STATE the publications used in navigation.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.1 (Interpreting Nautical Charts).

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.2 (Charts and Publications).

3. Skim Chart No. 1, Nautical Chart Symbols, Abbreviations, and Terms, Tenth Edition, National Geospatial-Intelligence Agency.

D. Study Questions:

1. What information does a scale of a chart represent?

2. What is the purpose of the Sailing Directions?

ASSIGNMENT SHEET

TIME

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the types of time used in terrestrial navigation.

2. STATE the standard time zones and how they are used.

3. PERFORM Greenwich Mean Time (GMT) and Zone Time (ZT) calculations.

4. IDENTIFY the timepieces used aboard ship and the procedures for adjusting a ship's time and date at sea.

C. STUDY ASSIGNMENT:

1. Review Time Zone Map.

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.10 (Basics of Time).

D. Study Questions:

1. How many time zones is the Earth divided into?

2. Where is the International Date Line located?

ASSIGNMENT SHEET

COMPASS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the main developments in the history of the compass and the various types of compasses.

2. IDENTIFY the principles of magnetic compass theory and how they affect the magnetic compass.

3. IDENTIFY the appropriate notations to record compass headings and bearings.

4. IDENTIFY the components of the magnetic compass.

5. IDENTIFY the advantages, disadvantages, and uses of the magnetic compass. (DOSG NSS 1.6)

6. IDENTIFY the principles and functions of the fluxgate compass.

7. DETERMINE local variation.

8. IDENTIFY the methods to determine and correct for deviation.

9. DESCRIBE the shipboard degaussing system.

10. CALCULATE compass error.

11. DETERMINE the magnetic course to steer.

12. IDENTIFY basic operational principles of the gyrocompass.

13. IDENTIFY the components of the gyrocompass.

14. IDENTIFY process steps required to ready the gyrocompass for underway operations.

15. IDENTIFY systems that use gyrocompass inputs.

16. IDENTIFY the actions to be taken in response to the loss of the gyrocompass.

17. IDENTIFY the sources of gyrocompass error.

18. IDENTIFY the terrestrial methods to check the accuracy of the gyrocompass.

19. PERFORM gyrocompass error calculations.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.6 (The Magnetic Compass).

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.7 (Magnetic Compass Error Correction).

3. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.8 (The Gyrocompass).

4. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.9 (Gyrocompass Error Corrections).

D. STUDY QUESTIONS:

1. What is deviation and variation?

ASSIGNMENT SHEET

RULES OF THE ROAD I

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the five parts of the Rules of the Road.

2. STATE the General Rules of the Road.

3. STATE the Steering and Sailing Rules of the Road.

4. STATE the Lights and Shapes that are in the Rules of the Road.

5. STATE the Sounds and Light Signals that are in the Rules of the Road.

C. STUDY ASSIGNMENT:

1. Read COMDTINST M16672.2D, Navigation Rules (COLREGS) Rules 1-10.(HARDCOPY)

2. Complete the DOSG Officer of the Deck Module 4.1 (Rules of the Road).

3. Complete the DOSG Officer of the Deck Module 1.7 (Introduction to Navigation Lights).

D. STUDY QUESTIONS:

1. When is a lookout required?

2. What are the factors used to determine safe speed?

ASSIGNMENT SHEET

RULES OF THE ROAD II

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the five parts of the Rules of the Road.

2. STATE the General Rules of the Road.

3. STATE the Steering and Sailing Rules of the Road.

4. STATE the Lights and Shapes that are in the Rules of the Road.

5. STATE the Sounds and Light Signals that are in the Rules of the Road.

C. STUDY ASSIGNMENT:

1. Read COMDTINST M16672.2D, Navigation Rules (COLREGS) Rules 11-19. (HARDCOPY)

2. Complete the DOSG Officer of the Deck Module 4.1 (Rules of the Road) and 4.2 (Navigation in Restricted Visibility).

D. STUDY QUESTIONS:

1. Define an overtaking situation according to the rules?

2. Define vessel hierarchy according to the rules.

ASSIGNMENT SHEET

RULES OF THE ROAD III

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the five parts of the Rules of the Road.

2. STATE the General Rules of the Road.

3. STATE the Steering and Sailing Rules of the Road.

4. STATE the Lights and Shapes that are in the Rules of the Road.

5. STATE the Sounds and Light Signals that are in the Rules of the Road.

C. STUDY ASSIGNMENT:

1. Read COMDTINST M16672.2D, Navigation Rules (COLREGS) Rules 20-31. (HARDCOPY)

2. Complete the DOSG Officer of the Deck Module 4.2 (Navigation in Restricted Visibility).

D. Study Questions:

1. What type of light do vessels use as a towing light?

2. What type of day shape is used for a vessel engaged in trawling?

ASSIGNMENT SHEET

RULES OF THE ROAD IV

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the five parts of the Rules of the Road.

2. STATE the General Rules of the Road.

3. STATE the Steering and Sailing Rules of the Road.

4. STATE the Lights and Shapes that are in the Rules of the Road.

5. STATE the Sounds and Light Signals that are in the Rules of the Road.

C. STUDY ASSIGNMENT:

1. Read COMDTINST M16672.2D, Navigation Rules (COLREGS) Rules 32-37. (HARDCOPY)

2. Complete the DOSG Officer of the Deck Module 4.2 (Navigation in Restricted Visibility)

D. STUDY QUESTIONS:

1. What type of sound signal is used to indicate a vessel is getting underway from a dock or pier in Inland waters?

2. What is the duration of a prolonged blast?

ASSIGNMENT SHEET

PILOTING 1

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY basic terms and symbols associated with the navigational plot.

2. IDENTIFY terms and symbols associated with plotting a course and speed.

3. STATE the six rules of dead reckoning.

4. IDENTIFY the tools and procedures used to measure and plot distance and direction on a chart.

5. PLOT a dead reckoning track.

6. IDENTIFY the factors affecting the accuracy of a dead reckoning plot.

7. STATE the procedure used to obtain and plot a fix by using three visual bearings.

8. DESCRIBE the procedure to obtain and plot a fix by using three radar ranges.

9. IDENTIFY the procedures for determining set and drift while piloting.

10. COMPUTE the course to steer while piloting to regain and maintain track.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 2.1 (Introduction to Terrestrial and Coastal Navigation).

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 2.2 (Piloting).

3. Complete the DOSG Navigation, Seamanship and Shiphandling Module 2.3 (Dead Reckoning).

4. Complete the DOSG Navigation, Seamanship and Shiphandling Module 2.4 (Plot a Terrestrial Fix).

5. Complete the DOSG Navigation, Seamanship and Shiphandling Module 2.5 (Compute the Course to Steer).

D. STUDY QUESTIONS:

1. What shape is drawn on a nautical chart to indicate a visual fix?

2. What are the six rules of dead reckoning?

ASSIGNMENT SHEET

GLOBAL POSITIONING SYSTEM (GPS)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the importance of the Global Positioning System in regard to navigational history.

2. IDENTIFY the common uses of the Global Positioning System.

3. STATE the advantages of Global Positioning System capabilities.

4. LIST the three major segments of the Global Positioning System.

5. IDENTIFY how a Global Positioning System receiver determines its correct position using satellites as reference points.

6. LIST factors that affect Global Positioning System accuracy.

7. DESCRIBE sources of Global Positioning System errors.

8. IDENTIFY the steps to conduct Global Positioning System start-up and self-test procedures. (CBT)

9. IDENTIFY the steps to enter a Global Positioning System waypoint. (CBT)

10. IDENTIFY the procedures to interpret Global Positioning System navigation data. (CBT)

11. SUMMARIZE the history of chart datums in navigation.

12. IDENTIFY the principles of chart datums.

13. STATE chart datum mismatch and its impact on modern navigation.

14. IDENTIFY the limitations of commercial Global Positioning System receivers.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module. 3.1 (What is the Global Positioning System?)

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.2 (Principles of GPS)

3. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.3 (GPS Errors and Accuracy)

4. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.4 (Operations at Sea)

5. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.5 (Chart Datums)

6. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.6 (Commercial GPS Receivers)

D. STUDY QUESTIONS:

1. How many satellites are required to acquire a 2 Dimensional Fix?

2. What is the standard datum for all National Geospatial Intelligence Agency (NGA) charts?

ASSIGNMENT SHEET

VOYAGE PLANNING

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. Given appropriate materials and information and times of departure and arrival, ORGANIZE a transoceanic voyage, IAW fleet/force directives.

