

STANDARD OPERATING PROCEDURES (SOP)

FOR

THE COAST GUARD'S TRAINING SYSTEM

Volume 6

CURRICULUM OUTLINE



Office of Training, Workforce Performance & Development (CG-132)
Human Resources Directorate

Coast Guard Headquarters
Washington, DC

May 2008
Version 3.0

USCG Training System SOP: Curriculum Outline

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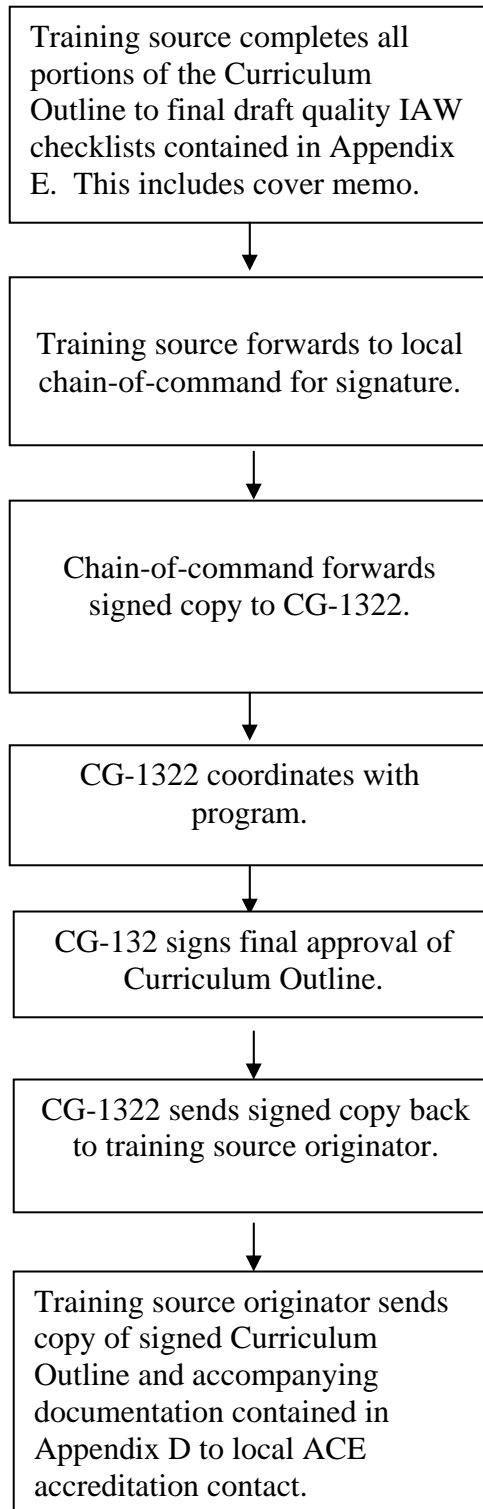
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Proper Routing of a Curriculum Outline



USCG Training System SOP: Curriculum Outline

Overview

Introduction

This standard operating procedure (SOP) has been developed to provide a guide for developing and formatting a Curriculum Outline (CO).

Purpose

Curriculum Outlines are required for all Coast Guard-conducted resident and nonresident training courses. A standard format has been adopted to ensure uniformity throughout Coast Guard training.

The Curriculum Outline:

- Documents performance objectives for a course of instruction.
 - Documents training resource requirements for conducting resident and nonresident courses.
 - Identifies improvements or changes in training.
 - Maintains agreement between job performance requirements and validated training needs.
 - Facilitates the curriculum review and approval process and serves as an audit trail document.
-

Using this SOP

This SOP is divided into the different parts or "sections" of a Curriculum Outline. It is further divided into Resident and Nonresident. TPOs and EOs are the same for both types of Curriculum Outlines. For each section, the SOP will:

- Show the format for that section.
- Refer the reader to a corresponding Step in a Step/Action table.
- Describe how to complete certain elements of the section.
- Provide a completed example of the section.

Some sections/elements of the Curriculum Outline should be self-explanatory and no further explanation is provided in this SOP. In those instances, only examples/samples are given. If you have additional questions or need assistance, consult with your Training Center's instructional system specialist or CG-1322.

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**RESIDENT
CURRICULUM
OUTLINE**

USCG Training System SOP: Curriculum Outline

Resident Curriculum Outline Cover Sheet

Format

The format for the Curriculum Outline cover sheet is shown on the next page.

Note: A Step/Action table explaining each numbered step follows the formatting information. A camera-ready example of the specific page is then shown.

USCG Training System SOP: Curriculum Outline

CURRICULUM OUTLINE

FOR

CLASS "C" See Step 1 of Procedures on next page

COURSE NAME See Step 2
COURSE ID and COURSE CODE

TRAINING DAYS See Step 3

CLASSIFICATION See Step 4

DEVELOPED BY

SCHOOL NAME See Step 5

U.S. COAST GUARD TRAINING CENTER YORKTOWN See Step 6
YORKTOWN, VA

FREQUENCY OF REVIEW: _____ See Step 7

REVIEWED AND APPROVED AT

U.S. COAST GUARD HEADQUARTERS
WASHINGTON, DC

SUBMITTED: See Step 8 _____
DATE CHIEF, SCHOOL/BRANCH

FORWARDED: _____
DATE TRAINING OFFICER

REVIEWED: _____
DATE CG-132 TRAINING MANAGER

REVIEWED: _____
DATE PROGRAM MANAGER

APPROVED: _____
DATE CG-132 OFFICE OF TRAINING, WORKFORCE
PERFORMANCE AND DEVELOPMENT

Next Review Date: 25 December 2008 See Step 9

USCG Training System SOP: Curriculum Outline

Curriculum Outline Cover Sheet, continued

Procedures

The procedures for completing the Curriculum Outline cover sheet are outlined in the following table.

STEP	ACTION
1.	Insert the type of course/school: Class "A" or Class "C".
2.	Insert the course name, course ID, and course code.
3.	Insert the total number of actual training days or hours required to conduct course. Refer to the Instructor Contact Hours Computation Work Sheet of this SOP. Note: Weekends/non-work days are excluded. Not applicable to nonresident or self-paced courses.
4.	Insert the proper classification. The classification deals with the content of the curriculum. If a portion of the curriculum is classified, please specify as well. Note: If this document is classified, follow proper procedures for handling of classified documents.
5.	Insert the full name of the school where the course was developed.
6.	Insert the full name of Training Center or Unit where the course was developed.
7.	Leave blank. Headquarters (CG-1322) assigns the frequency of review. There are three possibilities: annual, biennial, or triennial. .
8.	Insert the month, day, and year. Curriculum outlines at all training centers will be forwarded to the training officer prior to sending to Headquarters (CG-132).
9.	Leave blank. Headquarters (CG-1322) assigns the review date. This is based on when the curriculum is approved.

USCG Training System SOP: Curriculum Outline

Curriculum Outline Cover Sheet, continued

Example

Below is an example of a Curriculum Outline Cover Sheet.

CURRICULUM OUTLINE	
FOR	
CLASS "C"	
<u>ALUMINUM WELDING</u>	
COURSE ID: <u>DC-02</u> COURSE CODE: <u>140252</u>	
20.0 TRAINING DAYS	
UNCLASSIFIED	
DEVELOPED BY	
<u>DC SCHOOL</u>	
U.S. COAST GUARD TRAINING CENTER YORKTOWN <u>YORKTOWN, VA</u>	

FREQUENCY OF REVIEW: _____	
REVIEWED AND APPROVED AT	
U.S. COAST GUARD HEADQUARTERS WASHINGTON, DC	
SUBMITTED: _____	_____
DATE	CHIEF, ENGINEERING & WEAPONS BRANCH
FORWARDED: _____	_____
DATE	TRAINING OFFICER
REVIEWED: _____	_____
DATE	CG-132 TRAINING MANAGER
REVIEWED: _____	_____
DATE	PROGRAM MANAGER
APPROVED: _____	_____
DATE	CG-132 OFFICE OF TRAINING, WORKFORCE PERFORMANCE AND DEVELOPMENT
Next Review Date: _____	

USCG Training System SOP: Curriculum Outline

Curriculum Outline Table of Contents

Format The format of a Table of Contents is shown below.

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Course Data.....	3 See Step 1
Mission and Scope Statements.....	4
Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5
Course Content Reference Table	See Step 2

EXHIBITS

(1) Training Aids/Training Equipment	
(2) Texts and References	
(3) Facilities and Space Requirements.....	
(4) Course Limiting Factors.....	
(5) Instructor Contact Hours Computation Work Sheet	
(5a) Additive Man-hour Computation Work Sheet	
(5b) Staffing Standards Computation Work Sheet	

USCG Training System SOP: Curriculum Outline

Curriculum Outline Table of Contents, continued

Procedures

The procedures for completing the Table of Contents are outlined in the following table.

STEP	ACTION								
1.	<p>Note: It is easiest to insert the page numbers for Table of Contents when the entire document is complete.</p> <p>Insert the page numbers for the sections listed below.</p> <p>The following three pages of every curriculum outline will be sequenced as follows:</p> <table data-bbox="511 871 1242 1207"> <thead> <tr> <th></th> <th style="text-align: right;"><u>PAGE</u></th> </tr> </thead> <tbody> <tr> <td>Course Data</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Mission and Scope Statements</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)</td> <td style="text-align: right;">5</td> </tr> </tbody> </table>		<u>PAGE</u>	Course Data	3	Mission and Scope Statements	4	Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5
	<u>PAGE</u>								
Course Data	3								
Mission and Scope Statements	4								
Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5								
2.	<p>After numbering the remaining TPO and EO pages, insert the page numbers of the following sections:</p> <p>Course Content Reference Table</p> <p>Exhibits</p>								

USCG Training System SOP: Curriculum Outline

Course Data

Format

The format for the Course Data page is shown below.

COURSE DATA	<u>See Step 1</u>
COURSE NAME AND COURSE CODE:	<u>See Step 2</u>
<u>CURRICULUM/CHANGES PROPOSED</u>	<u>See Step 3</u>
ELIGIBILITY REQUIREMENTS	<u>DESCRIPTION</u>
PREREQUISITES	
CONTENT	
LENGTH	
STAFFING (Steady State)	
QUOTAS PER YEAR	
NUMBER OF COURSE CONVENINGS	
EQUIPMENT	
FUNDING	<u>See Job Aid Appendix F to calculate</u>
LIMITING FACTORS	
COMPETENCY CODE AUTHORIZATION	
REASONS FOR PROPOSED CURRICULUM/CHANGES:	<u>See Step 4</u>
RECOMMENDED IMPLEMENTATION DATE:	<u>See Step 5</u>

USCG Training System SOP: Curriculum Outline

Course Data, continued

Procedures The procedures for completing the Course Data page are outlined in the following table.

STEP	ACTION
1.	If this outline is for a new course, the title of this page is "COURSE DATA - NEW CURRICULUM." If this outline is for a revision, the title of this page is "COURSE DATA - COURSE REVISION."
2.	Insert the course name and course code.
3.	If this outline is for a new course, this line should be "CURRICULUM PROPOSED." Write a short description for each of the 10 areas listed. If this outline is for a revision, this line should be "CHANGES PROPOSED." Write a short description for each of the 10 areas and any changes for each of the areas listed.
4.	If this outline is for a new course, this line should be "REASONS FOR PROPOSED CURRICULUM." Write a short statement to describe why this new course is being proposed. If this outline is for a revision, this line should be "REASONS FOR PROPOSED CHANGES." Write a short statement of the current situation or what is currently in place and compare this with the newly proposed needs or requirements.
5.	Insert the recommended implementation date.

USCG Training System SOP: Curriculum Outline

Course Data, continued

Example

Below is an example of a Course Data page for a course that is new.

COURSE DATA - NEW CURRICULUM	
COURSE NAME AND COURSE CODE:	<u>Intelligence Collector Course (501866)</u>
<u>CURRICULUM PROPOSED</u>	<u>DESCRIPTION</u>
ELIGIBILITY REQUIREMENTS	Secret Clearance
PREREQUISITES	Completion of INT-200
CONTENT	Subjects in this course include: Planning collections, collecting information and reporting information collected.
LENGTH	10 Training Days
STAFFING	3
QUOTAS PER YEAR	60
NUMBER OF COURSE CONVENINGS	3
EQUIPMENT	WSIII, Monitors, Cameras, Books, Notebooks, Misc. consumables.
FUNDING	Non-Recurring equipment: \$45,000 Annual consumables: \$18,400
LIMITING FACTORS	20 students per class
COMPETENCY CODE AUTHORIZATION	ICA
REASONS FOR PROPOSED CURRICULUM:	Initial Creation of Course. CG-1322 tasking memo dated Oct 17, 2005 based on Final Bearing Point study dated November 23, 2004. TCY JTA/Task validation conducted 2/17/2006.
RECOMMENDED IMPLEMENTATION DATE:	21 August 2006

USCG Training System SOP: Curriculum Outline

Course Data, continued

Example Below is an example of a Course Data page for a course that is being revised.

COURSE DATA - COURSE REVISION	
COURSE NAME AND COURSE CODE:	<u>Coxswain "C" Course (230275)</u>
<u>CHANGES PROPOSED</u>	<u>DESCRIPTION</u>
ELIGIBILITY REQUIREMENTS	Must be a certified crewman on a standard boat.
PREREQUISITES	See Mission and Scope Statements – No changes
CONTENT	Coxswain Qualification Tasks
LENGTH	4 weeks
STAFFING	6 – No changes
QUOTAS PER YEAR	192 – No changes
NUMBER OF COURSE CONVENINGS	8 – No changes
EQUIPMENT	See Exhibit 1 – No changes
FUNDING	See Exhibit 1 – No changes
LIMITING FACTORS	See Exhibit 4 – No changes
COMPETENCY CODE AUTHORIZATION	None
REASONS FOR PROPOSED CHANGES:	Changes due to updating course and converting to performance-based instruction.
RECOMMENDED IMPLEMENTATION DATE:	9 March 2007

USCG Training System SOP: Curriculum Outline

Mission and Scope Statements

Format

The format for the Mission and Scope Statements page is shown below.

MISSION AND SCOPE STATEMENTS

NAME OF COURSE: See Step 1 Procedures on next page

MISSION: See Step 2

This section shall include information on the purpose of the course, the type of billet toward which the training is directed, if appropriate, and reference to the Enlisted Performance Qualifications Manual.

SCOPE: See Step 3

This section shall include the following specific elements: (a) a description of the target population (the student's specialty area, rate, job assignment, etc.); (b) a brief overview of the tasks and content areas covered in the course; (c) a statement describing the performance criteria to be met in order for the student to successfully complete the course.

PREREQUISITES: See Step 4

COMPETENCY CODE ELIGIBILITY: See Step 5

STUDENT SECURITY CLASSIFICATION: See Step 6

USCG Training System SOP: Curriculum Outline

Mission and Scope Statements, continued

Procedures The procedures for completing the Mission and Scope Statements page are outlined in the following table.

STEP	ACTION
1.	Insert the name of the course in all caps.
2.	Write a brief statement about the course/school mission, including: <ul style="list-style-type: none"> • Purpose of the course. • Type of billet for which the training is directed. Reference to the Enlisted Performance Qualifications Manual, if applicable.
3.	Write a short paragraph on the course/school scope which includes the following specific elements: <ul style="list-style-type: none"> • Description of the target student: <ul style="list-style-type: none"> ○ Specialty ○ Paygrade ○ Rating ○ Job assignment • Overview of the tasks and content areas covered in the course. • Statement describing the performance standards the student must meet to successfully complete the course.
4.	Insert all prerequisites that students must have before attending the course/school. Other Coast Guard courses, job/billet designation, equivalent courses, experience level or time in the field should be included. If there are none, insert NONE.
5.	Insert the competency code(s) students will be eligible for upon completion of the course. For information, see Competency Management System Manual, COMDTINST M5300.2 (series). For new courses, contact CG-1B. If there are none, insert NONE.
6.	Insert security classification code which students must have before attending the course/school. For information, see Personnel Manual, COMDTINST M1000.6 (series), Chapter 5, and Military Personnel Security Program, COMDTINST M5520.12 (series), Chapters 1 and 2.

USCG Training System SOP: Curriculum Outline

Mission and Scope Statements, continued

Example

Below is an example of the Mission and Scope Statements page.

MISSION AND SCOPE STATEMENTS

NAME OF COURSE: MARINE SAFETY AND ADVANCED INVESTIGATING COURSE

MISSION: This course is designed to prepare prospective Coast Guard Investigating Officers to accomplish their assigned duties at the Marine Safety Units.

SCOPE: This course provides E-6 through O-3 personnel with instruction on the applications of laws, regulations, and policies related to the investigation of actionable misconduct or violation of any law or regulation in the U. S. Maritime Community. Students will receive instruction on advanced investigative skills used to determine the human errors contributing to an accident. The Investigating Officer's use of International Ship Management (ISM), Standards of Training, Certification and Watchkeeping (STCW), and Risk Management using the Marine Safety and Environmental Protection Plan will also be taught. Students will use marine casualty scenarios, role-play, and mock hearings to practice enforcement techniques as well as case processing.

PREREQUISITES: Enlisted personnel must have attended Marine Safety Petty Officer Course (MS 400 R) or the Marine Inspector Course (MS 452 R); and be designated by the Command as a qualified pollution investigator or a qualified assistant marine inspector.