2. Given appropriate materials and information and times of departure and arrival, PLAN a transoceanic voyage, IAW fleet/force directives.

3. RETRIEVE specific information pertaining to the preparation of movement reports.

4. RETRIEVE specific information pertaining to the preparation of an OTSR request/daily report message IAW NAVMETOCCOMINST 3144.1(Ser). Naval Meteorology and Oceanography Command Instruction.

C. STUDY ASSIGNMENT: NONE

D. STUDY QUESTIONS:

1. How many days prior to getting underway should you request an Optimal Track Ship Routing (OTSR)?

2. What factors are taken into consideration to calculate PIM?

ASSIGNMENT SHEET

PILOTING 2

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the tools used to plot radar fixes.

2. DESCRIBE the procedure to obtain and plot a fix by using three radar ranges.

3. DESCRIBE the procedure to obtain and plot a fix by using three radar bearings.

4. DESCRIBE the procedure to obtain and plot a fix by using three radar tangents.

C. STUDY ASSIGNMENT:

1. Complete DOSG Navigation, Seamanship and Shiphandling Module 3.10 (Radar Ranges and Bearings)

D. STUDY QUESTIONS:

1. How many arcs are needed for a fix?

2. Can you use a buoy for an electronic fix?

ASSIGNMENT SHEET

WEATHER

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE Air mass, Cold/warm/occluded front, and Tropical cyclone.

2. IDENTIFY the purpose of the shipboard weather instruments.

3. DESCRIBE a tropical cyclone in both the northern and southern hemisphere.

4. IDENTIFY the information available on Naval Oceanography Center weather messages.

5. DESCRIBE the responsibilities of the OOD in heavy weather.

6. IDENTIFY the significant factors in the formation and prediction of fog.

7. DESCRIBE the requirements for logging and reporting weather information

C. STUDY ASSIGNMENT:

1. Complete DOSG Officer of the Deck Module 5.1 (Introduction to Meteorology)

2. Complete DOSG Officer of the Deck Module 5.2 (Atmospheric Circulation)

3. Complete DOSG Officer of the Deck Module 5.3 (Ocean Currents)

4. Complete DOSG Officer of the Deck Module 5.4 (Waves and Sea States)

5. Complete DOSG Officer of the Deck Module 5.5 (Weather Observation, Records, Reports and Forecasts)

6. Complete DOSG Officer of the Deck Module 5.6 (Heavy Weather)

D. STUDY QUESTIONS:

1. What is the purpose of Optimum Track Ship Routing (OTSR) service?

2. How should you evade the dangerous semicircle of a Hurricane if you are in the Northern Hemisphere?

ASSIGNMENT SHEET

HARBOR NAV PACKAGE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE the evolutions and duties of the navigation team during Special sea and anchor detail.

2. IDENTIFY the importance of running a degaussing range.

3. DESCRIBE the swept channel navigation exercise.

4. DESCRIBE a precision anchorage.

5. DESCRIBE a low visibility exercise.

6. DESCRIBE a loss of gyro exercise.

7. PREPARE all charts and briefs required to navigate designated harbor transit.

8. IDENTIFY and man all primary stations required for the transit in the COVE simulator.

9. NAVIGATE the designated harbor from entrance to assigned pier.

10. DISCUSS criteria for selecting a proper anchorage.

11. MAKE all navigation preparations for anchoring.

12. DISCUSS actions to control environmentals effecting an anchoring situation.

13. DETERMINE swing circle and drag circle for a given anchorage position.

C. STUDY ASSIGNMENT:

1. Complete DOSG Officer of the Deck Module 2.2 (Sea and Anchor Detail)

2. Complete DOSG Officer of the Deck Module 2.4 (Anchoring)

D. STUDY QUESTIONS:

1. How do you determine the radius of the swing and drag circles?

2. Describe the steps that occur upon discovery of a loss of gyro.

ASSIGNMENT SHEET

ELECTRONIC NAVIGATION AND VOYAGE MANAGEMENT SYSTEM (VMS)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the advantages and disadvantages of electronic chart systems.

2. IDENTIFY the standards, policies, and requirements the ECDIS-N standard places upon electronic navigational systems.

3. STATE the principal types of electronic charts.

4. IDENTIFY the characteristics and limitations of vector and raster charts.

5. IDENTIFY the importance of charts in relation to Tactical Ocean Data.

6. IDENTIFY the types and functions of the components that make up an Electronic Chart Display and Information System-Navy compliant Voyage Management System.

7. IDENTIFY the information supplied by the shipboard sensors that is displayed or accessed via the Voyage Management System menu structure.

C. STUDY ASSIGNMENT:

1. Complete DOSG Navigation, Seamanship and Shiphandling Module 3.11 (What is ECDIS-N?)

2. Complete DOSG Navigation, Seamanship and Shiphandling Module 3.12 (Electronic Charts)

3. Complete DOSG Navigation, Seamanship and Shiphandling Module 3.13 (VMS Familiarization)

D. STUDY QUESTIONS:

1. What is the primary purpose of VMS?

2. What does the Inertial Navigation System (INS) provide to Navigation Sensor System Interface (NAVSSI)?

ASSIGNMENT SHEET

ARPA OPERATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE and UTILIZE the following functions of the radar/ARPA.

- Standby/Power
- Gain
- FTC
- STC
- EBL
- VRM
- Range Scale
- Range Rings
- True and Relative Modes
- Heads up/Course Up/North Up Modes
- Acquire
- Auto Acquire
- Parallel Index Lines
- True/Relative Vectors
- Vector Lengths

2. Given a radar and current weather conditions, EXPLAIN the effects that various weather conditions will have on radar tracking.

3. Given a radar and current weather conditions, DESCRIBE the various characteristics of a radar target that can affect the quality of the return signal.

4. Given a radar and current weather conditions, DESCRIBE the affect that distortion may have on the return signal.

5. Given a radar and current weather conditions, DESCRIBE the limitations on the signal received from weak and low lying coastal areas.
6. Given a radar picture with a fixed object, use the VRM function to DETERMINE the range to the object to within 100 yards.

7. Given a radar picture with a fixed object, use the EBL function to DETERMINE the bearing to the object to within 2 degrees.

8. Given a radar contact, ACQUIRE the contact to begin ARPA tracking.

9. Given an ARPA contact, DETERMINE a CPA and Time of CPA. Given a radar contact, RUN a Trial Maneuver on ARPA.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.7 (Fundamentals of Radar).

2. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.8 (Radar Display Modes).

3. Complete the DOSG Navigation, Seamanship and Shiphandling Module 3.9 (Setting Up and Maintaining a Radar).

4. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.1 (Contact Management and Collision Avoidance).

5. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.2 (Radar Interpretation).

6. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.3 (Radar Contact Management).

7. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.4 (Parallel Indexing).

8. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.5 (Automatic Radar Plotting Aid Principles).

9. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.6 (Setting Up and Maintaining ARPA Display).

10. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.7 (ARPA operations: Target Acquisition and Tracking).

11. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.8 (ARPA Operations: Collision Avoidance).

12. Complete the DOSG Navigation, Seamanship and Shiphandling Module 5.9 (ARPA Operations: Other Functions).

D. STUDY QUESTIONS:

1. What does RADAR stand for?

2. What are the three primary uses of ARPA?

ASSIGNMENT SHEET

TIDES AND CURRENTS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the characteristics and causes of tides and tidal currents.

2. LIST the reference publications used to predict tides and tidal currents.

3. DESCRIBE the effect of current on your ship at sea and in restricted waters

4. INTERPRET tide and tidal current graphs.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Navigation, Seamanship and Shiphandling Module 1.5 (Tides and Currents).

D. STUDY QUESTIONS:

1. What is the definition of a tide?

2. What is a neap tide?

ASSIGNMENT SHEET

NAVIGATION BRIEF

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. Identify key watch stations manned during a sea and anchor evolution, IAW the NAVDORM.

2. Describe the Navigators role in preparing and delivering the Navigation brief, IAW the NAVDORM.

3. Identify the key information presented by the Navigator, to include special considerations, timeline, and weather, IAW the NAVDORM.

4. Describe the Conning Officers role in the Navigation brief, to include track and maneuvering intentions, IAW the NAVDORM.

5. Identify the key piloting and track data that should be discussed, IAW the NAVDORM.

6. DESCRIBE emergency action response procedures, to include engineering, force protection, and navigational casualties, IAW the NAVDORM.

C. STUDY ASSIGNMENT:

1. Read Appendix B of COMNAVSURFORINST 3530.4, Navigation Department Organization and Regulations Manual (NAVDORM).

D. STUDY QUESTIONS:

1. Who must attend a Navigational Brief?

2. List the items of a Navigational Brief that are briefed by the Conning Officer.

ASSIGNMENT SHEET

DECK SEAMANSHIP AND SAFETY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the usage and characteristics of the standard terms used in marlinspike seamanship.

2. IDENTIFY the purpose and appearance of deck equipment and fittings.

3. DISCUSS the difference between synthetic, natural fiber, and Kevlar mooring lines.

4. IDENTIFY the characteristics, construction, and use of wire rope and line.

5. IDENTIFY the proper handling practices for wire rope and fiber line.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Officer of the Deck Fundamentals Module 1.1 (Ship Terminology).

2. Complete the DOSG Officer of the Deck Fundamentals Module 1.3 (Deck Seamanship).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

CONREP

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS STREAM and Highline solid cargo/personnel transfer rig components.

2. DISCUSS STREAM and Astern refueling rig components.

3. DESCRIBE the sequence of component involvement so as to accomplish transfer operations and then breakaway procedures upon completion of transfer.

4. EXPLAIN how this system interfaces with the fuel transfer systems, potable water system, and feed water system.

5. STATE the personnel assigned to a rig station and the color worn by them.

6. DESCRIBE different signals and communications utilized.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Officer of the Deck Fundamentals Module 2.1 (Connected Replenishment/Underway Replenishment).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

POLLUTION CONTROL AND MARINE MAMMAL PROTECTION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE Hazardous Material (HM), Hazardous Waste, Oily Waste, and Waste Oil

2. DISCUSS the legislation that governs the discharge of oily waste

3. STATE the discharge limitations for black water, gray water, plastics, solid waste

4. DESCRIBE the actions required for an oil spill inside the U.S. Contiguous waters and outside U.S. Contiguous water

5. DISCUSS actions required for an oil spill inport

6. DISCUSS all hands responsibilities for Hazardous Material Control and Management (HMC&M) to include proper stowage and marking of various HM containers

7. DISCUSS the Navy's policy with regards to marine species protection particularly the Protective Measures Assessment Protocol (PMAP)

8. STATE the reporting requirements for a whale strike or taking of a marine mammal

C. STUDY ASSIGNMENT:

1. Read Appendix J, Watch Officers Guide (Summary of Navy Pollution Control Discharge Restrictions)

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

TOWING

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE Catenary and In Step.

2. DESCRIBE equipment used for towing.

3. DISCUSS the four methods for approaching a disabled vessel needing a tow, as well as environmental conditions to consider.

4. DISCUSS actions taken when getting underway, changing course or speed, or when towing vessel loses propulsion.

C. STUDY ASSIGNMENT:

1. Read pages 196-199, Naval Shiphandler’s Guide

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

SMALL BOAT OPERATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS the components of small boat structure to include: hull, rudder, outdrives, handrails, hoisting sling, sampson post.

2. DISCUSS the engineering systems to include starting, fuel, drainage, and outdrive systems.

3. DISCUSS the marine reduction gear, jet drive and outboard motor.

4. DISCUSS the instrument panel.

5. DESCRIBE what indications and warnings there are if the system is malfunctioning.

6. EXPLAIN the safety precautions that must be observed during operation of a small boat.

7. STATE the basic duties of each member of the small boat crew: coxswain, boat engineer, bow hook, and boat officer.

8. DISCUSS the hoisting/lowering capability of U.S. naval vessels.

9. DISCUSS the procedures and precautions for launching and recovering small boats during calm and heavy weather.

10. DESCRIBE the equipage found on a small boat.

11. DISCUSS planing speed, pivot turns, preventing tripping and preventing a RHIB from becoming airborne.

12. DISCUSS rendering/receiving honors for officials embarked and between naval vessels.
13. DISCUSS boat hails during daylight and night and the proper procedure for embarking/disembarking personnel.

14. DISCUSS the flag staff insignia for embarked officers.

15. DISCUSS actions taken if conducting small boat operations during Colors.

16. LIST all required rescue boat equipment.

17. DISCUSS the duties of each member of the rescue boat crew.

18. DISCUSS SAR swimmer hand, flare, and light signals.

19. DISCUSS procedures to be followed when approaching and recovering a survivor in the water.

C. STUDY ASSIGNMENT:

1. Read Chapter 5 pages 5-2 to 5-15, NAVEDTRA 14343 Boatswain's Mate (Boats and Davits).

2. Read Chapter 6 pages 6-4 to 6-10, NAVEDTRA 14343 Boatswain's Mate (Boat Handling).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

ANCHORING/MOOR TO BUOY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE the different types of anchors used by US naval vessels.

2. DESCRIBE the anchor and anchor chain components.

3. DESCRIBE the anchor windlass system components to include: capstan, wildcat, mechanical brake, electrical brake, and control box.

4. DISCUSS safety precautions during anchoring evolutions.

5. DISCUSS the procedures and reports made for making the anchor ready for letting go and for properly setting the anchor once dropped.

6. DISCUSS the environmental and geographical considerations taken into account in determining the scope of anchor chain to employ.

7. STATE the chain-to-water depth rule-of-thumb ratio.

8. STATE frequency and information contained in an anchor report.

9. DISCUSS the Mediterranean moor with respect to procedures, advantages and disadvantages.

10. DEFINE buoy mooring terms.

11. DESCRIBE the trolley method and ordinary (dip rope) method of mooring to a buoy.

12.COMPARE mooring to a buoy to anchoring.

13.DISCUSS the buoy party duties and safety precautions that apply to the evolution.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Officer of the Deck Fundamentals Module 2.4 (Anchoring)

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

MOORING

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the numbering sequence for mooring lines.

2. DISCUSS the purpose of breast, forward spring, and after spring lines.

3. IDENTIFY standard commands to line handlers and actions performed in response to the commands.

4. IDENTIFY the preparations and shiphandling techniques required to moor to a pier.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Officer of the Deck Fundamentals Module 2.3 (Mooring)

E. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

WELL DECK OPERATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DESCRIBE the standard terminology utilized in well deck operations.

2. DISCUSS the responsibilities and duties of the Condition 1A Detail.

3. DISCUSS the significant differences for ship preparation when landing and launching AAVs, LCACs, and LCUs.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 3.3 (Amphibious Ships and Craft).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

FLIGHT DECK OPERATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS the communications between aircraft, flight control and ships with respect to UHF, light signals, hand signals, and signal flags.

2. DISCUSS the envelope necessary for air operations.

3. DESCRIBE the responsibilities of the flight deck crew.

4. DESCRIBE the Crash Crew equipment.

5. DESCRIBE the considerations for conducting a HIFR/VERTREP.

6. DISCUSS the purpose, capabilities, limitations, and ship lighting configuration for NVG operations.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Officer of the Deck Fundamentals Module 2.5 (Flight Quarters).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

MAINTENANCE U - SPOT CHECKS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. Describe the function and purpose of PMS (Planned Maintenance System).

2. EXPLAIN the purpose of the 3M program.

3. DESCRIBE the function and purpose of the various documents associated with the 3M Program (LOEP, MIP, MRC, EGL, etc).

4. DESCRIBE the function and purpose of spotcheck program.

C. STUDY ASSIGNMENT:

1. Review OPNAVINST 5100.19 (Series) Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat.

2. Review NAVSEAINST 4790.8 (Series) Ships' Maintenance and Material Management (3-M) Manual

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

MAINTENANCE U – ZONE INSPECTIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY common material discrepancies found throughout the fleet.

2. EXPLAIN the importance of ZIDLs.

3. EXPLAIN the function of CCOLs.

C. STUDY ASSIGNMENT:

1. Review COMNAVSURFORINST 3120.1 Zone Inspections.

2. Read section 6.2.12 of OPNAVINST 3120.32D (SORM) (pgs 6-38 to 6-42). Zone Inspection Bill.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

DC ORGANIZATION AND ADMINISTRATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the duties and responsibilities of the Damage Control Administration and In-port Damage Control Organization.