Officers must have attended Marine Inspector Course (MS 452 R) or Marine Safety Port Operations Department Course (MS 422 R); and be qualified as one of the following: small passenger vessel inspector, hull inspector, machinery inspector, or pollution investigator.

Commands requesting attendance of unit personnel must provide in the request a statement certifying how the prerequisites were met.

Commands requesting attendance of unit personnel **not** meeting the above criteria should request specific quota approval in writing from Commandant G-MOA prior to attendance. Unless there are extraordinary circumstances, approval will not be granted.

COMPETENCY CODE ELIGIBILITY: NONE

STUDENT SECURITY CLASSIFICATION: UNCLASSIFIED

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs

Format

The format for the Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs) page is shown below.

UNIT 1.0 See Step 1 of Procedures on next page

TERMINAL PERFORMANCE OBJECTIVE:

1.1 **See Step 2**

REFERENCES: **See Step 3**

METHOD OF INSTRUCTION: **See Step 4**

TIME FOR INSTRUCTION: **See Step 5**

ENABLING OBJECTIVES: The standards and conditions statements for each of the following enabling objectives are the same as written in the terminal performance objective unless otherwise stated.

1.1.1 **See Step 6**

1.1.2

1.1.3

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Procedures

The procedures for completing the Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs) are outlined in the following table.

STEP	ACTION
1.	<p>Insert the general title of the unit. Each subject area within the course will be referred to as a UNIT. Label the units in a sequential order, starting with 1.0, 2.0, 3.0, etc.</p> <p>Note: Each unit/TPO must begin on a separate page.</p>
2.	<p>Insert the Terminal Performance Objective (TPO) following the unit number. Label each TPO starting with 1.1, the second 1.2, etc.</p> <p>Each TPO shall meet the following requirements:</p> <ul style="list-style-type: none"> • Specify what assistance, aids, or constraints (conditions) the students will be given. • Specify what the student will do (performance). • Capitalize and bold type the ACTION VERB. See Appendix B for a Standard Verb list. • Specify how well the student will perform (standard). • Focus on the qualifications or other job performance requirements (JPR) using the course reference table. <ul style="list-style-type: none"> ○ Note: When a qualification is used, its format must be adjusted to meet requirements. ○ Begin a new page for each TPO in a given unit. <p>Write each TPO with performance (action), conditions, and standards using the job aid in Appendix A.</p>
3.	<p>Insert the references used for the TPO. Number the references and list the title, number, and section of each published reference. Be as specific as possible when citing the part of the reference used.</p>
4.	<p>Insert the methods of instruction required for each TPO. Ensure that performance examination and review are included. See Appendix C for a list of methods and definitions.</p>
5.	<p>Insert the total time required for instruction, examination, and review for each TPO.</p> <p>Note: The methods of instruction and time required for instruction should match the information entered on the Instructor Contact Hours Computation Work Sheet.</p>

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

STEP	ACTION
6.	<p>Insert each Enabling Objective (EO) that supports the TPO. Each EO shall meet the following requirements:</p> <ul style="list-style-type: none">• Be a step required to complete the TPO.• Number each EO sequentially and begin with the first two digits of the TPO. For TPO 1.1, number the first EO as 1.1.1, the second as 1.1.2, etc.• Specify what assistance, aids, or constraints (conditions) the students will be given.• Specify what the student will do (performance).• Capitalize and bold type the ACTION VERB. See Appendix B for a Standard Verb list.• Specify how well the student will perform (standard) if different from the TPO (see Note below). <p>Note: Conditions and standards are not required for EOs when they are the same as the conditions and standards of the TPO being supported. However, if the EO's conditions and standards <u>are</u> different, then it will require its own set of conditions and standards. The job aid in Appendix A can also be used when writing EOs.</p> <p>When EOs continue on to another page, use the title of the unit, ENABLING OBJECTIVES: (continued), and continue sequentially numbering the EOs (see Example 2).</p>

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Example 1

Below is an example of a Unit of Instruction, TPOs, and EOs page.

UNIT 1.0 MECHANICAL TROUBLESHOOTING OF THE XYZ ENGINE

TERMINAL PERFORMANCE OBJECTIVE:

- 1.1 Given the necessary technical publications, past performance records (machinery history) and a problem scenario concerning an engine malfunction, **TROUBLESHOOT** the XYZ engine to the component level without error.

REFERENCES:

1. Coast Guard Technical Publications (CGTP) 1282, sections A and B
2. Coast Guard Technical Publications (CGTP) 2003, section A

METHOD OF INSTRUCTION: LECT, E/PE, EXAM

TIME FOR INSTRUCTION: 24 hours

ENABLING OBJECTIVES: The standards and conditions statements for each of the following enabling objectives are the same as written in the terminal performance objective unless otherwise stated.

- 1.1.1 When supplied with a list of XYZ engine operating indicators (gauge readings, measurements, peculiarities), **SELECT** the indications that do not conform to normal engine parameters as stated by the manufacturer, with 80% accuracy.
- 1.1.2 Given the CGTP(s) for the XYZ engine and a list of engine symptoms (indicators outside parameters), **DETERMINE** the component associated with the symptoms that would indicate the source of the engine malfunction.

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Example 2

Below is an example of a Unit of Instruction, EO continuation page.

UNIT 1.0 MECHANICAL TROUBLESHOOTING OF THE XYZ ENGINE

ENABLING OBJECTIVES: (continued)

- 1.1.3 Given the XYZ transmitter system, **OPEN** an interlocked compartment without damaging the equipment.
- 1.1.4 Given the XYZ transmitter system, **BYPASS** the interlock switch in an interlocked compartment ensuring the interlock is disabled and rendered safe.
- 1.1.5 Given the XYZ transmitter system, **SET** the interlock switch to the normal open position, returning the equipment back to operational status.

USCG Training System SOP: Curriculum Outline

Course Content Reference Table

Format

The format for the Course Content Reference Table page is shown below.

COURSE CONTENT REFERENCE TABLE	
<u>TPOs</u>	<u>REQUIREMENT JUSTIFICATIONS</u>
1.1	See Step 1
1.2	
1.3	
1.4	
Enlisted Performance Qualifications NOT covered: See Step 3	

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

Procedures

The Course Content Reference Table lists the justification for training each task. The purpose is to identify the source (authority) from which the TPO was derived, the analysis that determined the training requirement, and the applicable task.

The procedures for completing the Course Content Reference Table are outlined in the following table.

STEP	ACTION																	
1.	List all TPO numbers contained within the course.																	
2.	<table border="1"> <thead> <tr> <th data-bbox="363 877 829 919">IF TPO is justified by . . .</th> <th data-bbox="829 877 1333 919">THEN write as follows . . .</th> </tr> </thead> <tbody> <tr> <td data-bbox="363 919 829 1100">An enlisted qualification</td> <td data-bbox="829 919 1333 1100">Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8(series) Task number: (include EPQ number) Task: (include task)</td> </tr> <tr> <td data-bbox="363 1100 829 1173">A job task analysis</td> <td data-bbox="829 1100 1333 1173">JTA dated (include date) Task: (include task)</td> </tr> <tr> <td data-bbox="363 1173 829 1247">A front end analysis</td> <td data-bbox="829 1173 1333 1247">FEA dated (include date) Task: (include task)</td> </tr> <tr> <td data-bbox="363 1247 829 1358">A Level 3 analysis</td> <td data-bbox="829 1247 1333 1358">Level 3 Evaluation Executive Summary dated (include date)</td> </tr> <tr> <td data-bbox="363 1358 829 1539">A manual</td> <td data-bbox="829 1358 1333 1539">Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)</td> </tr> <tr> <td data-bbox="363 1539 829 1581">An instruction</td> <td data-bbox="829 1539 1333 1581">Title of instruction, number</td> </tr> <tr> <td data-bbox="363 1581 829 1623">Program mandate</td> <td data-bbox="829 1581 1333 1623">Task mandated by Program</td> </tr> </tbody> </table>		IF TPO is justified by . . .	THEN write as follows . . .	An enlisted qualification	Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8(series) Task number: (include EPQ number) Task: (include task)	A job task analysis	JTA dated (include date) Task: (include task)	A front end analysis	FEA dated (include date) Task: (include task)	A Level 3 analysis	Level 3 Evaluation Executive Summary dated (include date)	A manual	Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)	An instruction	Title of instruction, number	Program mandate	Task mandated by Program
	IF TPO is justified by . . .	THEN write as follows . . .																
	An enlisted qualification	Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8(series) Task number: (include EPQ number) Task: (include task)																
	A job task analysis	JTA dated (include date) Task: (include task)																
	A front end analysis	FEA dated (include date) Task: (include task)																
	A Level 3 analysis	Level 3 Evaluation Executive Summary dated (include date)																
	A manual	Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)																
	An instruction	Title of instruction, number																
Program mandate	Task mandated by Program																	

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

STEP	ACTION		
	IF ...	AND ...	THEN ...
3.	The course is a rating course	All enlisted qualifications are covered	Insert NONE.
		<p>You have elected NOT to cover a qualification specific to the paygrade</p> <p>Note: If you have difficulty identifying sources of job information and cannot get help from the program manager, let CG-132 know.</p>	<p>Get approval from CG-132 by:</p> <ul style="list-style-type: none"> • Listing the qualification not covered and • Identifying the rationale for not teaching the qualification. (Each situation will be evaluated on a case-by-case basis.) <p>Note: Do not omit a qualification because it is taught in an "A" or "C" school.</p>
		<p>You have covered lower level enlisted qualifications</p> <p>Note: Lower level qualifications may be covered in courses when the qualifications are supportive of and necessary for the understanding of the qualifications written for the paygrade of the course.</p>	Do not list lower level qualifications in the curriculum outline and do not test on the lower level qualifications.
	The course is a specialty course	No qualifications are covered	<p>Enter the following statement:</p> <p>"This is a specialty course and is not required to cover specific qualifications."</p>

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

Example

Below is an example of a Course Content Reference Table page.

COURSE CONTENT REFERENCE TABLE	
<u>TPOs</u>	<u>REQUIREMENT JUSTIFICATIONS</u>
1.1	Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8 (series) A.4.01 Task: Troubleshoot XYZ engine
1.2	JTA dated March 2003 Task: Tune-Up the XYZ engine
1.3	FEA dated January 2004 Task: Tune-Up the XYZ engine
1.4	Level 3 Evaluation Executive Summary dated April 2004
1.5	U.S. Coast Guard Boat Operations and Training (BOAT) Manual Vol II, COMDTINST M16114.33 (series) Task: COX-03-02-TYPE, State the Basic Principles of Boat Handling
1.6	TRACEN YORKTOWN INST 1552.1 (series)
1.7	Task mandated by Program

USCG Training System SOP: Curriculum Outline

Exhibits

Format

The format for Exhibits 1-3 is shown below.

EXHIBITS

(1) TRAINING AIDS/TRAINING EQUIPMENT:

AMOUNT NEEDED

See Step 1a

See Step 1b

(2) TEXTS AND REFERENCES:

See Step 2a

See Step 2b

(3) FACILITIES AND SPACE REQUIREMENTS:

Classroom (1)

See Step 3a sq ft

Lab (1)

See Step 3b sq ft

Storeroom (1)

See Step 3c sq ft

USCG Training System SOP: Curriculum Outline

Exhibits, continued

Procedures The procedures for completing Exhibits 1-3 are outlined in the following table.

STEP	ACTION								
1a.	<p>List all training aids/training equipment that is specific to one convening of a course/school. DO NOT list items that are used for several courses/schools. Below is a sample list of acceptable and unacceptable items.</p> <table border="1" data-bbox="428 711 1218 863"> <thead> <tr> <th data-bbox="428 711 823 751">Acceptable</th> <th data-bbox="823 711 1218 751">Unacceptable</th> </tr> </thead> <tbody> <tr> <td data-bbox="428 751 823 791">Mockups</td> <td data-bbox="823 751 1218 791">Movie projectors</td> </tr> <tr> <td data-bbox="428 791 823 831">Cutaways</td> <td data-bbox="823 791 1218 831">Desks</td> </tr> <tr> <td data-bbox="428 831 823 863">Operational equipment</td> <td data-bbox="823 831 1218 863">Chairs</td> </tr> </tbody> </table>	Acceptable	Unacceptable	Mockups	Movie projectors	Cutaways	Desks	Operational equipment	Chairs
Acceptable	Unacceptable								
Mockups	Movie projectors								
Cutaways	Desks								
Operational equipment	Chairs								
1b.	List the amount of items needed per convening.								
2a.	<p>List all texts and references that each student will need in one convening of a course/school.</p> <p>Note: If there are large numbers of references, it may be necessary to list other exhibits on separate pages.</p>								
2b.	<p>List the amount of texts or references required per student, per convening. See example below.</p> <p>COMDTINST M13020.1 (series) Qty: 1 per student, 25 per class</p>								
3a.	<p>List the size of classroom required per convening.</p> <p>Note: List all areas in square feet.</p>								
3b.	<p>List the size of lab required per convening.</p> <p>Note: List all areas in square feet. If a lab is not required, insert NONE.</p>								
3c.	<p>List the size of storeroom required per convening.</p> <p>Note: List all areas in square feet. If a storeroom is not required, insert NONE.</p>								

USCG Training System SOP: Curriculum Outline

Exhibits, continued

Example Below is an example of Exhibits 1-3.

EXHIBITS

(1) <u>TRAINING AIDS/TRAINING EQUIPMENT:</u>	<u>AMOUNT NEEDED</u>
Kroy Letter Machine	02
Thermal Copier	02
Electrostatic Copier	01
 (2) <u>TEXTS AND REFERENCES:</u>	
Learning Principles Handbook, IT School (1999)	Qty: 1 per student, 18 per class
 (3) <u>FACILITIES AND SPACE REQUIREMENTS:</u>	
Classroom (1)	625 sq ft
Lab (1)	600 sq ft
Storeroom (1)	230 sq ft

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4

Overview

The Course Limiting Factors Sheet will be completed when there is a submission of a Curriculum Outline for review or approval. A change in the course limiting factors may be the only reason for the Curriculum Outline submission. It should reflect the situation as it exists at the time that the Curriculum Outline is submitted. There are no provisions on this form for any projected additional resources that may be utilized to accomplish the desired training.

This document is a tool for the school, the program manager, and the training manager to determine the factors that may limit the course. It serves as the basis for summarizing the capabilities of the subject course. It includes all the pertinent information that is required for successful instruction of the course by a training center for a specified number of students.

Purpose

The Course Limiting Factors Sheet has many uses in the Coast Guard's systems approach to training. It establishes the basis for quota utilization and the effective and efficient use of our training resources. Along with the Curriculum Outline, this document is extremely valuable for all three members of the Training Triangle: Training Source, Training Manager, and Program Manager (TS-TM-PM). It is used to outline current requirements of a particular course to train a specified number of students annually. The supporting information defines what limits the training to this number of students. It is used as a decision making tool and as a planning document.

As the originator of the data used to complete the Course Limiting Factors Sheet, the school has researched areas that affect each course within the school. This gives them a clear picture of staff requirements, and can serve as a scheduling document for the upcoming training year(s). This also passes on important information to both the TM and PM about the limitations of student loading and the causes of those limitations.

As a first-line user of this document, the Training Centers can use this as a planning and programming document. They can use it for scheduling and assigning classroom and lab facilities, as well as to project the messing and berthing requirements of the command.

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

Procedures

The procedures for completing the Course Limiting Factors Sheet, Exhibit 4, are outlined in the table on the next page.

Click the link below to obtain an electronic Course Limiting Factors Sheet.

<ftp://cgweb.tcyorktown.uscg.mil/Training/Docs/CLFS.doc>

Note: To input your data on the electronic Course Limiting Factors Sheet, you must go to "File", do a "Save As", and name the file as the course name and add "CLF", i.e., EM-03 CLF. Once the file is saved, you can enter data in the appropriate blocks.

Note: Information in Steps 1-8 is collected prior to completing the Course Limiting Factors Sheet.

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

Format

The format for the Course Limiting Factors Sheet, Exhibit 4, is shown below.