2. IDENTIFY the duties and responsibilities of the Damage Control Repair Party Organization.

3. IDENTIFY the duties and responsibilities of the Damage Control Battle Organization Underway.

C. STUDY ASSIGNMENT:

1. Read Chapter 2 of NAVEDTRA 14057 (Damage Controlman)

2. Complete the DOSG, Lesson 1.1, "Damage Control (DC) Organization & Administration", in the Damage Control Module.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

DC COMMUNICATION AND SYMBOLOGY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DRAW the DC symbols used in rapid plotting.

2. STATE the five parts of a message.

3. STATE the rules for circuit discipline.

4. STATE the titles of the sound-powered telephone circuits and DISCUSS their uses.

5. IDENTIFY the following system components and component parts for: IVCS, J-DIAL, General Anouncing System (1MC), Sound powered telephones, Wire-free, PTT switch.

6. DISCUSS how the loss of electrical power affects the operation of the different communications systems.

7. DISCUSS how the following outside influences (EMCON, RFI/EMP, HERO) affect the operation of the communications systems.

C. STUDY ASSIGNMENT: NONE

1. Complete the DOSG Damage Control Module 1.2 (Damage Control Communications and Symbology).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

FIREMAIN AND DRAINAGE SYSTEMS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the function, location, and operating principles of loop and composite firemain systems.

2. IDENTIFY the function, location, and operating principles of single main firemain systems.

3. IDENTIFY the function, location, and operating principles of vertical offset loop firemain systems.

4. IDENTIFY the function, location, and operating principles of installed drainage systems.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Damage Control Module 2.3 (Firemain and Drainage Systems).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

STABILITY

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the design characteristics of naval ships relating to watertight integrity and damage resistance.

2. IDENTIFY the requirements for all material conditions of readiness and associated watertight fittings.

3. IDENTIFY the purpose and procedures for preparing and maintaining the DC Closure Log and Compartment Check Off List.

4. IDENTIFY the procedures for inspecting watertight doors, hatches, and scuttles.

5. IDENTIFY the basic terminology and principles of ship stability.

6. IDENTIFY the effects of weight additions, shifts, and removals on the center of buoyancy, center of gravity, metacentric height, righting arm, and roll period.

7. IDENTIFY the elements of the free surface and free communication effects and how they affect stability.

8. IDENTIFY actions to limit floodable length damage and damage when aground.

9. IDENTIFY lessons learned from liquid loading case studies.

10. IDENTIFY reasons for ballasting and steps to increase stability.

C. STUDY ASSIGNMENT:

1. Read Chapter 3 of NAVEDTRA 14057 (Damage Controlman)

2. Complete the DOSG Damage Control Module 1.3 (Stability).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

FIXED DC SYSTEMS AND THEIR EXTINGUISHING AGENTS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the function, location and safety considerations of AFFF systems.

2. IDENTIFY the function, location, operating principles, and safety considerations of fixed CO2 system.

3. IDENTIFY the function, location, operating principles, and safety considerations of the HALON 1301 and HFP systems.

4. IDENTIFY the function, location, operating principles, and safety considerations of the magazine sprinkler and water mist systems.

5. IDENTIFY the function, location, operating principles, and safety considerations of the Gaylord Hood and APC range guard fire suppression systems.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Damage Control Module 2.1 (Fire Suppression Systems)

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

PERSONAL PROTECTIVE EQUIPMENT

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the types of personal protective clothing and the procedures for their use

2. IDENTIFY the components and operation of the Self-Contained Breathing Apparatus (SCBA)

3. IDENTIFY the procedures to don the Self-Contained Breathing Apparatus (SCBA)

4. IDENTIFY the components, operation, and donning procedures of the Emergency Escape Breathing Device (EEBD)

C. STUDY ASSIGNMENT: NONE

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

BASIC GAS FREE ENGINEERING

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the types of shipboard hazardous atmospheres.

2. IDENTIFY the basic elements of the Gas Free Engineering program.

3. IDENTIFY hot work operations and associated safety procedures and precautions.

4. IDENTIFY the function, location, component parts, operating limits, interfaces, and safety considerations for ventilation and desmoking systems.

5. IDENTIFY when a shipboard hazardous environment exists and when Gas Free engineering is required.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Damage Control Module 1.4 (Basic Gas Free Engineering).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

CBR-N

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the basic terms and concepts of chemical, biological, and radiological-nuclear hazards.

2. IDENTIFY the function, location, and operating principles of CBR-N personal protective equipment.

3. IDENTIFY the equipment and methods used for collective protection against CBR-N hazards.

4. IDENTIFY CBR-N detection and treatment equipment.

5. IDENTIFY the CBR-N procedures for decontaminating/treating personnel and material.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Damage Control Module 5.1 (CBR-N Fundamentals).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

DC ELECTRICAL

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the function and operation of portable cables and their phase identification markings.

2. IDENTIFY the function and operation of Riser terminals and Bulkhead terminals.

3. IDENTIFY the function and operation of Switchboard terminals and casualty power circuit breaker.

4. DISCUSS the sequence of component involvement to accomplish: rigging casualty power, securing casualty power, unrigging casualty power.

5. DISCUSS the safety precautions in regards to rigging casualty power.

C. STUDY ASSIGNMENT: NONE

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

ENGINEERING ORGANZIATION

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. IDENTIFY the role of the Engineering Department Organization and Regulations Manual (EDORM) and the duties and responsibilities of the Engineering Department IAW COMNAVSURFORINST 3540.3 (EDORM).

2. STATE the information available in the Engineering Operational Sequencing System, Engineering Operational Procedures, and Engineering Operational Casualty Control IAW the Engineering Operational Sequencing System.

3. IDENTIFY events that require the Chief Engineer’s permission IAW COMNAVSURFORINST 3540.3 (EDORM).

4. IDENTIFY events that require the Commanding Officer's permission IAW COMNAVSURFORINST 3540.3 (EDORM).

5. EXPLAIN the contents of the Main Space Fire Doctrine IAW COMNAVSURFORINST 3541.1 Repair Party Manual.

6. DESCRIBE the Engineering Log, Bell book, Bell log/data log, Fuel and water report, Fueling memorandum, DC closure log IAW COMNAVSURFORINST 3540.3 (EDORM).

7. DESCRIBE the information contained in the Engineering standing orders, Engineering Officer night order book, Light off orders and Temporary Standing Orders IAW COMNAVSURFORINST 3540.3 (EDORM).

8. STATE the purpose of the Electrical safety program, Tag-out Program, Environmental and Natural Resources Program, Fuel Quality Management (FOQM), Lube Oil Quality Management (LOQM), Damage Control Training Team (DCTT), Engineering Training Team (ETT), Gas-free engineer, Gage Calibration

Program, Quality Maintenance Program IAW COMNAVSURFORINST 3540.3 (EDORM).
9. IDENTIFY the elements of the tag-out program IAW NAVSEA Technical Publication S0400-AD-URM-010/TUM, Tag-out Users Manual.

10. IDENTIFY the elements of a ship's Restricted Maneuvering Doctrine IAW COMNAVSURFORINST 3540.3 (EDORM).

11. IDENTIFY the components of the Physical Security Program IAW COMNAVSURFORINST 3540.3 (EDORM).

12. IDENTIFY the role of the Joint Fleet Maintenance Manual in shipboard engineering IAW CINCLANTFLT/PACFLTINST 4790.3, Joint Fleet Maintenance Manual.

C. STUDY ASSIGNMENT:

1. Read Chapters 1, 2, 4, 5 of COMNAVSURFORSINT 3540.3a (EDORM).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

NAVY SAFETY AND OCCUPATIONAL HEALTH

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the basic terms and functions NAVOSH programs.

2. DESCRIBE Division Officer Responsibilities with respect to NAVOSH programs.

C. STUDY ASSIGNMENT:

1. Read OPNAVINST 5100.19E, NAVOSH Manual, Vol 1. Section B.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

MECHANICAL FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the basic terms and functions of piping, valves, and pumps.

2. IDENTIFY the function, types, parts, operation, and interfaces of piping, valves, and pumps.

C. STUDY ASSIGNMENT:

1. Read NSTM 503 Pumps, Section 1, 2.

2. NSTM 505 Piping, Section 1.

E. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

ELECTRICAL FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the principles and components of electrical power generation.