EXHIBITS

(4) COURSE LIMITING FACTORS SHEET:

Course Limiting Factors Sheet					
Course Design	Classrooms (1)	Labs & Installed Equipment (2)	Training Aids & Equipment (3)	Classroom Furnishings (4)	Summary of Capabilities
Maximum Students/ Class (# of students) (A)	<u>See Step 9</u>				<u>See Step 12</u>
Maximum Classes on Board (# of classes) (B)	<u>See Step 10</u>				<u>See Step 13</u>
Maximum CLCVNS/ Year (# of classes) (C)	<u>See Step 11</u>				<u>See Step 14</u>
Maximum Quotas/ Year (# of students) (D)					<u>See Step 15</u>
Explanation of Factors: <u>See Step 16</u>					
Additional Information: <u>See Step 17</u>					

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

STEP	ACTION
1.	<p>Identify the existing training resources that will impact this course.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Number and size of classroom(s). • Number and size of lab(s) or other work areas. • Number and types of installed equipment that cannot be moved. • Number and types of training aids (simulators, mockups, projectors, VCRs, etc.). • Number and types of equipment (test equipment, tools, etc.). • Number and types of desks, chairs, tables, benches, etc.
2.	<p>List all factors that could influence your training resources.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Other courses/schools that use your classroom. • Classrooms/labs from other courses/schools that you can use. • Shared test equipment, visual aids.
3.	<p>Determine how each influence will impact the training resource:</p> <ul style="list-style-type: none"> • Increase the resource. • Decrease the resource. • Have no effect on the resource. <p>Example: Resource is one 625-sq ft classroom with 10 large two-man tables and 20 chairs; influence is the XYZ school has two classrooms, but only one is in use. This influence will increase the resources. However, there is only one classroom and it is shared with the other school; therefore, this will limit the number of course convenings available.</p>

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

STEP	ACTION																								
4.	<p>List all training requirements for this course.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Types of equipment (test equipment, tools, text, etc.). • Quantity of equipment (per student, per group, etc.). • Types of training aids (VCRs, screens, mockups, etc.). • Types of seating arrangements. • Quantity of classrooms, labs, desks, chairs, tables, benches, etc. <p>Note: Instructor requirements to support the course of instruction are determined in the Instructor Contact Hours Computation Work Sheet, Exhibit 5.</p>																								
5.	<p>Compare existing resources, with influences marked, to the new course requirements (Steps 1-4). This will give you an indication of how many students per class, how many classes on board, and total classes graduating in a fiscal year.</p>																								
6.	<p>Multiply the maximum students times maximum classes on board, times maximum classes that can graduate in a fiscal year. This will give you your maximum capability per year.</p>																								
7.	<p>Determine if there are any limiting factors using the information from Steps 5 and 6, your course requirements, and the chart below.</p> <table border="1" data-bbox="375 1266 1336 1717"> <thead> <tr> <th data-bbox="375 1266 699 1377">IF Your resources are:</th> <th data-bbox="699 1266 1057 1377">AND Your Maximum Capabilities are:</th> <th data-bbox="1057 1266 1336 1377">THEN</th> </tr> </thead> <tbody> <tr> <td data-bbox="375 1377 699 1488" rowspan="3">= Course requirements</td> <td data-bbox="699 1377 1057 1415">= Quotas</td> <td data-bbox="1057 1377 1336 1415">No limiting factors</td> </tr> <tr> <td data-bbox="699 1415 1057 1453">> Quotas</td> <td data-bbox="1057 1415 1336 1453">No limiting factors</td> </tr> <tr> <td data-bbox="699 1453 1057 1491">< Quotas</td> <td data-bbox="1057 1453 1336 1491">Limiting factors</td> </tr> <tr> <td data-bbox="375 1491 699 1602" rowspan="3">> Course requirements</td> <td data-bbox="699 1491 1057 1528">= Quotas</td> <td data-bbox="1057 1491 1336 1528">No limiting factors</td> </tr> <tr> <td data-bbox="699 1528 1057 1566">> Quotas</td> <td data-bbox="1057 1528 1336 1566">No limiting factors</td> </tr> <tr> <td data-bbox="699 1566 1057 1604">< Quotas</td> <td data-bbox="1057 1566 1336 1604">Limiting factors</td> </tr> <tr> <td data-bbox="375 1604 699 1717" rowspan="3">< Course requirements</td> <td data-bbox="699 1604 1057 1642">= Quotas</td> <td data-bbox="1057 1604 1336 1642">No limiting factors</td> </tr> <tr> <td data-bbox="699 1642 1057 1680">> Quotas</td> <td data-bbox="1057 1642 1336 1680">No limiting factors</td> </tr> <tr> <td data-bbox="699 1680 1057 1717">< Quotas</td> <td data-bbox="1057 1680 1336 1717">Limiting factors</td> </tr> </tbody> </table> <p>Note: If there are limiting factors, see chart in Step 8.</p>	IF Your resources are:	AND Your Maximum Capabilities are:	THEN	= Course requirements	= Quotas	No limiting factors	> Quotas	No limiting factors	< Quotas	Limiting factors	> Course requirements	= Quotas	No limiting factors	> Quotas	No limiting factors	< Quotas	Limiting factors	< Course requirements	= Quotas	No limiting factors	> Quotas	No limiting factors	< Quotas	Limiting factors
IF Your resources are:	AND Your Maximum Capabilities are:	THEN																							
= Course requirements	= Quotas	No limiting factors																							
	> Quotas	No limiting factors																							
	< Quotas	Limiting factors																							
> Course requirements	= Quotas	No limiting factors																							
	> Quotas	No limiting factors																							
	< Quotas	Limiting factors																							
< Course requirements	= Quotas	No limiting factors																							
	> Quotas	No limiting factors																							
	< Quotas	Limiting factors																							

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

STEP	ACTION										
8.	<p>If there are limiting factors, compare the resources list to the requirements list and note the differences. Use the chart below to determine your limiting factors.</p> <table border="1" data-bbox="386 451 1435 997"> <thead> <tr> <th data-bbox="386 451 1052 527">IF your differences involve:</th> <th data-bbox="1052 451 1435 527">THEN your limiting factors are:</th> </tr> </thead> <tbody> <tr> <td data-bbox="386 527 1052 611">Quantity: of classrooms or seating Size: of classrooms due to seating arrangement</td> <td data-bbox="1052 527 1435 611">Classrooms</td> </tr> <tr> <td data-bbox="386 611 1052 758">Types of installed equipment: specially installed equipment required Quantity: of equipment required Size: of labs due to seating arrangement</td> <td data-bbox="1052 611 1435 758">Labs and installed equipment</td> </tr> <tr> <td data-bbox="386 758 1052 842">Types of training aids: special aids required Quantity: of training aids required</td> <td data-bbox="1052 758 1435 842">Training aids and equipment</td> </tr> <tr> <td data-bbox="386 842 1052 997">Types of furnishings: desks, chairs, benches, or tables required Quantity: of desks, chairs benches, or tables required</td> <td data-bbox="1052 842 1435 997">Classroom furnishings</td> </tr> </tbody> </table>	IF your differences involve:	THEN your limiting factors are:	Quantity: of classrooms or seating Size: of classrooms due to seating arrangement	Classrooms	Types of installed equipment: specially installed equipment required Quantity: of equipment required Size: of labs due to seating arrangement	Labs and installed equipment	Types of training aids: special aids required Quantity: of training aids required	Training aids and equipment	Types of furnishings: desks, chairs, benches, or tables required Quantity: of desks, chairs benches, or tables required	Classroom furnishings
IF your differences involve:	THEN your limiting factors are:										
Quantity: of classrooms or seating Size: of classrooms due to seating arrangement	Classrooms										
Types of installed equipment: specially installed equipment required Quantity: of equipment required Size: of labs due to seating arrangement	Labs and installed equipment										
Types of training aids: special aids required Quantity: of training aids required	Training aids and equipment										
Types of furnishings: desks, chairs, benches, or tables required Quantity: of desks, chairs benches, or tables required	Classroom furnishings										
9.	<p>In row (A) under the appropriate limiting factor(s), list the <i>maximum students per class</i> you can instruct.</p> <p>Note: There may be multiple limiting factors for any area.</p>										
10.	<p>In row (B) under the appropriate limiting factor(s), list the <i>maximum classes on board</i> you can instruct at the same time.</p>										
11.	<p>In row (C) under the appropriate limiting factor(s), list the <i>maximum number of class convenings</i> (classes with actual graduating dates between Oct 1 – Sep 30).</p> <p>Note: For this category, you must consider your maximum classes on board and total training weeks in the fiscal year.</p>										
12.	<p>In row (A) under Summary of Capabilities, enter the number of all the limiting factors involved with: <i>maximum students/class (# of students)</i>.</p>										

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

STEP	ACTION																														
13.	In row (B) under Summary of Capabilities, enter the number of all the limiting factors involved with: <i>maximum classes on board (# of classes)</i> .																														
14.	In row (C) under Summary of Capabilities, enter the number of all the limiting factors involved with: <i>maximum CLCVNS/year (# of classes)</i> .																														
15.	<p>In row (D) under Summary of Capabilities, enter the number from multiplying number in Step 12 by Step 13 and multiplying the total by step 14. See the example below.</p> <table border="1" data-bbox="383 821 1421 1035"> <thead> <tr> <th data-bbox="383 821 524 905">Classrooms</th> <th data-bbox="524 821 678 905">Labs & Installed Equipment</th> <th data-bbox="678 821 820 905">Training Aids & Equipment</th> <th data-bbox="820 821 972 905">Classroom Furnishings</th> <th data-bbox="972 821 1114 905">Summary of Capabilities</th> <th data-bbox="1114 821 1421 905"></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td data-bbox="820 905 972 936">30</td> <td data-bbox="972 905 1114 936">30</td> <td data-bbox="1114 905 1421 936"><= #12</td> </tr> <tr> <td></td> <td data-bbox="524 936 678 968">2</td> <td></td> <td></td> <td data-bbox="972 936 1114 968">2</td> <td data-bbox="1114 936 1421 968"><= #13</td> </tr> <tr> <td data-bbox="383 968 524 999">5</td> <td></td> <td></td> <td></td> <td data-bbox="972 968 1114 999">5</td> <td data-bbox="1114 968 1421 999"><= #14</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td data-bbox="972 999 1114 1031">300</td> <td data-bbox="1114 999 1421 1031"><= #15 30 x 2 x 5 = 300</td> </tr> </tbody> </table>	Classrooms	Labs & Installed Equipment	Training Aids & Equipment	Classroom Furnishings	Summary of Capabilities					30	30	<= #12		2			2	<= #13	5				5	<= #14					300	<= #15 30 x 2 x 5 = 300
Classrooms	Labs & Installed Equipment	Training Aids & Equipment	Classroom Furnishings	Summary of Capabilities																											
			30	30	<= #12																										
	2			2	<= #13																										
5				5	<= #14																										
				300	<= #15 30 x 2 x 5 = 300																										
16.	<p>Write a brief explanation for each limiting factor listed. The explanation should include:</p> <ul style="list-style-type: none"> • What the limitations are. • Options or changes that would overcome the limitation. <p>Identify each limitation by its letter and column number, i.e., A1, B3, C2.</p> <p>Note: In the explanations, include any limitations that cannot be eliminated or minimized.</p>																														
17.	<p>Use the space to list any additional information that would assist the Program Manager in managing the course. Below are items that could be covered:</p> <ul style="list-style-type: none"> • Information on resources • Facilities • Staffing Qualifications • Minimum number of students needed to hold the course 																														

USCG Training System SOP: Curriculum Outline

Course Limiting Factors Sheet, Exhibit 4, continued

Example

Below is an example of Course Limiting Factors Sheet, Exhibit 4.

EXHIBITS

(4.) COURSE LIMITING FACTORS SHEET:

Course Limiting Factors Sheet					
Course Design	Classrooms	Labs & Installed Equipment	Training Aids & Equipment	Classroom Furnishings	Summary of Capabilities
	(1)	(2)	(3)	(4)	
Maximum Students/ Class (# of students) (A)			06		06
Maximum Classes on Board (# of classes) (B)		01	01		01
Maximum CLCVNS/ Year (# of classes) (C)	05				05
Maximum Quotas/ Year (# of students) (D)					30

Explanation of Factors:

- A3: Limited to six students per class with existing and expected training aids. An increase would require additional equipment.
- B2: Limited to one class on board at a time due to limited lab space. An increase would require additional lab space, instructors, and installed equipment.
- B3: Limited to one class on board at a time due to limited training aids. An increase would require additional training aids.
- C1: Limited to five convenings a year by current classroom scheduling. Classroom is also used for EM-05A, EM-25, and MK-27.

Additional Information: None

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5

Overview

The Curriculum Outline provides various times to instruct each TPO. The Instructor Contact Hours (ICH) Computation Work Sheet breaks this time down by each method of instruction along with the required number of instructors to support that method.

The data obtained from the ICH computations and documentation of applicable additives is used to determine full-time billet requirements. The proper identification and breakdown of these requirements help to ensure that each course in the training community receives the right resources to support valid and varying levels of workload in the budget process.

The ICH determination is only one part of the overall Training Center Staffing Standards. The process for documenting these requirements includes the following:

- Instructor Contact Hours Computation Work Sheet
- Additives Man-Hours Computation Work Sheet
- Staffing Standards Computation Work Sheet

Note: CG-132 has the ultimate responsibility to validate all ICH and additive requirements. CG-132 may exercise this responsibility to audit at any time due to organizational data requirements.

Note: The ICH Computation Work Sheet is used to calculate instructor hours only and is not intended for use in American Council on Education (ACE) accreditation.

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5, continued

Format

The format for the Instructor Contact Hours Computation Work Sheet is shown below.

Click the link below to obtain the electronic ICH forms to complete Exhibit 5, 5a, and 5b.

<ftp://cgweb.tcyorktown.uscg.mil/Training/Docs/ICH.doc>

Note: To input your data on the electronic ICH forms, double click inside the work sheet. A box will appear and ask you if you want to "...activate an embedded object..." and you will click "Yes." Then you must go to "File", do a "Save As", and name the file as the course name and add "ICH", i.e., EM-03 ICH. Once the file is saved, you can enter data for each TPO. The computer will perform all calculations. Do not change fields with formulas.

Include these forms when forwarding curriculum outline for approval signatures.

EXHIBITS

(5.) INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET:

INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET

Course Name: (Step 1)					Location: (Step 2)					Page	
Course ID:											
CO Approval Date: (Step 3)						Optimum Class Size (Step 5)					
Validation Date: (Step 4)											
Course Length											
BASED ON 37.5 HOUR TRAINING WEEK										Weeks	Days
										0.0	0.0
Terminal	INSTRUCTION USED IN TRAINING (Step 7)								TOTAL	INSTR	TOTAL
Performance									CO	PER	ICH
Objective	LECT	DEMO	E/PE	EXAM	LAB	RP/S	VIDEO	CBT	HOURS	TPO	
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
(Step 6)	(Step 8)								(Step 9)		
									0.00		0.00
									0.00		0.00
									0.00		0.00
									0.00		0.00
									0.00		0.00

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5, continued

Procedures

The procedures for completing the Instructor Contact Hours Computation Work Sheet are outlined in the following table.

STEP	ACTION
1.	Enter course name and course ID number. Example: <i>Course Name: Power Generation and Speed Control</i> <i>Course ID: EM-05</i>
2.	Enter the location of the training. Example: <i>Location: TC Yorktown</i>
3.	Enter the last CG-1322 approval date of the Curriculum Outline (if known).
4.	Leave blank. This entry will be completed by CG-132 after review and validation of the course.
5.	Enter the optimum class size from the Course Limiting Factor Work Sheet, Exhibit 4.

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5, continued

In order to fill out the Instructor Contact Hours Computation Work Sheet Steps 6-9, you must refer to the Curriculum Outline and use the method(s) of instruction and hours devoted to those methods for each TPO. Fill in the number of the TPO on the first line (under "Totals"). Start with the first TPO and work to the last TPO in the Curriculum Outline.

More than one entry for a TPO may be written on a single line, however, when the method of instruction used to train the TPO changes the number of instructors required, the hours under the method of instruction should be written on another line.

For example, Lecture (LECT) always requires one instructor. Demonstration (DEMO) may require more than one instructor if one instructor is lecturing and one instructor is demonstrating at the same time but if the DEMO only requires one instructor, you can place both hours on the same line (see example next page, first line entry for TPO 1.1). Exercise/Practical Exercise (E/PE) may require the class size to be broken down into different sized groups, based on the exercise. If E/PE requires the same number of instructors as the Exam/Review (EXAM), they can be placed on the same line (see example next page, second line entry for TPO 1.1). See Appendix C, Definitions for Methods of Instruction, for information.

STEP	ACTION
6.	Enter TPO number from the Curriculum Outline. Example: <i>1.1</i>
7.	Find each method(s) of instruction for the TPO in the Curriculum Outline. Example: <i>Lecture (LECT), Demonstration (DEMO), Exercise/Practical Exercise (E/PE), Exam/Review (EXAM), Laboratory (LAB), Role Play/Simulation (RP/S), Video Tape/DVD (VIDEO), Computer-Based Training (CBT). Lecture should never be the sole method!</i>
8.	Enter the time of instruction for each method for the TPO in the appropriate block. Example: <i>Time of instruction: 17 hours Lecture (LECT) = 6.5 hours Demonstration (DEMO) = 1 hour Exercise/Practical Exercise (E/PE) = 5.5 hours Exam/Review (EXAM) = 1 hour Lab (LAB) = 3 hours</i>
9.	Enter number of instructors required per method of instruction for TPO. Example: <i>LECT = 6.5 hours with 1 instructor DEMO = 1 hour with 1 instructor E/PE = 5.5 hours with 2 instructors EXAM = 1 hour with 1 instructor LAB = 3 hours with 4 instructors</i>

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5, continued

Example

Below is an example of an Instructor Contact Hours Computation Work Sheet.

EXHIBITS

(5.) INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET:

INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET

Course Name: Power Generation & Speed Controls						Location:				Page		
Course ID: EM-05						TC Yorktown				1		
CO Approval Date: Pending									Optimum Class Size			
Validation Date: 5 November 2003									6			
BASED ON 37.5 HOUR TRAINING WEEK									Course Length			
									Weeks		Days	
									1.3		6.3	
Terminal	INSTRUCTION USED IN TRAINING									TOTAL	INSTR	TOTAL
Performance										CO	PER	ICH
Objective	LECT	DEMO	E/PE	EXAM	LAB	RP/S	VIDEO	CBT	HOURS	TPO		
TOTALS	14.50	1.00	27.42	1.00	3.00	0.00	0.00	0.00	46.92		84.34	
1.1	6.50	1.00							7.50	1	7.50	
1.1			5.50	1.00					6.50	2	13.00	
1.1					3.00				3.00	4	12.00	
1.2			2.17						2.17	2	4.34	
2.1	3.00								3.00	1	3.00	
2.1			4.00						4.00	2	8.00	
2.2			4.00						4.00	2	8.00	
2.3	1.50								1.50	1	1.50	
2.3			3.00						3.00	2	6.00	
2.4			4.00						4.00	2	8.00	
3.1	3.50								3.50	1	3.50	
3.1			2.00						2.00	2	4.00	
3.2			2.75						2.75	2	5.50	

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5a

Additive Man-Hour Computation Work Sheet, Exhibit 5a

Additives are required workload that instructors have to perform to successfully accomplish the course of instruction but is not accounted for in the basic standard or in the Curriculum Outline Instructor Contact Hours computation. These hours are determined to be work-related and performed on a continuing basis. The Additive Man-Hour Computation Work Sheet is used to document these additional tasks and their associated man-hours and is found at the link for electronic ICH forms on page 42.

Format

The format for the Additive Man-Hour Computation Work Sheet is shown below.

EXHIBITS

(5a.) ADDITIVE MAN-HOUR COMPUTATION WORK SHEET:

INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET	
ADDITIVE MAN-HOUR COMPUTATION WORK SHEET	
Course Name: <u>See Step 1</u>	
Course ID:	
CO Approval Date: <u>See Step 2</u>	
Validation Date: <u>See Step 3</u>	
ADDITIVES, COMMENTS	<i>Hours per month</i>
<u>See Step 4</u>	
Total Monthly Additive Man-Hours:	<u>See Step 5</u>

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5a, continued

Procedures

The procedures for completing the Additive Man-Hour Computation Work Sheet are outlined in the following table.

STEP	ACTION
1.	Course name and course ID will appear from the ICH Work Sheet link.
2.	Curriculum Outline (CO) approval date will appear from the ICH Work Sheet link.
3.	Leave blank. This entry will be completed by CG-132 after review and validation of the course.
4.	<p>List the additives/comment and the hours performed per month. (See valid examples and nonexamples on the following pages.) Tasks and associated times should be listed by their natural frequency of occurrence (i.e., task is accomplished every day, twice per week, monthly, quarterly, etc.) and computed as monthly Man-Hours. For example, if the task is required to be performed for each convening and takes one hour, and there are eight convenings per year, the requirement would be computed as follows:</p> $8 \times 1.00 \times .0833 \text{ (yearly conversion factor)} = .67 \text{ monthly Man-Hours}$ <p>Note: Instructors should arrive at the TRACENs with the prerequisite qualifications for the job. However, that does not always happen. If an instructor must have specific training before he or she can instruct, then credit should be listed as an additive. An example of this would be:</p> <p>A DC instructor is required to be qualified in aluminum welding and, therefore, must attend training. The training is 15 days with 2 days travel. Instructor turnover is credited as every 3 years. This would be shown as follows:</p> $8 \text{ hours per day} \times 17 \text{ days} \times .0833 = 11.33 / 3 = 3.78 \text{ monthly Man-Hours}$
5.	Total Monthly Additive Man-Hours is totaled electronically and will appear after Step 4 is completed.

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5a, continued

<p>Examples of Valid Additive Tasks</p>	<ul style="list-style-type: none"> • Maintaining Coxswain qualifications (boat-specific). • EMT recertification. • Preventative maintenance on operational equipment used for training. (Preventative maintenance that students do not accomplish during training and instructors have to perform.) • Hazardous materials disposal. • Troubleshooting network/software/hardware and NIDA equipment. • Ensure training equipment is operational prior to instruction. • Setting faults in computer/simulator for students to troubleshoot. • Coordination of guest speakers coming from out of town.
<p>Tasks Not to be Included as Additives</p>	<p>Below are the basic tasks that are already included in the resident instructor standard. Do not include these as additive requirements:</p> <ul style="list-style-type: none"> • Conducts resident instruction: <ul style="list-style-type: none"> ○ Provides instruction ○ Conducts practical exercise/lab ○ Conducts practical examination or test ○ Conducts course critique. • Bringing an instructor up to speed to instruct (the basic equation allows 6 months for this). • Performs class in-processing. • Issues course materials. • Prepares for new class orientation: <ul style="list-style-type: none"> ○ Sends welcome package ○ Screens student ○ Coordinates enrollment ○ Orients late-entry student.

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5a, continued

Tasks Not to be Included as Additives, continued	<ul style="list-style-type: none">• Prepares to instruct:<ul style="list-style-type: none">○ Reviews lesson plan○ Develops personalized lesson plan○ Prepares training site○ Performs instructor preventive maintenance.• Recovers training environment.• Identifies discrepancy in training material.• Performs graduation/dinner ceremony:<ul style="list-style-type: none">○ Coordinates graduation/dinner, speaker(s)○ Attends graduation/dinner.• Monitors class out-processing.• Instructor student support:<ul style="list-style-type: none">○ Processes student absence or request○ Grades written test○ Assesses performance test○ Reviews and grades homework○ Posts student grades○ Conducts academic counseling○ Conducts remedial training○ Participates in academic and aptitude or evaluation board○ Administers retest○ Conducts nonacademic counseling○ Initiates disenrollment action○ Drafts student academic evaluation report.• Provides course logistical support:<ul style="list-style-type: none">○ Requisitions training equipment and material○ Picks up expendable supplies○ Performs training and equipment inventory○ Accomplishes equipment survey○ Performs inventory of training material.• Performs area cleanup:<ul style="list-style-type: none">○ Prepares work area○ Cleans work area.• Prepares for or conducts/attends training meeting.• Reviews incoming mail or e-mail.• Reviews outgoing mail or e-mail.
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USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5a, continued

Example The following is an example of Additive Man-Hour Computations.

EXHIBITS

(5a.) ADDITIVE MAN-HOUR COMPUTATION WORK SHEET:

INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET	
ADDITIVE MAN-HOUR COMPUTATION WORK SHEET	
Course Name: Boatswain Mate "A" School	
Course ID: BM-A	
CO Approval Date: Pending	
Validation Date: 9 July 2005	
ADDITIVES, COMMENTS	
Computations based on 10 convenings per year	
Coordinate 41' UTB and crew rqmts with UTB Systems Center - 3.00/convening =	
$3.00 * 10 * .0833 = 2.499$	2.50
Survival Vest Inspection - 2.00/month	2.00
Survival Raft Inspection - 2/month 3.00	6.00
Coordinate with LANTAREA for Helo ops - 2.00/month	2.00
Evaluate Student Navigation Charts - 4.00/convening	
$4.00 * 10 * .0833 = 3.33$	3.33
Ground Tackle Inspection - 8.00/month	8.00
Navigation Chart procurement - 2.00/month =	2.00
Petty Officer Development - 2 inst 19.00/convening =	
$2 * 19.99 * 10 * .0833 = 31.65$	31.65
Signal Lights PMS - 10.00/month	10.00
Total Monthly Additive Man-Hours =	67.48

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5b

Staffing Standards Computation Work Sheet, Exhibit 5b

The Staffing Standards Computation Work Sheet is the resource impact page. This page takes the instructor contact hours required to instruct the course, along with the approved number of convenings per year, and the documented additives, and runs them through the linear regression equation, to determine the required number of instructor Full-Time Equivalent (FTE) billets. The work sheet is found at the link for electronic ICH forms on page 42.

Overview

The format for the Staffing Standards Computation Work Sheet is shown below.

EXHIBITS:

(5b.) INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET:

STAFFING STANDARDS COMPUTATION WORK SHEET	
Course Name:	Validation Date:
Course ID:	
MODEL:	
LOCATION:	MAN-HOURS
1. "A" Value (Given values for "A" School and "C" School)	
2. Projected Student Load =	
3. Optimum Class Size =	
4. Number of Convenings	
5. One Time Instructor Contact Hours =	
6. Monthly ICH (X1) =	
7. B1 Coefficient Value (Given values for "A" School and "C" School) =	
8. B1 * X1 (Monthly ICH Value) + "A" Value =	
9. Additive Man-Hours Earned =	
10. Total Man-Hours Earned =	
11. Manpower Availability Factor (MAF) (Given values for "A" School and "C" School) =	
12. Earned Manpower Requirements =	
13. Rounded Requirements (see chart on page 56) =	
NOTE: Additives	
See Instructor Contact Hours Computation Work Sheet	

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5b, continued

Procedures

The procedures for completing the Instructor Contact Hours Computation Work Sheet are outlined in the following table.

STEP	ACTION								
1.	<p>"A" Value is a given value and is the hours required to prepare for a class convening. This time may include, but is not limited to, preparing the classroom for use, setting up tools, equipment, and supplies, and preparing any required paperwork.</p> <p>Given values are as follows:</p> <table data-bbox="430 814 1221 961"> <tr> <td>"A" School</td> <td>7.6199 Staff Hours</td> </tr> <tr> <td>"C" School</td> <td>6.1672 Staff Hours</td> </tr> <tr> <td>Officer Candidate School</td> <td>386.0000 Staff Hours</td> </tr> <tr> <td>Recruit Training</td> <td>260.2000 Staff Hours</td> </tr> </table>	"A" School	7.6199 Staff Hours	"C" School	6.1672 Staff Hours	Officer Candidate School	386.0000 Staff Hours	Recruit Training	260.2000 Staff Hours
"A" School	7.6199 Staff Hours								
"C" School	6.1672 Staff Hours								
Officer Candidate School	386.0000 Staff Hours								
Recruit Training	260.2000 Staff Hours								
2.	<p>Projected Student Load is the planned number of students that are required to undergo training in a particular course to produce the required number of graduates needed in a fiscal year (FY). This number includes active duty, reserve, and international students, and is calculated by multiplying Optimum Class Size (line 3) by Convenings (line 4).</p>								
3.	<p>Optimum Class Size is the planned number of students which can undergo training in a particular class with regard to the number of instructors, equipment, classrooms, convenings, and projected student load. This number is found on the Course Limiting Factors Sheet, Exhibit 4, row A under the Summary of Capabilities column.</p>								
4.	<p>Convenings is the number of times the course will be conducted in a FY to produce the required student output. This number is found on the Course Limiting Factors Sheet, Exhibit 4, row C under the Summary of Capabilities column. Once this number is inserted on line 4 under the <i>Man-Hours</i> column, the total student throughput for the FY will be calculated and displayed on line 2 under the <i>Man-Hours</i> column.</p>								
5.	<p>One Time Instructor Contact Hours (ICH) is the total number of hours an instructor directly interfaces with students in a classroom or laboratory environment per course convening. This number is taken from the ICH Computation Work Sheet, Exhibit 5a, under the TOTAL ICH column.</p>								

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5b, continued

6.	<p>Monthly ICH (X1) Value is the monthly average number of hours an instructor interfaces directly with students in a classroom or laboratory environment. It is determined by the Projected Student Load (line 2) divided by the Optimum Class Size (line 3), multiplied by the One Time ICH (line 5), divided by twelve (months in a year).</p>																					
7.	<p>B1 Coefficient Value is a given value that accounts for "Break-in" time for new instructors.</p> <p>Given values are as follows:</p> <table data-bbox="427 688 1063 829"> <tr> <td>"A" School</td> <td>1.454</td> </tr> <tr> <td>"C" School</td> <td>1.4874</td> </tr> <tr> <td>Officer Candidate School</td> <td>3595.00</td> </tr> <tr> <td>Recruit Training</td> <td>1226.00</td> </tr> </table>	"A" School	1.454	"C" School	1.4874	Officer Candidate School	3595.00	Recruit Training	1226.00													
"A" School	1.454																					
"C" School	1.4874																					
Officer Candidate School	3595.00																					
Recruit Training	1226.00																					
8.	<p>B1 * X1 Value is a calculation of the B1 Coefficient Value (given value on line 7), multiplied by the Monthly ICH (X1) value (line 6), added to the given "A" Value (line 1).</p>																					
9.	<p>Additive Man-Hours Earned is required work that is not accounted for in the basic standard for Instructor Contact Hours but is determined to be work-related and performed on a continuing basis. This number is taken from the Additive Man-Hour Computation Work Sheet, Exhibit 5a.</p>																					
10.	<p>Total Man-Hours Earned is the total number of staff hours earned based on the computations of lines 1 through 9. It is calculated by adding the B1 * X1 Value (line 8) to Additive Man-Hours Earned (line 9).</p>																					
11.	<p>Man-Hour Availability Factor (MAF) is a given value which is the average number of hours per month a worker is expected to be on the job and available for work. The MAF takes into account such things as leave, PCS, sick leave, etc., (Reference Staffing Standards Manual, COMDTINST M5312.11A (series), F16 1-1 p. 1.10).</p> <p>Given values are as follows:</p> <table data-bbox="427 1564 1388 1816"> <tr> <td>Class "A" and "C" School Courses</td> <td>145</td> <td>hrs</td> </tr> <tr> <td>Resident Course Design & Development</td> <td>145</td> <td>hrs</td> </tr> <tr> <td>Resident Course Evaluation</td> <td>145</td> <td>hrs</td> </tr> <tr> <td>Resident Instructor Direct Support</td> <td>145</td> <td>hrs</td> </tr> <tr> <td>Nonresident Course Development</td> <td>145</td> <td>hrs</td> </tr> <tr> <td>Recruit Training</td> <td>168</td> <td>hrs</td> </tr> <tr> <td>Officer Candidate School</td> <td>168</td> <td>hrs</td> </tr> </table> <p>The MAF for Recruit Training and Officer Candidate School is 168 hours due to the extended training hours associated with their schedule.</p>	Class "A" and "C" School Courses	145	hrs	Resident Course Design & Development	145	hrs	Resident Course Evaluation	145	hrs	Resident Instructor Direct Support	145	hrs	Nonresident Course Development	145	hrs	Recruit Training	168	hrs	Officer Candidate School	168	hrs
Class "A" and "C" School Courses	145	hrs																				
Resident Course Design & Development	145	hrs																				
Resident Course Evaluation	145	hrs																				
Resident Instructor Direct Support	145	hrs																				
Nonresident Course Development	145	hrs																				
Recruit Training	168	hrs																				
Officer Candidate School	168	hrs																				

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5b, continued

12.	<p>Earned Manpower Requirement is the computation of the number of billets earned based on the sum of instructor contact hours and additive man-hours. This number represents the number of full-time equivalent (FTE) billets required to support the course. The Earned Manpower Requirement is the Total Man-Hours Earned (line 10), divided by the given MAF (line 11).</p>																																				
13.	<p>Rounded Requirement is the fractional Earned Manpower Requirement converted or rounded into a whole number. To determine the rounded requirement for line 13, under the <i>Man-Hours</i> column, use the Manpower Breakpoint Table below.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">If the number is between</th> <th style="text-align: center;">and</th> <th style="text-align: center;">Then the rounded requirement equals</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">.100</td><td style="text-align: center;">1.077</td><td style="text-align: center;">1</td></tr> <tr><td style="text-align: center;">1.078</td><td style="text-align: center;">2.154</td><td style="text-align: center;">2</td></tr> <tr><td style="text-align: center;">2.155</td><td style="text-align: center;">3.231</td><td style="text-align: center;">3</td></tr> <tr><td style="text-align: center;">3.232</td><td style="text-align: center;">4.308</td><td style="text-align: center;">4</td></tr> <tr><td style="text-align: center;">4.309</td><td style="text-align: center;">5.385</td><td style="text-align: center;">5</td></tr> <tr><td style="text-align: center;">5.386</td><td style="text-align: center;">6.462</td><td style="text-align: center;">6</td></tr> <tr><td style="text-align: center;">6.463</td><td style="text-align: center;">7.539</td><td style="text-align: center;">7</td></tr> <tr><td style="text-align: center;">7.540</td><td style="text-align: center;">8.616</td><td style="text-align: center;">8</td></tr> <tr><td style="text-align: center;">8.617</td><td style="text-align: center;">9.693</td><td style="text-align: center;">9</td></tr> <tr><td style="text-align: center;">9.694</td><td style="text-align: center;">10.500</td><td style="text-align: center;">10</td></tr> <tr><td style="text-align: center;">10.510</td><td style="text-align: center;">11.500</td><td style="text-align: center;">11</td></tr> </tbody> </table> <p>Note: Fractional manpower requirements over 10.50 are rounded up to the next whole FTE.</p>	If the number is between	and	Then the rounded requirement equals	.100	1.077	1	1.078	2.154	2	2.155	3.231	3	3.232	4.308	4	4.309	5.385	5	5.386	6.462	6	6.463	7.539	7	7.540	8.616	8	8.617	9.693	9	9.694	10.500	10	10.510	11.500	11
If the number is between	and	Then the rounded requirement equals																																			
.100	1.077	1																																			
1.078	2.154	2																																			
2.155	3.231	3																																			
3.232	4.308	4																																			
4.309	5.385	5																																			
5.386	6.462	6																																			
6.463	7.539	7																																			
7.540	8.616	8																																			
8.617	9.693	9																																			
9.694	10.500	10																																			
10.510	11.500	11																																			

To save this document, go to the Microsoft Excel menu bar and click on File, then Page Setup. At the bottom of the Page screen it says "First Page Number: auto", type in the correct page number for insertion into the Curriculum Outline. Press OK.

Save Exhibits 5a and 5b and submit to Training Officer with the curriculum outline through your chain-of-command for signature.

USCG Training System SOP: Curriculum Outline

Instructor Contact Hours Computation, Exhibit 5b, continued

Example The following is an example of a Staffing Standards Computation Work Sheet for a "C" School course.