2. IDENTIFY the general safety precautions for electricity and electrical equipment

C. STUDY ASSIGNMENT:

1. NSTM 320 Electric Power Distribution Systems, Section 1.

2. NSTM 300 Electric Plants, Section 1, 2.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

LUBE OIL

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL ENGINES.IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL FUEL OIL SERVICE SYSTEM.

2. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL LUBE OIL SYSTEM.

3. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL LUBE OIL SYSTEM.

C. STUDY ASSIGNMENT:

1. Read NSTM 262 Lube Oil, Section 1, 3.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

FUEL OIL

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. DESCRIBE the fuel oil fill, transfer, and purification system to include the location, operating parameters and safety features of each major component.

2. DESCRIBE the main fuel oil system to include the operating parameters and safety features of each major component.

3. DESCRIBE the fuel oil pump logic sequence.

4. DISCUSS the testing requirements for fuel oil

C. STUDY ASSIGNMENT:

1. Read NSTM 541 Fuel Oil, Section 1, 2, 3, 4.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

POWER TRANSMISSION FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the basic terms and functions of a power transmission. IDENTIFY the function, location, component parts, operation, and interfaces of the propulsion drive train system.

2. IDENTIFY the safety precautions for the propulsion drive train system.

3. IDENTIFY the safety precautions for the propulsion drive train system.

C. STUDY ASSIGNMENT:

1. Read NSTM 241 Reduction Gears, Section 1, 2.

2. Read NSTM 244 Propulsion Bearings, Section 1.

3. Read NSTM 245 Propellers, Section 1

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

TAGOUT

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the principles and components of electrical power generation.

2. IDENTIFY the general safety precautions for electricity and electrical equipment.

C. STUDY ASSIGNMENT:

1. Read the entire Tag-out User's Manual (TUM).

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

POTABLE WATER

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. IDENTIFY the basic types and terms of distilling plants. IDENTIFY the components and operation of submerged-tube and flash-type distillers.

2. IDENTIFY the components and operation of reverse osmosis desalination plants.

3. IDENTIFY the purpose and components of potable water systems.

4.IDENTIFY safety precautions associated with potable water systems.

C. STUDY ASSIGNMENT:
1. Read NSTM 531 Vol. 1: Low-Pressure Distilling Plants, Section 1

2. Read NSTM 531 Vol. 3: Reverse Osmosis Desalination Plants, Section 1.

3. Read NSTM 533 Potable Water Systems, Section 1, 2.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

HIGH PRESSURE AIR

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. Describe the basic theory and requirements of the high pressure air system.

2. Utilize a line drawing of high pressure air to describe its flow path from high pressure air compressor to user systems.

3. Explain the basic components of the high pressure air compressor.

4. Explain the operation of the high pressure air compressor.

5. Utilize a diagram of the high pressure air compressor to describe the sea water, fresh water, air and mechanical sub-assemblies.

C. STUDY ASSIGNMENT:

1.Read NSTM 551 Compressed Air Plants and Systems, Section 1, 2,

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

LOW PRESSURE AIR

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. Describe the function and structure of the low pressure air system.

2. DESCRIBE the purpose and major components of the ship service air/control air concept.

3. DESCRIBE the purpose and major components of the vital/nonvital air concept.

4. DESCRIBE the purpose and function of Air Quality Control.

5. DESCRIBE the function and structure of the common shipboard Low Pressure Air Compressor (LPAC).

6. EXPLAIN the safety concerns of the low pressure air system.

C. STUDY ASSIGNMENT:

1. Read NSTM 551 Compressed Air Plants and Systems, Section 1, 2, 4

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

REFRIGERATION FUNDAMENTALS

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. DISCUSS the fundamental concepts and definitions of the shipboard refrigeration.

2. DISCUSS the refrigeration cycle.

3. DISCUSS the shipboard application of refrigeration systems.

4. DISCUSS the function of a typical refrigeration compressor plants.

5. DISCUSS the safety precautions when dealing with refrigeration systems.

C. STUDY ASSIGNMENT:

1. Read NSTM 516, Refrigeration, Section 1.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

STEERING

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B.ENABLLING OBJECTIVES:

1. IDENTIFY the safety precautions of compressed air systems.

2. IDENTIFY the location, function, and components of the steering system.

3. IDENTIFY the operation of the steering system.

4. IDENTIFY the different steering modes.

5. IDENTIFY the procedures for conducting steering gear tests in accordance with the Planned Maintenance System and Maintenance Requirement Card.

6. IDENTIFY the safety precautions for steering systems.

C. STUDY ASSIGNMENT:

1. Read NSTM 562 Steering, Section 1, 2, 3.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

STEAM FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. DESCRIBE and EXPLAIN the laws & concepts of the basic steam cycle, design, construction and operation of propulsion plant equipment.

2. DESCRIBE the four phases of the basic steam cycle.

3. DESCRIBE a drop of water through the basic steam cycle, listing all major components.

4. DESCRIBE the types of heat transfer that occur in naval steam propulsion plants.

C. STUDY ASSIGNMENT:

1. Read NSTM 221 Boilers, Section 1.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

DIESEL FUNDAMENTALS

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL ENGINES.

2. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL FUEL OIL SERVICE SYSTEM.

3. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL LUBE OIL SYSTEM.

4. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL JACKET WATER COOLING SYSTEM.

5. IDENTIFY the basic terminology, components, function, operation, and safety precautions for DIESEL PROPULSION CONTROL SYSTEM.

C. STUDY ASSIGNMENT:

1. Read NSTM 233, Section 1

2. Read NAVEDTRA 14331, Engineman 3, Chapter 2, 6, 7, 8.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

GAS TURBINE FUNDAMENTALS

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. IDENTIFY the principles and components of electrical power generation.

2. IDENTIFY the general safety precautions for electricity and electrical equipment.

C. STUDY ASSIGNMENT:

1. NSTM 234 Marine Gas Turbines, Section 1.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

ENGINEERING FOR THE OOD

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

(GAS TURBINE)

1. As the OOD, DESCRIBE the basic principles of engineering casualty response in order to restore the previous plant condition and to preserve life and equipment.
2. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for engine casualties.
3. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for shaft casualties.
4. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for CRP casualties.
5. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for steering casualties.
6. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for electrical casualties.
7. As the OOD, IDENTIFY the indications, immediate actions, and controlling actions for integrated casualties

C. STUDY ASSIGNMENT:

1. Scan the EOSS User’s Guide (EUG).

2. Scan your ship type’s EOCC.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

U.S. NAVY SHIP CAPABILITIES AND LIMITATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the primary missions and features of Nimitz class aircraft carriers.

2. IDENTIFY the primary missions and features of Ticonderoga-class guided missile cruisers.

3. IDENTIFY the primary missions and features of Arleigh Burke-class guided missile destroyers.

4. IDENTIFY the primary missions and features of Oliver Hazard Perry-class frigates.

5. IDENTIFY the primary missions and features of the Littoral Combat Ship.

6. IDENTIFY the primary missions and features of command ships.

7. IDENTIFY the primary missions and features of amphibious assault ships.

8. IDENTIFY the primary missions and features of amphibious transport ships.

9. IDENTIFY the primary missions and features of amphibious landing ships.

10. IDENTIFY the primary missions and features of landing craft and amphibious vehicles.

11. IDENTIFY the primary missions and features of nuclear attack submarines.

12. IDENTIFY the primary missions and features of nuclear strategic missile submarines.

13. IDENTIFY the primary missions and features of logistic support platforms.

14. IDENTIFY the primary missions and features of US special operations craft.

15. IDENTIFY the primary missions and features of US riverine craft.

16. IDENTIFY the primary missions and features of high-speed vessels.

17. IDENTIFY the primary missions and features of US mine countermeasures ships.

18. IDENTIFY the purpose and capabilities of the RGM-84 Harpoon

19. IDENTIFY the purpose and capabilities of the Tomahawk Land Attack Cruise Missile (TLAM)

20. IDENTIFY the purpose and capabilities of the Standard Missile.

21. IDENTIFY the purpose and capabilities of the RIM-7 Sea Sparrow Weapon System.

22. IDENTIFY the purpose and capabilities of the RIM-162 ESSM Weapon System.

23. IDENTIFY the purpose and capabilities of the RIM-116 RAM. IDENTIFY the purpose and capabilities of the SeaRAM Weapon System.