EXHIBITS:

(5b.) INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET:

INSTRUCTOR CONTACT HOURS COMPUTATION WORK SHEET		
STAFFING STANDARDS COMPUTATION WORK SHEET		
Course Name: Fiber Optic Technician Course		Validation Date: 26 August 2005
Course ID: EM-03		
MODEL: "C" School		
LOCATION: TC Yorktown		
		<i>Man-Hours</i>
1. "A" Value	6.1672	
2. Projected Student Load =		126.00
3. Optimum Class Size =		14.00
4. Convenings =		9.00
5. One Time Instructor Contact Hours =		57.00
6. Monthly ICH (X1) =	42.75	
7. B1 Coefficient Value =	1.4874	
8. B1 * X1 (Monthly ICH Value) =		69.75
9. Additive Man-Hours Earned =		8.00
10. Total Man-Hours Earned =		77.75
11. Manpower Availability Factor (MAF) =		145.00
12. Earned Manpower Requirement =		0.536
13. Rounded Requirement =		1
<u>Note:</u> Additives		
See Instructor Contact Hours Computation Work Sheet		

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**NONRESIDENT
CURRICULUM
OUTLINE**

USCG Training System SOP: Curriculum Outline

Overview

Policy

Coast Guard Headquarters policy requires that curriculum outlines be submitted and approved for all distance learning PQG courses. The curriculum outline is the "blueprint" for course development, the justification for funding, and the instrument used to receive American Council of Education (ACE) credit for nontraditional learning. The curriculum outline must be approved before development of course materials begins.

Curriculum Outline

A standard format has been adopted to ensure uniformity throughout Coast Guard training. A well-written curriculum outline should meet the following criteria:

- Documents performance objectives for a course of instruction.
 - Documents training resource requirements for conducting resident and distance learning courses.
 - Identifies improvements or changes in training.
 - Maintains agreement between job performance requirements and validated training needs.
 - Facilitates the curriculum review and approval process and serves as an audit trail document.
-

Nonresident Curriculum Outline Instructions

This section explains how to produce a nonresident curriculum outline. Some sections/elements of a curriculum outline are self-explanatory and no further explanation is provided in this SOP. In those instances, only examples/samples are given. If you have additional questions or need assistance, consult your training center's instructional system specialist or CG-132.

USCG Training System SOP: Curriculum Outline

Nonresident Curriculum Outline Cover Sheet

Format

The format of a Nonresident Curriculum Outline cover sheet is shown on the next page.

Note: A Step/Action table explaining each numbered step follows the formatting information. A camera-ready example of the specific page is then shown.

USCG Training System SOP: Curriculum Outline

CURRICULUM OUTLINE

FOR

COURSE NAME See Step 1 of Procedures on next page

COURSE ID and COURSE CODE See Step 2

RESERVE RETIREMENT POINTS See Step 3

CLASSIFICATION See Step 4

DEVELOPED BY

SCHOOL NAME See Step 5

U.S. COAST GUARD TRAINING CENTER YORKTOWN See Step 6
YORKTOWN, VA

FREQUENCY OF REVIEW: _____ See Step 7

REVIEWED AND APPROVED AT

U.S. COAST GUARD HEADQUARTERS
WASHINGTON, DC

SUBMITTED:	<u>See Step 8</u>	_____
	DATE	CHIEF, SCHOOL/BRANCH
FORWARDED:	_____	_____
	DATE	TRAINING OFFICER
REVIEWED:	_____	_____
	DATE	CG-132 TRAINING MANAGER
REVIEWED:	_____	_____
	DATE	PROGRAM MANAGER
APPROVED:	_____	_____
	DATE	CG-132 OFFICE OF TRAINING, WORKFORCE PERFORMANCE AND DEVELOPMENT
Next Review Date:	<u>25 December 2008</u>	<u>See Step 9</u>

USCG Training System SOP: Curriculum Outline

Nonresident Curriculum Outline Cover Sheet, continued

Procedures

The procedures for completing the Nonresident Curriculum Outline Cover Sheet are outlined in the following table.

STEP	ACTION
1.	Insert the course name.
2.	Insert the course ID and course code with edition number.
3.	<p>Insert total reserve retirement points (RRPs). Use the directions provided later in this section.</p> <p>Note: The RRP's cannot be determined until the pamphlets are completely developed. Insert "TBD" on the cover page until pamphlets are completed and RRP's are determined.</p> <p>Reference: Reserve Policy Manual, COMDTINST M1001.28 (series)</p>
4.	<p>Insert the proper classification. The classification deals with the content of the curriculum. If a portion of the curriculum is classified, please specify as well.</p> <p>Note: If this document is classified, follow proper procedures for handling of classified documents.</p>
5.	Insert the full name of the school where the course was developed.
6.	Insert the full name of Training Center or Unit where the course was developed.
7.	<p>Leave blank. Headquarters (CG-1322) assigns the frequency of review. Cycle is every three or four years depending on if the rating is considered highly technical or if data supports a shorter cycle.</p> <p>Reference: EPQ Manual, COMDTINST M1414.8 (series), Chapter 3</p>
8.	Insert the month, day, and year. Curriculum outlines at all training centers will be forwarded to the training officer prior to sending to Headquarters (CG-132).
9.	Leave blank. Headquarters (CG-1322) assigns the review date. This is based on when the curriculum is approved.

USCG Training System SOP: Curriculum Outline

Nonresident Curriculum Outline Cover Sheet, continued

Example

Below is an example of a Nonresident Curriculum Outline Cover Sheet.

CURRICULUM OUTLINE	
FOR	
<u>BOATSWAIN'S MATE, THIRD CLASS POG</u>	
COURSE ID: <u>BM3</u> COURSE CODE: <u>0390-4</u>	
34 RESERVE RETIREMENT POINTS	
UNCLASSIFIED	
DEVELOPED BY	
<u>BM SCHOOL</u>	
U.S. COAST GUARD TRAINING CENTER YORKTOWN <u>YORKTOWN, VA</u>	
FREQUENCY OF REVIEW: _____	
REVIEWED AND APPROVED AT	
U.S. COAST GUARD HEADQUARTERS WASHINGTON, DC	
SUBMITTED: _____	_____
DATE	CHIEF, OPERATIONS BRANCH
FORWARDED: _____	_____
DATE	TRAINING OFFICER
REVIEWED: _____	_____
DATE	CG-132 TRAINING MANAGER
REVIEWED: _____	_____
DATE	PROGRAM MANAGER
APPROVED: _____	_____
DATE	CG-132 OFFICE OF TRAINING, WORKFORCE PERFORMANCE AND DEVELOPMENT
Next Review Date: _____	

USCG Training System SOP: Curriculum Outline

Curriculum Outline Table of Contents

Format The format of a Table of Contents is shown below.

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Course Data.....	3 See Step 1
Mission and Scope Statements.....	4
Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5
Course Content Reference Table	See Step 2

EXHIBITS

- (1) Training Aids/Training Equipment
- (2) References Listed in TPOs
- (3) Training Center Pamphlets Issued to Student
- (4) Reserve Retirement Points Work Sheet

USCG Training System SOP: Curriculum Outline

Curriculum Outline Table of Contents, continued

Procedures

The procedures for completing the Table of Contents are outlined in the following table.

STEP	ACTION								
1.	<p>Note: It is easiest to insert the page numbers for Table of Contents when the entire document is complete.</p> <p>Insert the page numbers for the sections listed below.</p> <p>The following three pages of every curriculum outline will be sequenced as follows:</p> <table data-bbox="511 863 1242 1192"> <thead> <tr> <th></th> <th style="text-align: right;"><u>PAGE</u></th> </tr> </thead> <tbody> <tr> <td>Course Data</td> <td style="text-align: right;">3</td> </tr> <tr> <td>Mission and Scope Statements</td> <td style="text-align: right;">4</td> </tr> <tr> <td>Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)</td> <td style="text-align: right;">5</td> </tr> </tbody> </table>		<u>PAGE</u>	Course Data	3	Mission and Scope Statements	4	Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5
	<u>PAGE</u>								
Course Data	3								
Mission and Scope Statements	4								
Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs)	5								
2.	<p>After numbering the remaining TPO and EO pages, insert the page numbers of the following sections:</p> <p>Course Content Reference Table</p> <p>Exhibits</p>								

USCG Training System SOP: Curriculum Outline

Course Data

Format

The format for the Course Data page is shown below.

COURSE DATA	<u>See Step 1</u>
COURSE NAME, ID, CODE, AND EDITION:	<u>See Step 2</u>
<u>CURRICULUM/CHANGES PROPOSED</u>	<u>See Step 3</u>
<u>DESCRIPTION</u>	
ELIGIBILITY REQUIREMENTS	
PREREQUISITES	
CONTENT	
LENGTH	<u>See Step 4</u>
EQUIPMENT	
FUNDING	<u>See Step 5</u>
LIMITING FACTORS	
COMPETENCY CODE AUTHORIZATION	
REASONS FOR PROPOSED CURRICULUM/CHANGES:	<u>See Step 6</u>
RECOMMENDED IMPLEMENTATION DATE:	<u>See Step 7</u>

USCG Training System SOP: Curriculum Outline

Course Data, continued

Procedures

The procedures for completing the Course Data page are outlined in the following table.

STEP	ACTION
1.	<p>If this outline is for a new course, the title of this page is "COURSE DATA - NEW CURRICULUM."</p> <p>If this outline is for a revision, the title of this page is "COURSE DATA - COURSE REVISION."</p>
2.	<p>Insert the course name, course ID, and course code with edition number.</p>
3.	<p>If this outline is for a new course, this line should be "CURRICULUM PROPOSED." Write a short description for each of the 7 areas listed.</p> <p>If this outline is for a revision, this line should be "CHANGES PROPOSED." Write a short description for each of the 7 areas and any changes for each of the areas listed.</p>
4.	<p>Insert 36 months*. This is the maximum enrollment period for all nonresident courses. (*With the advent of the Performance Qualification Guide (PQG) to accompany nonresident courses, the suggested completion time is 6-12 months.)</p>
5.	<p>Insert statement on costs to develop PQGs which support the advancement system. Currently costs are approximately \$0.025 per camera-ready page in black and white and \$0.12 per camera-ready page in color. The cost for producing a CD-ROM is approximately \$1.00 per CD-ROM. This cost does not factor in salaries or the cost of reproduction. These costs are subject to change based on printing contract. Contact the CG Institute for actual costs.</p>

USCG Training System SOP: Curriculum Outline

Course Data, continued

STEP	ACTION
6.	<p>If this outline is for a new course, this line should be "REASONS FOR PROPOSED CURRICULUM." Write a short statement to describe why this new course is being proposed.</p> <p>If this outline is for a revision, this line should be "REASONS FOR PROPOSED CHANGES". Write a short statement of the current situation or what is currently in place and compare this with the newly proposed needs or requirements.</p>
7.	Insert the recommended implementation date.

USCG Training System SOP: Curriculum Outline

Course Data, continued

Example

Below is an example of a Course Data page for a course that is new.

COURSE DATA – NEW CURRICULUM	
COURSE NAME, ID, CODE, AND EDITION:	<u>Boatswain's Mate Third Class PQG (BM3) 0312-1</u>
<u>CURRICULUM PROPOSED</u>	<u>DESCRIPTION</u>
ELIGIBILITY REQUIREMENTS	NONE
PREREQUISITES	NONE
CONTENT	Subjects in this course include: Administration, Piloting and Navigation, Maintenance, and Honors and Ceremonies.
LENGTH	36 months
EQUIPMENT	NONE
FUNDING	Costs to develop courses to support the advancement system are currently approximately \$0.025 cents per camera-ready page in black and white and \$0.12 per camera-ready page in color. The cost for producing a CD-ROM is approximately \$1.00 per CD-ROM. This cost does not factor in salaries or the cost of reproduction. These costs are subject to change based on printing contract.
LIMITING FACTORS	NONE
COMPETENCY CODE AUTHORIZATION	NONE
REASONS FOR PROPOSED CURRICULUM:	Course developed in accordance with the Enlisted Qualifications Manual, COMDTINST M1414.8 (series). Based on new enlisted qualifications dated 2003.
RECOMMENDED IMPLEMENTATION DATE:	April 2007

USCG Training System SOP: Curriculum Outline

Course Data, continued

Example Below is an example of a Course Data page for a course that is being revised.

COURSE DATA - COURSE REVISION	
COURSE NAME, ID, CODE, AND EDITION:	<u>Electrician's Mate Third Class PQG (EM3) 0319-1</u>
<u>CHANGES PROPOSED</u>	<u>DESCRIPTION</u>
ELIGIBILITY REQUIREMENTS	NONE
PREREQUISITES	NONE
CONTENT	Subjects in this course include: Engineering Administration, Basic Electricity, Power Distribution, Motors and Controllers, Batteries, Standard Boat Electrical Systems, Auxiliary Control Systems, and National Electric Code (NEC).
LENGTH	36 months
EQUIPMENT	NONE
FUNDING	Costs to develop courses to support the advancement system are currently approximately \$0.025 cents per camera-ready page in black and white and \$0.12 per camera-ready page in color. The cost for producing a CD-ROM is approximately \$1.00 per CD-ROM. This cost does not factor in salaries or the cost of reproduction. These costs are subject to change based on printing contract.
LIMITING FACTORS	NONE
COMPETENCY CODE AUTHORIZATION	NONE
REASONS FOR PROPOSED CHANGES:	Changes due to updating course to meet qualifications in accordance with the Enlisted Qualifications Manual, COMDTINST M1414.8 (series).
RECOMMENDED IMPLEMENTATION DATE:	9 March 2007

USCG Training System SOP: Curriculum Outline

Mission and Scope Statements

Format

The format for the Mission and Scope Statements page is shown below.

MISSION AND SCOPE STATEMENTS

NAME OF COURSE: See Step 1 Procedures on next page

MISSION: See Step 2

This section shall include information on the purpose of the course, the type of billet toward which the training is directed, if appropriate, and reference to the Enlisted Performance Qualifications Manual.

SCOPE: See Step 3

This section shall include the following specific elements: (a) a description of the target population (the student's specialty area, rate, job assignment, etc.); (b) a brief overview of the tasks and content areas covered in the course; (c) a statement describing the performance criteria to be met in order for the student to successfully complete the course.

PREREQUISITES: See Step 4

COMPETENCY CODE ELIGIBILITY: See Step 5

STUDENT SECURITY CLASSIFICATION: See Step 6

USCG Training System SOP: Curriculum Outline

Mission and Scope Statements, continued

Procedures

The procedures for completing the Mission and Scope Statements page are outlined in the following table.

STEP	ACTION
1.	Insert the name of the course in all caps.
2.	Write a brief statement about the course to include: <ul style="list-style-type: none"> • Purpose of the course. • Type of billet for which the training is directed. Reference to the Enlisted Performance Qualifications Manual, if applicable.
3.	Write a short paragraph on the course which includes the following specific elements: <ul style="list-style-type: none"> • Description of the target student: <ul style="list-style-type: none"> ○ Specialty ○ Paygrade ○ Rating ○ Job assignment • Overview of the tasks and content areas covered in the course. • Statement describing the performance standards the student must meet to successfully complete the course. (The subject matter specialist (SMS) and rating force manager should determine the end-of-course test (EOCT) passing score and whether the EOCT may be an open book exam.)
4.	Insert all prerequisites the student must have before taking the course. If there are none, insert NONE.
5.	Insert the competency code(s) that students will be eligible for upon completion of the course. For information, see Competency Management System Manual, COMDTINST M5300.2 (series). For new courses, contact CG-1B. If there are none, insert NONE.
6.	Insert security classification code which students must have before taking the course. For information, see Personnel Manual, COMDTINST M1000.6 (series), Chapter 5, and Military Personnel Security Program, COMDTINST M5520.12 (series), Chapters 1 and 2.

USCG Training System SOP: Curriculum Outline

Mission and Scope Statement, continued

Example

Below is an example of a completed Mission and Scope Statements page.

MISSION AND SCOPE STATEMENTS

NAME OF COURSE: BOATSWAIN'S MATE THIRD CLASS PQG

MISSION: The purpose of this course is to provide the knowledges and skills necessary to perform at the Boatswain's Mate Third Class level as stated in the Enlisted Performance Qualifications Manual, COMDTINST M1414.8 (series).

SCOPE: This course consists of pamphlets and an end-of-course test (EOCT) provided in a distance learning, self-study format. Subject matter is specifically designed for seaman (E-3) as a required component for advancement to BM3. The course covers selected subjects in administration (maintenance of records and logs), seamanship and deck maintenance, piloting and navigation, and personnel supervision. The pamphlets include reading assignments with objectives to be mastered and appropriate review exercises specifically designed to test mastery of the objectives. The Professional Development Supervisor (PDS) will evaluate the student for 100 percent completion of the PQG sheets, and the student must achieve a minimum score of 80 percent on the EOCT to successfully complete the course.

PREREQUISITES: NONE

COMPETENCY CODE ELIGIBILITY: NONE

STUDENT SECURITY CLASSIFICATION: UNCLASSIFIED

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs

Format

The format for the Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs) page is shown below.

UNIT 1.0 **See Step 1 of Procedures on next page**

TERMINAL PERFORMANCE OBJECTIVE:

1.1 **See Step 2**

The Professional Development Supervisor (PDS) will evaluate student competency for 100% completion during the PQG process. The end-of-course test (EOCT) will evaluate knowledge competency, and an individual must achieve a minimum of 80% on the EOCT. **(Insert EPQ Number Here)**

REFERENCES: **See Step 3**

ENABLING OBJECTIVES: The standards and conditions statements for each of the following enabling objectives are the same as written in the terminal performance objective unless otherwise stated.

1.1.1 **See Steps 4 and 5**

1.1.2

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Procedures

The procedures for completing the Units of Instruction, Terminal Performance Objectives (TPOs), and Enabling Objectives (EOs) are outlined in the following table.

STEP	ACTION
1.	<p>Insert the general title of the unit. Each subject area within the course will be referred to as a UNIT. Label the units in a sequential order, starting with 1.0, 2.0, 3.0, etc.</p> <p>Note: Each unit/TPO must begin on a separate page.</p>
2.	<p>Insert the Terminal Performance Objective (TPO) following the unit number. Label each TPO starting with 1.1, the second 1.2, etc.</p> <p>Each TPO shall meet the following requirements:</p> <ul style="list-style-type: none"> • Specify what assistance, aids, or constraints (conditions) the students will be given. • Specify what the student will do (performance). • Capitalize and bold type the ACTION VERB. See Appendix B for a Standard Verb list. • Specify how well the student will perform (standard). • Focus on the qualifications or other job performance requirements (JPR) using the course reference table. <ul style="list-style-type: none"> ○ Note: When a qualification is used, its format must be adjusted to meet requirements. ○ Begin a new page for each TPO in a given unit. <p>Write each TPO with performance (action), conditions, and standards using the job aid in Appendix A. For all rating advancement courses that contain a PQG Certification Pamphlet, the following statement shall be added immediately below the TPO:</p> <p>"The Professional Development Supervisor (PDS) will evaluate student competency for 100% completion during the PQG process. The end-of-course test (EOCT) will evaluate knowledge competency, and an individual must achieve a minimum of 80% (the RFMC determines score) on the EOCT. <u>(Insert EPQ Number Here).</u>"</p>
3.	<p>Insert the references used for the TPO. Number the references and list the title, number, and section of each published reference. Be as specific as possible when citing the part of the reference used.</p>

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

STEP	ACTION
4.	<p>Insert each Enabling Objective (EO) that supports the TPO. Each EO shall meet the following requirements:</p> <ul style="list-style-type: none"> • Be a step required to complete the TPO. • Number each EO sequentially and begin with the first two digits of the TPO. For TPO 1.1, number the first EO as 1.1.1, the second as 1.1.2, etc. • Specify what assistance, aids, or constraints (condition) the students will be given. • Specify what the student will do (performance). • Capitalize and bold type the ACTION VERB. See Appendix B for a Standard Verb list. • Specify how well the student will perform (standard) if different from the TPO (see Note below). <p>Note: Conditions and standards are not required for EOs when they are the same as the conditions and standards of the TPO being supported. However, if the EO's conditions and standards <u>are</u> different, then it will require its own set of conditions and standards. The job aid in Appendix A can also be used when writing EOs.</p> <p>When EOs continue on to another page, use the title of the unit, ENABLING OBJECTIVES: (continued), and continue sequentially numbering the EOs (see Example 2).</p>
5.	<p>Write TPOs and EOs to test four-response, multiple-choice, end-of-course test items.</p> <p>Note: Refer to the Appendix B, Standard Verb List, to select common action verbs.</p> <p>Example: Given deviation and compass heading, COMPUTE the magnetic heading with 100% accuracy.</p> <p>REFERENCES: Dutton's Piloting and Navigation, Section X.</p> <p>Corresponding EOCT test item: What is the magnetic heading if the deviation is 2°E and the compass heading is 180°?</p> <p>A. 182° B. 181° C. 180° D. 178°</p>

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Example

Below is an example of a Units of Instruction, TPOs, and EOs page.

UNIT 1.0 ADMINISTRATION

TERMINAL PERFORMANCE OBJECTIVE:

- 1.1 Given selected equipment and references, **ORDER** parts needed at your unit with 100% accuracy.

The Professional development supervisor (PDS) will evaluate student competency for 100% completion during the PQG process. The end-of-course test (EOCT) will evaluate knowledge competency, and an individual must achieve a minimum of 80% on the EOCT. (EM EPQ A.5.01)

REFERENCES:

1. Supply and Policy Procedures Manual (SPPM), COMDTINST M4400.19A (series), (section or chapter number)
2. CMplus Users Manual, (section or chapter number)
3. FEDLOG User Manual and Tutorial
4. Material Information for Configuration and Allowances (MICA) Manual, (section or chapter number)

ENABLING OBJECTIVES: The standards and conditions statements for each of the following enabling objectives are the same as written in the terminal performance objective unless otherwise stated.

- 1.1.1 Given a copy of the Management Information for Configuration and Allowances (MICA) Manual, **IDENTIFY** the parts and sections of the Management Information for Configuration and Allowances (MICA) Manual and their contents.
- 1.1.2 Given a CG SWT-III and log-in information, **ENTER** content into the Federal Logistics Data Program (FEDLOG) Data Response Screens.
- 1.1.3 Given a specific part number, **ENTER** an inventory item in CMplus.
- 1.1.4 Given a specific piece of equipment, **ENTER** an OM&S item in CMplus.

USCG Training System SOP: Curriculum Outline

Units of Instruction, TPOs, and EOs, continued

Example 2

Below is an example of a Unit of Instruction, EO continuation page.

UNIT 1.0 MECHANICAL TROUBLESHOOTING OF THE XYZ ENGINE

ENABLING OBJECTIVES: (continued)

- 1.1.5 Given the XYZ transmitter system, **OPEN** an interlocked compartment without damaging the equipment.
- 1.1.6 Given the XYZ transmitter system, **BYPASS** the interlock switch in an interlocked compartment ensuring the interlock is disabled and rendered safe.
- 1.1.7 Given the XYZ transmitter system, **SET** the interlock switch to the normal open position, returning the equipment back to operational status.

USCG Training System SOP: Curriculum Outline

Course Content Reference Table

Format

The format for the Course Content Reference Table page is shown below.

COURSE CONTENT REFERENCE TABLE	
<u>TPOs</u>	<u>REQUIREMENT JUSTIFICATIONS</u>
1.1	See Step 1
1.2	
1.3	
1.4	
Enlisted Performance Qualifications NOT covered:	
	See Step 3

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

Procedures

The Course Content Reference Table lists the justification for training each task. The purpose is to identify the source (authority) from which the TPO was derived, the analysis that determined the training requirement, and the applicable task.

The procedures for completing the Course Content Reference Table are outlined in the following table.

STEP	ACTION																
1.	List all TPO numbers contained within the course.																
2.	<table border="1"> <thead> <tr> <th data-bbox="402 894 873 932">IF TPO is justified by . . .</th> <th data-bbox="876 894 1401 932">THEN write as follows . . .</th> </tr> </thead> <tbody> <tr> <td data-bbox="402 936 873 1115">An enlisted qualification</td> <td data-bbox="876 936 1401 1115">Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8 (series) Task number: (include EPQ number) Task: (include task)</td> </tr> <tr> <td data-bbox="402 1119 873 1192">A job task analysis</td> <td data-bbox="876 1119 1401 1192">JTA dated (include date) Task: (include task)</td> </tr> <tr> <td data-bbox="402 1197 873 1270">A front end analysis</td> <td data-bbox="876 1197 1401 1270">FEA dated (include date) Task: (include task)</td> </tr> <tr> <td data-bbox="402 1274 873 1379">A Level 3 analysis</td> <td data-bbox="876 1274 1401 1379">Level 3 Evaluation Executive Summary dated (include date)</td> </tr> <tr> <td data-bbox="402 1383 873 1528">A manual</td> <td data-bbox="876 1383 1401 1528">Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)</td> </tr> <tr> <td data-bbox="402 1533 873 1564">An instruction</td> <td data-bbox="876 1533 1401 1564">Title of instruction, number</td> </tr> <tr> <td data-bbox="402 1568 873 1600">Program mandate</td> <td data-bbox="876 1568 1401 1600">Task mandated by Program</td> </tr> </tbody> </table>	IF TPO is justified by . . .	THEN write as follows . . .	An enlisted qualification	Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8 (series) Task number: (include EPQ number) Task: (include task)	A job task analysis	JTA dated (include date) Task: (include task)	A front end analysis	FEA dated (include date) Task: (include task)	A Level 3 analysis	Level 3 Evaluation Executive Summary dated (include date)	A manual	Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)	An instruction	Title of instruction, number	Program mandate	Task mandated by Program
IF TPO is justified by . . .	THEN write as follows . . .																
An enlisted qualification	Enlisted Personnel Qualifications Manual (EPQM), COMDTINST M1414.8 (series) Task number: (include EPQ number) Task: (include task)																
A job task analysis	JTA dated (include date) Task: (include task)																
A front end analysis	FEA dated (include date) Task: (include task)																
A Level 3 analysis	Level 3 Evaluation Executive Summary dated (include date)																
A manual	Title of manual, volume, number, chapter, section, page number (if applicable) Task: (include task if TYPE or ANY)																
An instruction	Title of instruction, number																
Program mandate	Task mandated by Program																

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

STEP	ACTION		
3.	IF ...	AND ...	THEN ...
	The course is a rating course	All enlisted quals are covered	Insert NONE.
		<p>You have elected NOT to cover a qualification specific to the paygrade</p> <p>Note: If you have difficulty identifying sources of job information and cannot get help from the program manager, let CG-132 know.</p>	<p>Get approval from CG-132 by:</p> <ul style="list-style-type: none"> • Listing the qualification not covered and • Identifying the rationale for not teaching the qualification. (Each situation will be evaluated on a case-by-case basis.) <p>Note: Do not omit a qualification because it is taught in an "A" or "C" school.</p>
		<p>You have covered lower level enlisted qualifications</p> <p>Note: Lower level qualifications may be covered in courses when the qualifications are supportive of and necessary for the understanding of the qualifications written for the paygrade of the course.</p>	Do not list lower level qualifications in the curriculum outline and do not test on the lower level qualifications.
The course is a specialty course	No qualifications are covered	<p>Enter the following statement:</p> <p>"This is a specialty course and is not required to cover specific qualifications."</p>	

USCG Training System SOP: Curriculum Outline

Course Content Reference Table, continued

Example

Below is an example of a Course Content Reference Table page.

COURSE CONTENT REFERENCE TABLE

TPOs

REQUIREMENT JUSTIFICATIONS

Enlisted Performance Qualifications Manual (EPQM), COMDTINST M1414.8 (series)

1.1	EPQM: A.4.01
2.1	EPQM: B.4.02
3.1	EPQM: C.4.01
3.2	EPQM: C.4.01
3.3	EPQM: C.4.01
3.4	EPQM: C.4.01
3.5	EPQM: C.4.02
3.6	EPQM: C.4.03
3.7	EPQM: C.4.04
3.8	EPQM: C.4.05
3.9	EPQM: C.4.06
3.10	EPQM: C.4.06
3.11	EPQM: C.4.07
3.12	EPQM: C.4.08
4.1	EPQM: D.4.01
4.2	EPQM: D.4.03
4.3	EPQM: D.4.02
5.1	EPQM: G.4.01

Enlisted Performance Qualifications NOT covered:

B.4.01 This performance qualification is covered during the boat crew qualification process outlined in COMDTINST 16114.9 (series). This process is an on-the-job study/application and validation process composed of practical small boat type-specific tasks and some non-type-specific tasks generic in nature to small boat operations. Completion of this process requires both demonstrated knowledge and observable application. The level of performance required cannot be achieved through a nonresident course of instruction.

USCG Training System SOP: Curriculum Outline

Exhibits

Format

The format for Exhibits 1-4 is shown below.

EXHIBITS

(1) TRAINING AIDS/TRAINING EQUIPMENT:

See Step 1

(2) REFERENCES LISTED IN THE TPOs:

See Step 2a-2b

(3) TRAINING CENTER PAMPHLETS ISSUED TO THE STUDENT:

See Step 3

(4) RESERVE RETIREMENT POINTS WORK SHEET:

See Step 4

USCG Training System SOP: Curriculum Outline

Exhibits, continued

Procedures The procedures for completing Exhibits 1-4 are outlined in the following table.

STEP	ACTION				
1.	<p>List all of the items that are specific to the course. If there are none, insert "NONE." DO NOT list items that are generally used for all correspondence courses. Below is a sample list of acceptable and unacceptable items.</p> <table border="1" data-bbox="415 646 1227 911"> <thead> <tr> <th data-bbox="415 646 821 709">Acceptable</th> <th data-bbox="821 646 1227 709">Unacceptable</th> </tr> </thead> <tbody> <tr> <td data-bbox="415 709 821 911"> protractors triangles flash cards maneuvering board </td> <td data-bbox="821 709 1227 911"> pencils paper text study guide </td> </tr> </tbody> </table>	Acceptable	Unacceptable	protractors triangles flash cards maneuvering board	pencils paper text study guide
Acceptable	Unacceptable				
protractors triangles flash cards maneuvering board	pencils paper text study guide				
2a.	<p>List all references found in the TPOs.</p> <p>Note: If there are a large number of references, it may be necessary to list other exhibits on separate pages.</p>				
2b.	<p>Arrange the reference titles in alphabetical order. Use the following format:</p> <p style="padding-left: 40px;">Title of reference/name of text, publication number, and chapter number, if applicable</p> <p><u>Example:</u> EIMB Installation Standards, NAVSHIP 0967-LP-00-0110</p>				
3.	<p>List all Institute pamphlets issued to the student followed by the quantity provided for each. Use the following format:</p> <p style="padding-left: 40px;">Title of pamphlet, pamphlet number, and quantity</p> <p><u>Example:</u> Teletypewriters and Associated Equipment, CGI Pamphlet #W24504, Qty: 1 per student</p> <p>If pamphlets have not been developed, enter the following statement: "Pamphlets will be developed later."</p>				
4.	<p>Complete the Reserve Retirement Points Work Sheet in accordance with the directions on the following pages.</p>				

USCG Training System SOP: Curriculum Outline

Exhibits, continued

Example

Below is an example of Exhibits 1-3.

EXHIBITS

(1) TRAINING AIDS/TRAINING EQUIPMENT:

Nautical Charts

NavKit: Dividers, Compass, Parallel Rules, Weem's Plotter

Nautical Slide Rule

(2) REFERENCES LISTED IN THE TPOs:

Boat Crew Qualification Guide, COMDTINST M16114.10 (series)

Boat Crew Seamanship Manual, COMDTINST M16114.5 (series)

Boat Crew Training Program, COMDTINST M16114.9 (series)

Boatswain's Mate 3 & 2 Manual, NAVEDTRA 10121-G1

Shipboard Helicopter Operational Procedures, COMDTINST M3710.2 (series)

(3) TRAINING CENTER PAMPHLETS ISSUED TO THE STUDENT:

Administration, Watch Standing, and Personnel Supervision Pamphlet, W24504

Qty: 1 per student

Deck Seamanship Pamphlet, Qty: 1 per student

Navigation and Piloting Pamphlet, Qty: 1 per student

Sampson Cordage Splicing Manual, Qty: 1 per student

Marlinespike Seamanship Pamphlet, Qty: 1 per student

Student CD-ROM of BM3 PQG. Qty: 1 per Student

USCG Training System SOP: Curriculum Outline

Reserve Retirement Points, Exhibit 4

Overview

It is the course writer's responsibility to determine the amount of Reserve Retirement Points (RRP) that can be earned in a particular course. To do this, TRACEN subject matter specialists (SMS) will determine the amount of time a member will need to complete each section of the PQG and EPME.

The time to complete these courses includes reading the material and completing quizzes and/or exercises. It does not include completing the performance tasks or taking of the end of course test (EOCT), as these activities are performed during drill time (on the job).

Since RRP's are correlated with drills, the total number of hours is divided by "4" (the number of hours in a drill) to arrive at the RRP's for that PQG/EPME.

Use the worksheet to record your work.

Format

The format for the Reserve Retirement Points Work Sheet is shown below.

EXHIBITS

(4) RESERVE RETIREMENT POINTS WORK SHEET:

Course Completion Computation Work Sheet For Reserve Retirement Points					
Course Title:					
Terminal Performance Objective #	TPO/Lesson Length (words)	Reading (hrs)	Written Exercises and Quizzes (hrs)	CBT (if applicable)	Total TPO Hours

USCG Training System SOP: Curriculum Outline

Reserve Retirement Points, Exhibit 4, continued

Procedures

The procedures for determining Reserve Retirement Points are outlined in the following table.

STEP	ACTION
1.	<p>Determine word count of each pamphlet.</p> <p>Note: Use the word count feature in Microsoft Word® (Tools).</p>
2.	<p>Divide word count by the following:</p> <ul style="list-style-type: none"> • A reading rate of 75 words per minute (WPM) will be used when determining the reading factor for each TPO in a rate or rate-related courses and specialty courses. • A reading rate of 150 WPM for non rate related courses to include EPME. <p>Example Calculation:</p> <p>6116 (section word count) ÷ 75 (WPM for rate-related reading) = 81.55 (minutes) 81.55 ÷ 60 (minutes in an hour) = 1.359 (hours) Reading hours = 1.4 for the section counted (rounded to nearest tenth)</p>
3.	<p>After determining the WPM, the information will be documented on a sheet similar to the Instructor Contact Hours sheet, but will be modified to include:</p> <ul style="list-style-type: none"> • Reading (estimated amount of time needed to complete a portion of the PQG using 75 WPM) • Written Exercises and Quizzes (reinforcement of the material contained within the PQG) • CBT (computer-based training) would be included only if it applied to the training course.