24. IDENTIFY the purpose and capabilities of the Mk 15 Close-In Weapon System.

25. DESCRIBE the mission of guns in naval warfare.

26. DEFINE the difference between maximum range and maximum effective range.

27. IDENTIFY the basic features of Naval gun systems.

28. IDENTIFY the BASIC components of the Naval gun system.

29. IDENTIFY standard Naval gunnery commands.

30. IDENTIFY the features of gunfire control systems.

31. IDENTIFY the features and equipment of minor caliber weapons, including crew-served weapons.

C. STUDY ASSIGNMENT:

1. Complete your Ship Specific Tactical Data Card

2. Complete the DOSG Maritime Warfare Module 3.2(Surface Combatants)

3. Complete the DOSG Maritime Warfare Module 3.3(Amphibious Ships and Craft)

4. Complete the DOSG Maritime Warfare Module 3.5(Submarines)

5. Complete the DOSG Maritime Warfare Module 3.6(Auxiliaries)

D. STUDY QUESTIONS:

1. What is the primary mission of a CVN?

2. What is the primary air search radar on a CG?

3. What are the different DDG flight classifications and their associated hull numbers?

4. What is the primary mission of the FFG?

5. What are the two classes of LCS ships?

6. Do LCCs have welldecks?

7. How many LCUs can a LHA carry? How many LCACs?

8. What is the major limitation associated with the LHA’s aft aircraft elevator?

9. Which amphibious ship can carry the most LCACs? (specific)

10. Which submarine class has the most torpedo tubes, and how many are there?

ASSIGNMENT SHEET

COMMAND AND CONTROL

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:
1. SUMMARIZE the elements of the Composite Warfare Command concept.
2. IDENTIFY the Navy's administrative and operational command organizations.

3. IDENTIFY the Combatant Commanders.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.10 (Command and Control C2W)

D. STUDY QUESTIONS:

1. What is the purpose of the CWC doctrine?

2. What are the three tiers of the Composite Warfare Structure?

3. Name the four Warfare Commanders.

4. Which Warfare Commander is responsible for the overall planning, coordination, and execution of surface and undersea warfare functions?

5. Who is most often assigned to the role of AMDC?

6. What resources does the IWC have available to him/her for Surveillance?

7. What resources does the STWC use to conduct conventional strikes ashore?

8. What are the three levels of Weapons Control Status and their meaning?

9. What are the three levels of Threat Warnings and their meanings?

10. What is Command and Control?

ASSIGNMENT SHEET

U.S. NAVY AIRCRAFT CAPABILITIES AND LIMITATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the primary missions and features of carrier-based aircraft.

2. STATE the primary missions and features of amphibious aviation assets.

3. STATE the primary missions and features of land based aircraft.

4. STATE the primary missions and features of airborne weapons.

5. EXPLAIN the features of airborne undersea warfare sensors.

6. STATE the primary missions and features of unmanned aerial vehicles.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 3.1 (Aircraft and Weapons)

D. STUDY QUESTIONS:

1. What is the primary function of the P-3C Orion?

2. What is the primary function of UAV's in use by the U.S. Navy?

3. What are the typical four fixed wing aircraft found on U.S. carriers?

4. What type of engines does the F/A-18 E/F Super Hornet use?

5. What is the primary function of the E/A-6B Prowler?

6. How are AV-8B Harriers able to be launched from amphibious ships like the LHA & LHD?

7. What is the primary function of the AGM-88 HARM missile?

8. What guidance kit converts an unguided bomb into a precision-guided “smart” munition?

9. What is the range of the AIM-120 AMRAAM missile?

10. What is the primary function of the AIM-7 missile?

ASSIGNMENT SHEET

RADIO TELEPHONE PROCEDURES

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE communications terms Call sign, Precedence, Circuit discipline, Free net, Directed net, Plaindress, Abbreviated plaindress, Immediate executive, Delayed executive, and Nonexecutive

2. DESCRIBE types of communications watches: Guard, Cover, Copy, and Listen.

3. STATE the proper procedures in naval voice communications, including Operating rules; Five basic parts of transmissions; Radio check, including use and meaning of various prowords.

4. IDENTIFY the usage of daily-changing call signs.

5. IDENTIFY shipboard communication circuits in terms of usual frequency range, type of circuit (voice or teletype), units on the net, where it is normally guarded, and the use of the net.

6. DEFINE signals security terms as applies to shipboard communications.

7. IDENTIFY the types of disclosures afforded protection by the EEFI list.

8. STATE the proper BEADWINDOW reporting procedures.

9. DESCRIBE when authentication is mandatory.

10. STATE the GINGERBREAD procedures.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 1.5 (Shipboard Communications Systems)

2. Complete the DOSG Maritime Warfare Module 1.6 (Shipboard Satellite Communications)

D. STUDY QUESTIONS:

1. What are the different types of nets?

2. What is precedence?

3. What are the five basic parts of transmission?

4. Which frequency band is utilized for long range communications on Navy ships?

5. Which frequency band is primarily used for the LOS communications and SATCOM?

6. What does it mean to Guard a communication net?

7. What does BEADWINDOW mean?

8. What is the only authorized response to a BEADWINDOW?

9. What does GINGERBREAD mean?

10. How do you respond to a “radio check” call that is loud and clear?

ASSIGNMENT SHEET

COMBAT INFORMATION CENTER FAMILIARIZATION

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. LIST the primary & secondary missions of CIC and include functions required for each mission area.

2. IDENTIFY the functions of basic CIC Equipment.

3. LIST the 6 general conditions of readiness and corresponding watch conditions, including the manning requirements of each.

4. STATE the duties and responsibilities of the watchstations in CIC.

5. DESCRIBE the various CIC logs and the procedures for maintaining each.

6. IDENTIFY control and assist functions performed by CIC including information provided to control stations during major evolutions.

C. STUDY ASSIGNMENT:

1. Complete DOSG Maritime Warfare Module 1.1 (Combat Systems Fundamentals)

2. Complete the DOSG Maritime Warfare Module 2.10 (NTDS/CDS/DTE)

D. STUDY QUESTIONS:
1. What is the primary mission of CIC?

2. Identify the 5 basic functions of CIC equipment

3. What are the control functions of CIC in an undersea warfare scenario?

4. What are the real time sources of information to CIC?

5. What devices are used to display information in CIC?

6. What are the different Conditions of Readiness?

7. Who is the CO’s direct representative in all matters concerning the tactical employment and defense of the unit?

8. What are the types of entries contained in the CIC Watch Log?

9. What is the primary role of the CICWO?

10. What sound powered phone circuits are typically found in CIC?

ASSIGNMENT SHEET

BASIC RADAR

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the types and characteristics of radio waves.

2. LIST the factors that affect radio wave propagation.

3. IDENTIFY the types of propagation paths and how ground and the ionospheric variation affect them.

4. IDENTIFY the types, characteristics, and operation uses of radio frequency bands.

5. IDENTIFY the fundamental principles of radar and the basic components of a radar system.

6. IDENTIFY the BASIC operating characteristics of radar systems.

7. IDENTIFY how radar scan types affect operation.

8. IDENTIFY the factors affecting radar operation.

9. IDENTIFY the factors affecting radar detection capabilities.

10. DRAW a BASIC block diagram of a radar system.

11. LIST the maximum ranges and detection capabilities of the Air Search and Surface Search radars used in the Navy.

12. EXPLAIN how the radar system interfaces with Combat systems, VMS, and a Situational awareness system.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 1.3 (Radio Wave Propagation)

2. Complete the DOSG Maritime Warfare Module 1.4 (Radar Fundamentals and Systems)

D. STUDY QUESTIONS:

1. What are the two primary functions of radars?

2. What the main parts of a basic radar system?

3. What is Scanning?

4. What are the differences between Mechanical and Electronic scanning?

5. How does Continuous Wave scanning detect moving objects?

6. What is Radar Accuracy?

7. What affects Radar Accuracy?

8. Why do navy ships have so many different types of radar?

9. What are the two primary functions for Surface Search radars?

10. What are the two categories for Air Search radars?

ASSIGNMENT SHEET

ELECTRONIC WARFARE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. LIST the objectives and branches of electronic warfare.