USCG Training System SOP: Curriculum Outline

Reserve Retirement Points, Exhibit 4, continued

STEP	ACTION
4.	<p>Use the following formula to determine RRP:</p> $((\textit{Reading hours} + \textit{WE/Quizzes} + \textit{CBT}) / 4)$ <p>Note: Round the RRP up to the next whole number.</p>
5.	<p>Enter Course Reserve Retirement Points on Cover Page.</p> <p>Note: There is no maximum amount of reserve retirement points permitted to be awarded per course.</p>
6.	<p>Include the Reserve Retirement Points Work Sheet as an enclosure in the curriculum outline.</p>

USCG Training System SOP: Curriculum Outline

Reserve Retirement Points, Exhibit 4, continued

Example

Below is an example of a Reserve Retirement Points Work Sheet.

EXHIBITS

(4) RESERVE RETIREMENT POINTS WORK SHEET:

Course Completion Computation Work Sheet For Reserve Retirement Points					
Course Title: BM3 PQG					
Terminal Performance Objective #	TPO/Lesson Length (words)	Reading (hrs)	Written Exercises and Quizzes (hrs)	CBT (if applicable)	Total TPO Hours
1.1 - 1.3	6116	1.4	.1	0	1.5
2.1 - 2.5	10755	2.4	.1	0	2.5
3.1 - 3.6	6856	1.5	0	0	1.5
4.1 - 4.5	9212	2.0	.4	.2	2.6
5.6 - 5.15	23725	5.2	.4	0	5.6
6.1	20833	4.6	.4	0	5.0
7.1	25357	5.6	.4	0	6.0
8.1 - 8.12	41472	9.2	.4	0	9.6
9.1 - 9.5	84572	18.8	.4	0	19.2
					53.5 Hours/4
					13 RRP

Note: The **13 RRP** is what is included on the cover page of the curriculum outline.

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO

Context and Contents

Purpose This is a job aid to help you write a Coast Guard terminal performance objective (TPO).

Who Should Use This Job Aid You should use this job aid if you are a curriculum designer writing a TPO. Ideally, you are a graduate of the Coast Guard Course Designer Course (CDC) or the Accomplishment-Based Curriculum Development (ABCD) Workshop.

When to Use This Job Aid Use this job aid after a performance qualification or a task has been validated for addition to a curriculum through a formal analysis. (Further analysis information can be found in the Analysis SOP.)

How to Use This Job Aid Follow the steps as literally as practical and in the sequence described.

Tasks

- Task A: Write the Conditions Statement
- Task B: Write the Performance Statement
- Task C: Write the Standards Statement
- Task D: Write the TPO Statement with Standards

Use Checklist for Writing a TPO

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task A: Write the Conditions Statement

Caution Be careful not to overload your conditions statement. Do not put anything in the statement unless it is either necessary to perform the behavior or affects the actual performance of the behavior.

Introduction The conditions statement reflects what the student will be provided, or what the student will use, while performing the TPO. The conditions should match, as closely as possible, to the conditions existing on the job that are critical to the performance of the TPO.

The conditions statement may also alert the evaluator and performer to the limitations of the training environment that might prevent actual on-the-job performance. For example, the Emergency Medical Technician's curriculum can only guarantee that graduates can perform cardio-pulmonary resuscitation (CPR) on a mannequin, not on a live patient. Therefore, the conditions statement will tell us that CPR will be performed "on a mannequin."

Step 1 List the signal or signals that tell the graduate to perform the TPO. Here are some examples:

"Upon hearing the General Quarters alarm,"

"At the smell of burning food,"

"When the light goes out,"

"When the door feels hot to the touch,"

"When your mouth tastes sour,"

"On the last day of a voyage,"

"At the beginning of a work shift,"

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task A: Write the Conditions Statement, continued

Step 2 List the tools and equipment used on the job to perform the TPO.
Examples include:

an oscilloscope	a standard workstation
a signal flare	a blood pressure cuff

Step 3 List any references, job aids, and assistance used to perform the TPO.
Examples include:

the Joint Travel Regulations
the manufacturer's technical manual
the "Job Aid for Writing a Test for a TPO"
with a teammate

Step 4 List any restrictions placed on the performance or its environment.
Examples include:

underwater
while attached to a tether
from a sitting position
while wearing a breathing apparatus
without any light
with one hand

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task B: Write the Performance Statement

The performance in the performance statement must match the performance expected on the job, and must link directly to the task approved for training in the Course Content Reference Table and foundational analysis. Do not compromise on the performance statement in the TPO.

Introduction

The performance statement describes the behavior and the output of the behavior that the graduate will perform on the job. The statement consists of an action verb and the output resulting from the action.

Write the action verb (a physical or verbal action or a mental decision) that will produce the output on the job. **See Appendix B for verb suggestions and usage.**

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task C: Write the Standards Statement

Important The standards in the standards statement must match the standards expected on the job and identified through the objective's foundational analysis. Do not compromise on the standards in the TPO.

Introduction The standards tell how well the TPO must be completed. Clear standards for the output, and where necessary, the actions are the foundation for the evaluation and training of the TPO.

Step 1 Check the TPOs supporting documentation to find the standard as identified in the foundational analysis.

List the reference of the information.

Note: If no standard exists, then the task was prematurely delivered for training development and should be returned to the analysis source for further work.

Generally, any standard falls into one or more of these categories:

1. **Accuracy:** The degree of perfection required.
2. **Time:** The maximum time allowed for production of a single output.
3. **Rate of Production:** The specific number to be produced in a given time.
4. **Safety:** Avoidance of injury to people, equipment, or the environment.

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task C: Write the Standards Statement, continued

Step 2

The output of a TPO should always have standards. The standards are the quality or level of performance that will be considered acceptable. For most TPOs, *how* the student produces the output is of less consequence than the *quality* of the output. For some TPOs, however, it is necessary to write standards for the student's actions, as well as the output of the TPO.

Determine if the task documentation (analysis) discusses *how* the TPO is executed. For instance, consider the following:

- Safety
- Specific Regulations (do not list references)
- Legal requirements or liability
- Public relations

Separately, indicate the reference or references and page number(s) on which the information can be found.

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task C: Write the Standards Statement, continued

Step 3

IF you are . . .	THEN go to . . .
Satisfied that the standards statement is clear and complete enough	Task D
Concerned that the standards statement is <i>not</i> clear and complete enough	Step 4

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task C: Write the Standards Statement, continued

Step 4

Clarify the standards statement by doing the following:

- Write the current draft standards statement from the previous steps.
 - Circle any terms you think could be misinterpreted.
 - For each circled term, write the specific, observable actions and outputs that, if observed, would cause you to agree the standard covered by the term was achieved.
 - Write the specific, observable actions and outputs, as applicable, in place of the original term.
 - Test the edited term with the question, "If the student executed each of these actions and produced each of these outputs, would it be obvious to any observer that the student had met the standard?" When you can answer "yes," the standard is finished.
 - Repeat the substeps above for each term that could be misinterpreted.
-

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task D: Write the TPO Statement

Step 1 To start the conditions statement, write any signals, as appropriate.

Step 2 To continue the conditions statement, write any given references, job aids, assistance, tools, and equipment, as appropriate.

Step 3 To continue the conditions statement, add any limitations on the performance or its environment, as appropriate.

Step 4 Add the performance statement.

Step 5 Add the standards statement.

Step 6 Add the references and sections.

Examples

- Given an electrical schematic of a series DC electrical circuit with known values, **CALCULATE** circuit resistance, voltage, current and total power with 80% accuracy.

REFERENCES: XYZ manual, section XX

- While underway on a boat with an installed Furuno SINS navigation package, and without prompting or the use of references, **PLOT** the boat's position using GPS/DGPS, within 100 yards.

REFERENCES:

Boat Crew Seamanship Manual, section XX, COMDTINST M16114.24 (series)
GPS Operator's Handbook, section XX
Boat Operations and Training Manual, Vol. II, section XX, COMDTINST M16114.33 (series), section XX

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Task D: Write the TPO Statement, continued

Examples, continued

- While underway on a boat with an installed Furuno SINS navigation package, and without prompting or the use of references, **NAVIGATE** the boat utilizing the Furuno GPS/DGPS, within 3 degrees and position plotted within 100 yards.

REFERENCES:

Boat Crew Seamanship Manual, section XX

COMDTINST M16114.5 (series)

Furuno 1933C GPS Operators Manual, section XX, Coast Guard
Navigation Standards, section XX

COMDTINST 3530.2 (series)

Boat Operations and Training Manual, Volume II, section XX

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Checklist for Writing a Terminal Performance Objective

Quality Characteristic	Yes	No
1. The conditions statement:		
• Lists conditions that match as closely as possible those found on the job	<input type="checkbox"/>	<input type="checkbox"/>
• Provides a cue (or cues) that stimulate the performer to act	<input type="checkbox"/>	<input type="checkbox"/>
• Lists tools and equipment used to perform the TPO	<input type="checkbox"/>	<input type="checkbox"/>
• Lists references, job aids, and assistance used to perform the TPO	<input type="checkbox"/>	<input type="checkbox"/>
• Describes the range of typical job conditions	<input type="checkbox"/>	<input type="checkbox"/>
• States any restrictions placed on the performance or its environment	<input type="checkbox"/>	<input type="checkbox"/>
• Is consistent with the foundational analysis supporting the objective's inclusion in the course	<input type="checkbox"/>	<input type="checkbox"/>
2. The performance statement:		
• Contains the action verb executed on the job	<input type="checkbox"/>	<input type="checkbox"/>
• Contains the output produced on the job	<input type="checkbox"/>	<input type="checkbox"/>
• Is consistent with the foundational analysis supporting the objective's inclusion in the course	<input type="checkbox"/>	<input type="checkbox"/>
3. The standards statement:		
• Matches the standards found on the job	<input type="checkbox"/>	<input type="checkbox"/>
• Avoids words subject to misinterpretation	<input type="checkbox"/>	<input type="checkbox"/>

USCG Training System SOP: Curriculum Outline

Appendix A – Job Aid for Writing a TPO, continued

Checklist for Writing a Terminal Performance Objective, continued

Quality Characteristic	Yes	No
• Lists only the criteria that separates acceptable performance from unacceptable	<input type="checkbox"/>	<input type="checkbox"/>
• Lists the specific, observable characteristics of the output	<input type="checkbox"/>	<input type="checkbox"/>
• If specific actions are required, then the actions are in sequence and are specific, observable behavior	<input type="checkbox"/>	<input type="checkbox"/>
• Are consistent with the foundational analysis supporting the objective's inclusion in the course	<input type="checkbox"/>	<input type="checkbox"/>

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List

Introduction

The use of standard, well-defined verbs provides clarity, prevents duplicate work, and aids in providing quality training.

Standardized verbs:

- Promote clarity:
 - Allows everyone involved in design and development as well as students to understand what the task statement means. This is particularly important since:
 - The person who analyzes, designs, or develops the training may not be the person who developed the task statement.
 - Rating Force Master Chiefs usually make their decisions based on the task statement, before the conditions and standards are fully developed.
- Prevent duplication:
 - It is possible to write the same task many different ways, some so differently that it is almost impossible to tell if it is the same task. If you use standard verbs, it is simple to group tasks by verb and see if you have duplication.
- Promote application of sound training principles.

There are many words which may appear to be action verbs, but which don't actually refer to an observable action (such as "know," "understand," "appreciate," and so on.) By using standard verbs, you will avoid these words and produce sound, observable tasks.

Note: The following sections provide a partial source of verbs for use in task titles and learning objectives. **Individual schools may have "branch-unique" terminology in addition to these lists.**

Note: With the development of Performance Qualification Guides (PQGs), action verbs (e.g., perform, transmit, locate, specify, apply, etc.) may be used because the professional development supervisor (PDS) will acknowledge the student's accomplishment (performance) of tasks instead of testing the student's knowledge as an EOCT question.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List

Section I, Standard Verbs

Note:	Those verbs marked with an asterisk (*) in Section I, should be used with caution. For a fuller explanation, see Section II of this Appendix, VERBS TO BE USED WITH CAUTION.
*Achieve	To attain a desired end.
Adjust	1. To correct the actions of a distant unit. <i>Example:</i> Adjust indirect fire. 2. To bring parts of instruments into a truer or more effective relative position or setting.
*Administer	To manage or supervise the execution, use, or conduct of a relatively structured activity.
Advise	To counsel or recommend.
Alert	To make aware of.
Align	To place parts in the proper position to one another.
Allocate	To apportion for a specific purpose or to particular persons or things.
*Analyze	To separate a whole into its constituents with a view to its examination and interpretation.
Annotate	To make or furnish critical or explanatory notes or comments.
Approve	To give formal or official sanction.
*Apply	1. To put on. <i>Example:</i> Apply base coat of paint. 2. To use practically. 3. To concentrate.
Assemble	1. To fit the parts of an item together. <i>Note:</i> Usually said of a machine. 2. To bring together. <i>Note:</i> Usually said of an organization or group.
*Assess	1. To determine the importance, size, or value of. 2. To fix the amount of.
Assign	1. To give responsibility. <i>Note:</i> For the execution of a task. 2. To place under the control of. <i>Example:</i> Assign replacements to units.
Assist	To give aid by participating in a task.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued

Section I, Standard Verbs, continued

Attack	To operate against offensively. <i>Example:</i> Attack under conditions of limited visibility.
Authenticate	1. To verify identity in response to a challenge. <i>Note:</i> See Challenge. 2. To verify the authenticity of.
Brief	To give information or final precise instructions.
Breach	1. To break through. <i>Note:</i> As an enemy position. 2. To secure passage through. <i>Note:</i> Usually said of an obstacle.
Calculate	To ascertain by computation.
Challenge	To order to prove identity.
Change	To make different in some particular.
*Check	To inspect for satisfactory condition, accuracy, safety, or performance.
Clear	1. To make secure by searching and eliminating enemy resistance. <i>Examples:</i> Clear a trench line. Clear a building. 2. To make safe by following a prescribed procedure for unloading. <i>Example:</i> Clear a M16A2 rifle. 3. To render operable by overcoming a temporary condition. <i>Example:</i> Clear a stoppage in a M60 machine gun.
Close	1. To move into combat range of an enemy force. <i>Example:</i> Close with the enemy. 2. To arrive at a designated position. 3. To move in such a manner as to present passage through.
Collate	To bring parts together to form a whole. <i>Note:</i> Usually said of information or intelligence.
Collect	1. To gather or exact from a number of persons or sources. <i>Note:</i> Usually said of information. 2. To bring together in a group.
Combine	To join two or more things such as units, or chemical substances, into one.
Communicate	To convey knowledge of or information about: make known
*Compare	To examine the character or qualities of, especially in order to discover resemblances or differences. <i>Example:</i> Compare courses of action.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Complete	To bring to an end and especially into a perfected state.
Comply	To act in accordance with orders, regulations, policy, etc.
Compute	To determine, especially by mathematical means.
*Conduct	To direct or control, lead, or guide.
Confirm	To validate.
Connect	1. To join. 2. To fasten together.
Consolidate	1. To organize or reorganize, bringing separate parts together into one whole. 2. To secure or complete an action. <i>Example:</i> Consolidate the objective.
Construct	To build.
Control	1. To exercise restraining or direct influence over. 2. To regulate. 3. To dominate.
Coordinate	To bring into a common action, movement, or condition.
Correct	To alter or adjust so as to bring to some standard or required condition.
Correlate	To present or set forth so as to show relationship.
Cover	To afford protection or security to.
Cross	To pass over or through.
Cross-check	To check from various angles or sources to determine validity or accuracy.
Debrief	To obtain an oral report on an action or mission immediately afterwards. <i>Example:</i> Debrief reconnaissance patrol.
Decontaminate	To cleanse or remove chemical or radiological contamination.
Defend	To ward off an actual or threatened action
*Define	1. To determine the limits and nature. 2. To state the meaning of.
Delay	To slow the advance of an enemy force without becoming decisively engaged.
Deliver	To send to an intended target or destination.
*Demonstrate	1. To feign an action for the purposes of deceiving an enemy. 2. To show by reasoning. 3. To show the operation or working of. 4. To explain by using examples, experiments, or action.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Deploy	<ol style="list-style-type: none">1. To spread out, utilize, or arrange, especially tactically.2. To position for use.
Designate	<ol style="list-style-type: none">1. To indicate and set apart for a specific purpose, office, or duty.2. To select. Note: Usually said of a target.
Detect	To discover.
Determine	<ol style="list-style-type: none">1. To settle or decide by choice of alternatives or possibilities.2. To fix precisely.
Develop	To set forth or make clear by degrees or in detail.
Direct	<ol style="list-style-type: none">1. To regulate the activities or course by acting through subordinate leaders.2. To control through suggestions and guidelines.
Disconnect	To sever the connection between.
Disassemble	To take apart, usually for the purposes of cleaning or repair.
Disengage	<ol style="list-style-type: none">1. To release or break contact with. Example: Disengage the drive shaft.2. To terminate combat. Example: Disengage from enemy force.
Dismantle	To render inoperable by taking apart. Note: See Disassemble.
Dispatch	To send away with promptness or speed, especially on official business.
Displace	To leave one position and occupy another.
Disseminate	To disperse throughout. Note: Usually refers to orders, information, and similar matters.
Distribute	To give out or deliver, especially to members of a group.
Draft	To draw the preliminary sketch, version, or plan of.
*Effect	To cause the desired result or outcome. Note: See Achieve.
Employ	To make use of, usually in the role of a leader or commander.
Encrypt	Encipher, encode.
Enforce	To see that the provisions (of an order or regulation) are carried out effectively.
Engage	<ol style="list-style-type: none">1. To intermesh or interlock. Note: Usually refers to machinery.2. To fight.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