2. DESCRIBE the effect of atmospheric factors on electronic warfare.

3. IDENTIFY the sources and preventive measures for electromagnetic interference.

4. LIST the characteristics and capabilities of electronic warfare systems and decoys. SUMMARIZE the purpose of MILDEC.

5. LIST the three deception methods.

6. IDENTIFY the MILDEC equipment installable aboard ship, its capabilities, and ship support requirements.

7. DEFINE counter-deception.

C. STUDY ASSIGNMENT:

1. Complete DOSG Maritime Warfare Module 2.9(AN/SQQ-89(V) Part 1: Shipboard Systems)

2. Complete DOSG Maritime Warfare Module 2.10 (AN/SQQ-89(V) Part 2: LAMPS)

D. Study Questions:

1. What are the three types of electromagnetic (EM) Deception?

2. Name the three categories of Electronic Warfare.

3. Define electromagnetic interference.

4. What are several sources of man-made EMI?

5. What are several sources of natural EMI?

6. Above what frequency would you expect to see little natural EMI?

7. What efforts can be taken to limit EMI?

8. What is the primary purpose of the AN/SLQ-32(V)?

9. What is Military Deception?

10. What are the objectives of Electronic Warfare?

ASSIGNMENT SHEET

IFF AND TADIL

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. SUMMARIZE the characteristics and capabilities of the Identification Friend or Foe system.

2. DESCRIBE the characteristics and capabilities of the Tactical Air Communication and Navigation system.

3. IDENTIFY the terminology of data link technology and systems.

4. LIST the basic duties and responsibilities, symbols, and capabilities of Tactical Data Links.

5. SUMMARIZE the characteristics and capabilities of tactical data links.

6. LIST the elements of the Global Command and Control System.

7. LIST the communication nets used with tactical data links.

8. IDENTIFY the tactical data link capabilities of specific platforms.

9. LIST the capabilities of the Naval Tactical Data System and Combat Direction System.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 1.7 (Tactical Data Links)

D. STUDY QUESTIONS:

1. What are the five references and voice communication tools that the Strike Group Commands use for Link planning and establishment purposes?

2. What do the 4 C's in C4 stand for?

3. What is Identification?

4. What is IFF?

5. What do Tactical Data Links do?

6. What frequency bands does Link-11 operate in?

7. What is the major difference between Link-11 and Link-16?

8. What is the purpose of Satellite Link-11?

9. How is a Cooperative Engagement Capability different from a Tactical Data Link?

10. What is the objective of GCCS-M?

ASSIGNMENT SHEET

SURFACE WARFARE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. LIST the functional watchstations manned during SUW operations.

2. DEFINE the responsibilities of the Bridge, CIC/OTH-T Team, Weapons control, Electronic warfare center, and TAO.

3. IDENTIFY the responsibilities of the CWC, OTC, Screen Commander, SAG Commander, HAG Commander, SUWC, ASWC, STWC, CTP-M, Sea Combat Commander, MIWC, and MCMC in SUW.

4. LIST the tactical voice communications circuits used in SUW.

5. IDENTIFY the importance of EMCON in SUW.

6. DESCRIBE coordinated surface operations by surface ships, fixed-wing aircraft, and helicopters.

7. IDENTIFY the basic concepts of OTH-T.

8. IDENTIFY OTH-T methods used by LAMPS MK III.

9. LIST organic and inorganic OTH-T sensors available to the battle group.

10. DESCRIBE the SUW Operational environment with respect to geographical and environmental factors.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.2 (Surface Warfare)

D. STUDY QUESTIONS:

1. What watches are manned in CIC during Surface Warfare operations?

2. Who is responsible to the CWC for planning, directing, monitoring and accessing CWC force airborne power projection ashore?

3. What is the responsibility of the Bridge Watch Team during Surface Warfare Operations?

4. Who has overall responsibility for accomplishing the mission of the force and its defense?

5. What is the responsibility of the Screen Commander?

6. What are the four principles of EMCON?

7. What is Over the Horizon Targeting?

8. What are the characteristics of operating in the littorals?

9. What are some of the effects of rain/ice in the SUW environment?

10. What about sea-state?

ASSIGNMENT SHEET

AIR WARFARE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. STATE the elements of the air defense organization.

2. LIST and DESCRIBE the elements of air defense battlespace, ie vital area, CIEA, surveillance area, etc.

3. LIST and DESCRIBE common Air Defense terminology.

4. LIST and DESCRIBE the conditions and impact of threat warning.

5. DESCRIBE the conditions and impact of weapon control status.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.4 (Air Warfare)

2. Complete the DOSG Maritime Warfare Module 2.3 (Air Warfare and Cruise Missiles)

3. Complete the DOSG Maritime Warfare Module 2.4 (Close-in-Weapons Systems)

4. Complete the DOSG Maritime Warfare Module 2.6 (Aegis Weapons Systems)

D. STUDY QUESTIONS:

1. Which Air Defense role is responsible for assigning DCA and AEW aircraft?

2. What zone extends from the center of the Vital Area to the maximum detection range of the most distant ADU (ship or aircraft)?

3. What is the definition of Air Defense?

4. Who coordinates all Air Defense measures?

5. What classes of ships are typically assigned as Air Defense Units?

6. What aircraft is primarily assigned to Defensive Counterair roles?

7. What defines the outer limit of the Vital Area?

8. What is the difference between Vampire and Volcano?

9. What is the difference between Sweet and Sour?

10. What does the terminology Woodpecker mean?

ASSIGNMENT SHEET

COMBAT SYSTEMS OPERATIONAL SEQUENCING SYSTEM
(CSOSS)

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the purpose, components and responsibilities of the Combat Systems Operational Sequencing System (CSOSS).

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 1.2 (CSOSS)

D. STUDY QUESTIONS:

1. List the four components in the CSOP.

2. Describe the functions of the four components.

3. List the four components of CSOCC.

4. Describe the functions of the four components.

5. What is the purpose of the Support Data?

6. What is the Support Data composed of?

7. What are System Diagrams?

8. What are Status Boards?

9. What is the history of CSOSS?

10. What is its purpose?

ASSIGNMENT SHEET

ANTI-SUBMARINE WARFARE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS the responsibilities of the ASW Division Officer.

2. DISCUSS the responsibilities of the following personnel during ASW operations:
   a. CO
   b. TAO
   c. OOD
   d. ASW Evaluator
   e. ASW Fire Control Officer
   f. Sonar Supervisor
   g. ASTAC
   h. Sonar Operators
   i. DRT/DDRT plotters
   j. EW operators
   k. Lookouts
   l. EOOW

3. DESCRIBE the differences between acoustic and non-acoustic detection methods, and the affect of the environment on both sensor types.

4. DRAW and DESCRIBE a ray path associated with a sound speed profile.

5. DEFINE the following terms:
   a. Positive sound speed gradient
   b. Negative sound speed gradient
   c. Isospeed gradient
   d. Layer/Layer depth
   e. Propagation Loss
   f. Absorption
   g. Reflection
   h. Refraction
   i. Afternoon effect
   j. Broadband noise
   k. Narrowband noise

6. DISCUSS the effects of the following on sound propagation:
   a. Temperature
   b. Salinity
   c. Pressure
   d. Ocean fronts and eddies

7. DISCUSS the following propagation paths:

a. Direct Path
b. Bottom Bounce
c. Sound Channel
d. Surface Duct
e. Convergence Zone

8. DESCRIBE an XBT and the data received from an XBT deployment.

9. DISCUSS the differences in operation and mission of nuclear powered and diesel submarines.

10. DISCUSS the weapons capabilities of threat submarines.

11. DISCUSS the basic principles of operation of surface ships active/passive sonars.

12. DISCUSS TMA and its application to passive sonar.

13. DISCUSS the advantages and disadvantages of active versus passive operations

14. DISCUSS the advantages and disadvantages of ASW aircraft versus surface ships in an ASW environment.

15. DISCUSS the following ASW aircraft sensors:
a. Visual
b. Radar/ISAR
c. FLIR
d. MAD
e. ES
f. Dipping Sonar

16. DISCUSS the components, capabilities, and mission of IUSS.

17. DESCRIBE the shore based resource available for ASW support.

18. DISCUSS surface/subsurface communications and procedures to include:
a. SUBMISS
b. SUBLOOK
c. SUBSUNK

19. DEFINE the following:
a. SAU/SAC
b. Cavitation Speed
c. Optimum Sonar Speed
d. Furthest On Circle (FOC)
e. TDA/WEZ
f. TDZ

20. DESCRIBE shipboard noise sources.

21. DESCRIBE shipboard noise mitigation measures to include:

a. Prairie Air	d. Housekeeping surveys
b. Masker Air	e. Turn count masking
c. Quiet Ship Bill	f. Hull cleaning

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 1.8 (Acoustic Propagation)

2. Complete the DOSG Maritime Warfare Module 1.9 (Sonar Fundamentals)

3. Complete the DOSG Maritime Warfare Module 1.10 (Ships Silencing Program)

4. Complete the DOSG Maritime Warfare Module 2.5 (ASW Weapons)

5. Complete the DOSG Maritime Warfare Module 4.5 (Undersea Warfare)

D. STUDY QUESTIONS:

1. Which watchstation is responsible for communicating with and passing ASW information between the ship and aircraft?

2. Which aircraft has dipping sonar?

3. What are four acoustic sensors?

4. What are three necessary components for sound transmission?

5. What are three factors that influence the speed of sound through water?

6. What are three examples of sources of ambient noise?

7. What are the different types of torpedo guidance?

8. What are the different modes of sonar?

9. What are the advantages of the surface ship platform in ASW scenarios?

10. What is a TDZ and how big is it?

ASSIGNMENT SHEET

MINE WARFARE

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DEFINE key terminology associated with Mine Warfare.

2. IDENTIFY the developments in Mine Warfare.

3. STATE the advantages and disadvantages of Mine Warfare.

4. DESCRIBE offensive and defensive mining principles.

5. IDENTIFY methods used to classify mines.

6. IDENTIFY mine-hunting and minesweeping theories.

7. IDENTIFY the basic methods and equipment for mine-hunting.

8. IDENTIFY the basic methods and equipment for minesweeping.

9. DEFINE basic mine neutralization.

10. LIST and DESCRIBE the types of Passive Mine Countermeasures (MCM) available.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.12 (Mine Warfare)

D. STUDY QUESTIONS:

1. What method is used to prevent and reduce damage from mines?

2. What type of mine floats below the surface of the water by its attachment to a tether?

3. What are the advantages of Mine Warfare?

4. What are the disadvantages of Mine Warfare?

5. What is the purpose of Offensive Mining?

6. What is the purpose of Defensive Mining?

7. What are the characteristics of surface ship mine delivery?

8. What are the characteristics of bottom type mines?

9. What is the primary mine hunting sonar utilized by Mine sweeps?

10. What resources are available for mine neutralization?

ASSIGNMENT SHEET

VBSS and MIO

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY Visit, Board, Search, and Seizure (VBSS) Team composition, positions, and responsibilities.

2. IDENTIFY the procedures for querying, approaching, and stopping suspect vessels.

3. IDENTIFY the procedures for boarding, searching, and inspection.

4. IDENTIFY the levels of proportional force application used to gain compliance among uncooperative personnel.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.13 (Visit, Board, Search & Seizure (VBSS))

D. STUDY QUESTIONS:

1. What is the manning requirement for a VBSS team?

2. What are the safety considerations when it comes to approaching a suspect vessel?

3. What is the primary objective of MIO?

4. Describe the Right of Approach and Visit?

5. Where should a ship position itself on a suspect vessel?

6. Who is required to attend the Boarding Team Pre-Brief?

7. What should the OOD include in his visual inspection of a suspect vessel?

8. What is a good way to break the ice with the Captain of the suspect vessel?

9. What tools are available to force compliance?

10. What Boarding Level is a non-Compliant High Freeboard ship?

ASSIGNMENT SHEET

EXPEDITIONARY WARFARE AND AMPHIBIOUS OPERATIONS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. IDENTIFY the characteristics of the movement phase of an amphibious operation.

2. DESCRIBE the tactic of vertical envelopment, types of aircraft used, and how they are employed in amphibious warfare.

3. IDENTIFY the difference between combat and administrative loading.

4. IDENTIFY the purpose and supporting elements of an amphibious assault.

5. DESCRIBE the organization and command structure for an amphibious assault.

6. IDENTIFY the purpose and organization of the Area of Operations.

7. SUMMARIZE the sea echelon plan concept.

8. LIST the amphibious landing sequence of operations.

9. IDENTIFY the role of naval surface fire support and specialized forces in an amphibious assault.

10. STATE the elements of amphibious warfare.

11. IDENTIFY the force structure and command relationships for amphibious operations.

12. IDENTIFY the characteristics of the planning phase of an amphibious operation.

13. IDENTIFY the characteristics of the embarkation phase of an amphibious operation.

14. IDENTIFY the characteristics of the rehearsal phase of an amphibious operation.

C. STUDY ASSIGNMENT:

1. Complete the DOSG Maritime Warfare Module 4.6 (Introduction to Amphibious Operations)

2. Complete the DOSG Maritime Warfare Module 4.7 (Amphibious Operations)

3. Complete the DOSG Maritime Warfare Module 4.8 (Marine Corps)

D. STUDY QUESTIONS:

1. What does EMPRA stand for?

2. What is the term for the first waves of craft to land on a beach?

3. What is an amphibious operation?

4. What are the essential elements of amphibious operations?

5. What is the typical composition of an Amphibious Strike Group?

6. What is the CATF, and who fulfills the role?

7. Describe what the Amphibious Objective Area

8. What is the Sea Echelon Area?

9. What is the Fire Support Area?

10. Can submarines equipped with Tomahawks assist with NSFS?

ASSIGNMENT SHEET

ATTWO FUNDAMENTALS

A. INTRODUCTION:
This assignment is to be completed prior to the material being covered in class.

B. ENABLING OBJECTIVES:

1. DISCUSS the roles and responsibilities of the Antiterrorism Tactical Watch Officer.
2. DESCRIBE the shipboard force protection watch organization.
3. DISCUSS the communication system involved in force protection.
4. STATE the four different threat levels.
5. EXPLAIN the importance of timely intelligence in assessing threat levels.
6. DESCRIBE the information found in unit directives.

C. STUDY ASSIGNMENT:

1. Read Sections 5.4.3 and 5.12 of NTTP 3-07.2.1 (Antiterrorism).

2. Read Section 4.22.3 and 6.2.11 of OPNAVINST 3120.32D (SORM) (pgs 4-37 to 4-38; and 6-33 to 6-38). ATTWO Roles and Responsibilities; and Security Watch and Anti-terrorism Bill.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

TACTICS AND TECHNIQUES

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES

1. DISCUSS Defense-in-Depth as it pertains to waterborne defense and small boat intrusion.

2. EXPLAIN the defense strategy employed when using multiple-boat defense for HVA patrol.

3. DISCUSS the steps required to establish hostile intent of a waterborne threat.

4. EXPLAIN your unit's intrusion response techniques as it pertains to responding to waterborne contacts nearing the warning zone.

5. DESCRIBE the clearing procedures performed on a vessel before it is allowed to go alongside the HVA.

6. DISCUSS the variables that are used in the determination of the assessment zones for swimmer threat response.

7. LIST the techniques to deter and detect swimmers with hostile intent.

C. STUDY ASSIGNMENT:

1. Read Chapters 1, 2, 5, and 7 of NTTP 3-07.2.1 Rev. A (pgs 1-1 to 2-7; 5-1 to 5-6; and 7-1 to 7-5).
Introduction, Terrorist Threat, Antiterrorism / Force Protection Planning, and Legal Considerations.

D. STUDY QUESTIONS: NONE

ASSIGNMENT SHEET

SEARCH AND INSPECTION FUNDAMENTALS

A. INTRODUCTION: This assignment is to be completed prior to the material being covered in class.

B. ENABLLING OBJECTIVES:

1. DISCUSS the difference between search and inspection.

2. DISCUSS seizure.

3. DEFINE contraband.

4. DISCUSS the principles of seizure for contraband.

C. STUDY ASSIGNMENT:

1. Read Chapter 3 of NAVEDTRA 14137 (Master-at-Arms) (pgs 3-1 to 3-17; Search and Seizure.

2. Read sections 0203 & 0204 (pgs 2-2 to 2-4) of OPNAVINST 5580.1; Article 31 & Search and Seizure.

3. Read Sections 313 – 317, 321 (pgs III-1X to III-18) of the Military Rules of Evidence (MRE). Inspections and inventories in the armed forces; Searches not requiring probable cause; Probable cause searches; Seizures; Interception of wire and oral communications; Eyewitness identification.

D. STUDY QUESTIONS:

1. What three factors must exist for the law of *Search and Seizure* apply?

2. What is *Contraband?*

3. What are some categories of evidence that may be seized?

4. IAW MRE 315.e, what are examples of a basis for search authorization?

5. What is Probable Cause?