*Ensure	<ol style="list-style-type: none">1. To make certain.2. To guarantee.
Enter	To come in.
Erect	To build or set up.
Establish	<ol style="list-style-type: none">1. To bring into existence.2. To introduce as a permanent entity or procedure.
Evacuate	To move from an area, usually for the purpose of treatment, repair, or prevention of capture.
Evade	To avoid.
*Evaluate	To determine the significance or worth of, usually by careful appraisal and study.
Exchange	To part with for a substitute.
Extend	<ol style="list-style-type: none">1. To increase the scope, meaning, or application of.2. To elongate or to increase the size. <p>Example: Extend the legs of the tripod.</p>
Extract	<ol style="list-style-type: none">1. To remove from an area, usually for combat purposes.2. To select and copy out or cite.
Fire	To discharge a weapon.
Finalize	To put in final or finished form: to give final approval to. Example: Finalize operations order.
Format	To produce a document or electronic report in a specified form or style.
Formulate	To put into a systematized statement or expression.
Forward	To send onward.
Fuel	To provide with fuel.
Ground	To connect electrically with a ground.
Guard	<ol style="list-style-type: none">1. To protect by physical security means.2. To prevent from escaping by physical security means.3. To protect by accepting combat. <p>Example: Guard a building.</p>
Identify	<ol style="list-style-type: none">1. To determine critical or necessary conditions or other factors. Example: Identify all specified and implied missions.2. To determine the specific model of an item.3. To ascertain the origin, nature, or definitive characteristics of.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Implement	To give practical effect to and ensure of actual fulfillment by concrete measures.
Infiltrate	To move by small groups, usually clandestinely.
Inform	To make known.
Input	To provide information to or to enter information into a system.
*Inspect	To examine officially.
Install	To put in an indicated place, condition, or status.
Integrate	To form, coordinate, or blend into a functioning or unified whole.
Interpret	To present or delineate the meaning of. <i>Example:</i> Interpreting for Russian and English speakers.
Issue	To give out. <i>Example:</i> Issue the operations order.
Land	To bring an aircraft to earth.
Lead	1. To go at the head. <i>Example:</i> Lead a convoy. 2. To exercise direct, low-level control. <i>Example:</i> Lead search party.
Level	1. To make even or uniform. 2. To apportion equally.
Load	1. To insert ammunition into a weapon or launcher. 2. To place in or on a means of conveyance.
Locate	To determine or set the position of.
Log	To enter details of or about an event in a log.
Maintain	To preserve, fix, or keep in good repair.
*Manage	1. To handle or direct with a degree of skill or specialized knowledge. 2. To exercise executive, administrative, and supervisory direction.
Make	To create or cause to happen.
Modify	To make minor changes in/to.
*Monitor	To watch, observe, or check, especially for a special purpose. <i>Example:</i> Monitor radio traffic.
Move	To proceed from one point to another.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

*Name	<ol style="list-style-type: none">1. To designate or mention by name.2. To appoint.3. To identify by giving the right name.4. To give a name.
Navigate	Determine and follow a course.
Notify	To inform, to warn, to make known, or to make notice of.
Observe	To watch carefully.
Obtain	To gain or attain. Note: Usually by planned action or effort.
Occupy	To reside or control.
Open	<ol style="list-style-type: none">1. To make ready for business.2. To make available for entry or passage.
Operate	<ol style="list-style-type: none">1. To cause a piece of equipment to function.2. To perform a function.
Order	To command a specific action to be executed.
Organize	To arrange by systematic planning and united support.
Orient	<ol style="list-style-type: none">1. To point or look in a specific direction. Example: Orient weapons on assigned sector.
Pack	To place in a container for transportation or storage.
*Perform	To carry out an action or pattern of behavior.
Place	Put in proper position or location. Note: "Position" or "locate" are usually better choices.
Plan	<ol style="list-style-type: none">1. To devise or project.2. To formulate a systematic scheme or program of action.
Plot	To mark or note on a map, chart, or graph.
Police	<ol style="list-style-type: none">1. To provide protective or police services.2. To make clean and put in order.
Position	To put in place; to set.
Post	<ol style="list-style-type: none">1. To make transfer entries.2. To position at a certain site.
Predict	Foretell on the basis of observation, experience, or scientific reason.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Prepare	<ol style="list-style-type: none">1. To put together.2. To combine elements and produce a product. <i>Example:</i> Prepare a meal.3. To make ready. <i>Example:</i> Prepare to continue the attack.4. To make other persons or things ready.
Prevent	To keep from occurring or recurring. <i>Example:</i> Prevent cold weather injuries.
*Prioritize	To put in order or rank. <i>Note:</i> Especially for the purpose of allocating resources.
Process	To initiate a series of actions or operations leading to a particular end. <i>Example:</i> Process a request for transfer.
Produce	To develop or create.
Project	To plan, calculate, or estimate for the future. <i>Example:</i> Project supply expenditures.
Protect	To shield from destruction; safeguard.
Provide	To supply or make available.
Publish	To produce for distribution.
Range	To determine the distance.
React	To respond, usually to an emergency situation with a limited choice of actions. <i>Example:</i> React to engine failure while underway.
Reach	To arrive at a location.
Read	To examine carefully so as to understand.
Realign	To reorganize or make new groupings.
Reassess	To re-determine the extent or value.
Recall	To bring back to another location.
Receive	To acquire from someone else. <i>Example:</i> Receive patients.
Recommend	To endorse as worthy, fit, competent, exceptional, etc.
*Recognize	To determine the category of an item.
Record	<ol style="list-style-type: none">1. To set down as a means of preserving information.2. To document.3. To mechanically or electronically save information.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Recover	To extract damaged or disabled equipment and move to a location for repair.
Redistribute	To reallocate, usually in response to uneven consumption or usage. <i>Example:</i> Redistribute ammunition.
Reduce	<ol style="list-style-type: none">1. To diminish in size, amount, extent, or number.2. To render operable by following a prescribed procedure to eliminate a malfunction.3. To render ineffective by partially dismantling. <i>Example:</i> Reduce an obstacle.
Reestablish	To establish again, usually in response to a combat loss or damage. <i>Example:</i> Reestablish communications.
Reexamine	To examine again.
Release	<ol style="list-style-type: none">1. To let go.2. To set free from configuration or condition.
Relieve	<ol style="list-style-type: none">1. To replace.2. To reduce or eliminate pressure on.
Relocate	Establish or lay out in a new place.
Remove	<ol style="list-style-type: none">1. To take away or displace.2. To dismiss.3. To eliminate, kill, or destroy.
Reorganize	To organize again, usually as a result of combat damage or loss.
Repair	To restore to serviceable condition.
Replace	To substitute a new or workable item or person.
Replenish	To fill again.
Report	<ol style="list-style-type: none">1. To present an account officially.2. To formally or regularly carry back and repeat to another.3. To provide information on ongoing activities.
Request	<ol style="list-style-type: none">1. To ask for.2. To ask someone to do something.
Resolve	To reduce by analysis.
Restate	To state again or in another way.
Resume	To begin again.
Return	To restore to a former or proper place.
*Review	To go over for the purpose of determining correctness or currency.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Revise	To correct or improve. Note: Usually applied to a plan or document.
Rotate	To cause to turn about an axis or center.
Schedule	To appoint, assign, or designate for a fixed time.
Secure	1. To make safe. 2. To fix tightly. 3. To make immobile.
Select	To choose from among others to meet specific standards or criteria.
Send	To dispatch.
Set	To adjust a device to a desired position, to make ready for future action.
Set up	To erect or position components.
Sort	To examine and place into categories.
Splint	To support or restrict.
Stand to	To increase security by coming to full alertness, with all weapons manned and ready. Note: Derived from the phrase "Stand to Arms."
State	To declare or set forth; a condition.
Stockpile	To accumulate supplies for use.
Store	To stock or deposit.
Strike	1. To attack. 2. To disassemble. Example: Strike a tent.
Submit	To send forward for approval.
Supervise	1. To oversee. 2. To critically watch, motivate, and direct the activities of subordinates.
Support	To aid or help. Note: Usually refers to collective tasks. Example: Support by fire.
Suppress	To actively prevent, usually by firing on.
Sweep	To move through and search an area.
Take charge	To assume control or command.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section I, Standard Verbs, continued

Take off	To send an aircraft into the air. <i>Note:</i> Usually said of a manned aircraft. <i>Note:</i> See Launch.
Task	To assign responsibility.
Test	To examine to prove the value or ascertain the nature of something.
Triage	To assess patients' physical condition to determine treatment priority.
Train	To make proficient by instruction and practice.
Translate	To express in more comprehensible term, or in a different language.
Transmit	To send over a communications net.
Transport	To carry from one place to another; convey.
Treat	To care for medically.
Troubleshoot	To locate the source of trouble in equipment, systems, or operations.
Tune	To put on the proper setting or frequency. <i>Note:</i> As a radio.
Turn	To change the direction or orientation of something.
Update	To bring up to date or make current.
Validate	To substantiate accuracy by comparison or investigation.
Verify	To confirm or establish the accuracy or truth of something.
Wear	To bear or have on the person; to carry on the person.
Zero	To set a sight to enable a firearm to shoot a target.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued

Section II, Verbs To Be Used With Caution

These verbs should be used with care. Some are only variants of the verb "to do," and do not convey any special meaning. Their overuse defeats the purpose of standardized verbs and results in vague, "fuzzy," task statements.

Other verbs in this list are often a procedural step in the performance of the true task. When in doubt, you should ask yourself why anyone would want to perform this task. True tasks are performed for their own sake, while steps are performed in the accomplishment of a task.

Other verbs are most often used to define enabling objectives. For example, when teaching a student to repair an item of equipment, the instructor might require the student to LIST, NAME, or IDENTIFY the component parts of the item.

Achieve	This verb implies you are going to measure the product (or quality), not the process. A common mistake is to use the verb "achieve" and then to use standards that represent steps in the task rather than the quality of the outcome.
Administer	The use of this verb should be restricted to fairly mechanical or structured activities or to medical activities. It is not a synonym for "Manage."
Analyze	One usually analyzes something in order to accomplish a real task.
Apply	The use of "Apply" often leads to unobservable or non-measurable task statements. <i>Improper Use Example:</i> Apply the principles of war.
Assess	Difficult to observe or measure. Usually the analyst would be better off stating what the individual has to do in order to assess something.
Check	Checking is usually done as part of supervision or verification.
Conduct	The verb 'Conduct' should be used ONLY when a more precise verb does not exist or when the use of a more precise verb would result in an unusually clumsy construction. <i>Example 1 of Proper Use:</i> Conduct a deliberate attack. <i>Example 1 of Improper Use:</i> Attack deliberately. <i>Note:</i> "Attack" is the proper verb in the above task statement -- that's what you're going to do -- but the construction is so clumsy that in this case it is preferable to use "Conduct."

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section II, Verbs to be Used with Caution, continued

Conduct (Continued)

Example 2 of Proper Use: Suppress enemy fires

Example 2 of Improper Use: Conduct suppression operations

CAUTION: The verb "Conduct" (as well as "Perform" and other verbs that simply mean "Do") is often used to mask a serious error --using more than one verb in a task statement.

Counsel	"Counsel" has the connotation of simply providing general information. The verbs "advise" and "recommend" are usually what is really meant and indicate "action."
Define	Use of this verb often indicates an enabling objective that would be used in a classroom setting, not the task itself. <i>Example of Improper Use:</i> Define the purpose of a front-end analysis.
Demonstrate	Like "define," "demonstrate" is usually indicative of an enabling objective. <i>Example of Improper Use:</i> Demonstrate an understanding of front-end analysis by defining the purpose of a front-end analysis.
Effect	Similar in meaning to "achieve," but more vague.
Ensure	Difficult to observe or measure. Usually the analyst would be better off stating what the individual or unit has to do in order to ensure something happens or doesn't happen.
Evaluate	Usually indicates a step or enabling objective.
Identify	May indicate a step or enabling objective. <i>Example of Improper Task Title:</i> Identify the parts of the M16A2 rifle.
Inspect	Usually indicates a step or enabling objective.
Manage	Difficult to observe or measure. Usually the analyst would be better off stating what the individual has to do in order to manage something. Since management is a complex set of skills, a task that uses the verb "manage" should be closely examined. It will often be found to be so broad that it must be split into several more well defined tasks.
Monitor	Usually indicates a step or enabling objective.
Name	Nearly always indicates an enabling objective.
Perform	"Perform," like "conduct," is simply another way of saying "do."
Prioritize	Usually indicates a step or enabling objective.
Review	Usually indicates a step or enabling objective.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued

Section III, Verbs With Similar Definitions

Administer, Manage

"Administer" refers to relatively structured activities, while "manage" refers to broader activities requiring great depth of knowledge and experience. A clerk may administer the unit's publications. An executive or senior officer manages equipment procurement.

Assist, Support

An assistant participates in the action with the principal actor.

Example: The loader assists the gunner.

Support implies a different kind of activity than the primary activity.

The verb "support" usually indicates a collective task, while "assist" usually indicates an individual task.

Decide, Determine

"Decide" refers to arriving at a conclusion and then pronouncing that decision.

"Determine" is to settle or decide by choice of alternatives or possibilities and to fix precisely.

Disassemble, Dismantle

Disassemble implies taking apart for the purpose of repairing or cleaning.

Dismantling implies taking apart on a relatively long-term basis to render inoperable.

Lead, Command

"Lead" implies to go ahead, or to control the activities of a small group.

"Command" is a legal status, which includes not only direction, but also disciplinary authority.

Operate, Employ

"Operate" is to turn on, control, and turn off a piece of equipment.

"Employ" is to ensure that the equipment is used to further the mission of the organization.

Example: OS3 Jones operates the radio. LCDR Smith employs the communications system.

Recognize, Identify

"Recognize" implies a less stringent standard than "identify." A coxswain may recognize a threat vehicle by a characteristic that is common to many different threat vehicles (for example, the boat-shaped nose on most Soviet-designed personnel carriers). In order to identify the vehicle, the coxswain would have to determine the model.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued

Section IV, Verbs To Avoid

Appreciate

- Not measurable or observable.
- Not an action verb.

Become aware of

- Not measurable or observable.
- Not an action verb.

Be familiar with

- Not measurable or observable.
- Not an action verb.

Believe

- Not measurable or observable.
- Not an action verb.

Clarify Usually indicates an enabling objective.

Consider

- Rarely observable.
- Usually indicates an enabling objective.
- Not an action verb.

*Describe

- Usually indicates an enabling objective.
- Not an action verb.

*Discuss

- Usually indicates an enabling objective or a learning activity.
- Not an action verb.

Elucidate

- Not measurable or observable.
- Not an action verb.

Enjoy

- Not measurable or observable.
- Not an action verb.

Execute Vague. Another version of "Do".

*Explain

- Usually indicates an enabling objective.
- Not an action verb.

USCG Training System SOP: Curriculum Outline

Appendix B: Standard Verb List, continued Section IV, Verbs to Avoid, continued

Know

- Not measurable or observable.
- Not an action verb.

*List

- Usually indicates an enabling objective.
- Not an action verb.

Relate

- Usually indicates an enabling objective.
- Not an action verb.

Summarize

- Usually indicates an enabling objective.
- Not an action verb.

Synthesize

- Not measurable or observable.
- Not an action verb.

Understand

- Not measurable or observable.
- Not an action verb.

Use Vague. Another version of "Do."

Utilize Vague. Another version of "Do."

- * Indicates verbs that should only be used in enabling or learning objectives.

USCG Training System SOP: Curriculum Outline

Appendix C - Definitions of Methods of Instruction

The table below lists the methods, abbreviations, and definitions that are used to complete the Instructor Contact Hours Work Sheet.

METHODS (ABBREVIATIONS)	DEFINITIONS
Lecture (LECT)	Used to impart information or knowledge to a group of students at one time. Additional instructional methods can be incorporated especially if the learning objective requires more than the indoctrination of information.
Demonstration (DEMO)	Presentation by a live instructor, video, television, slide show, or computer that shows how to perform a procedure or task. A limitation of this method is that it does not necessarily mean the student can perform the same demonstration.
Exercise/Practical Exercise (E/PE)	Used for practicing, reviewing, or evaluating progress on hands-on performance utilizing equipment, mock-ups, job aids, or checklist.
Examination and Review (EXAM)	Hands-on, written, or oral examination to ensure the student has achieved a learning objective. Review includes feedback on how well the student accomplished that learning objective. The test must match exactly with the objective being tested.
Laboratory (LAB)	Used for a variety of learning. An environment equipped for practice, experimentation, or testing.
Role Play/Simulation (RP/S)	Used to provide two or more students the opportunity to interact, and practice behaviors, or hands-on skills in a given situation, such as counseling or customer service situations that require interpersonal communications skills, without incurring the risk associated with either the real equipment or real-life situation. Various types of training equipment or other instructional methods can be utilized such as mockups, simulators, models, flowcharts or CBT.

USCG Training System SOP: Curriculum Outline

Appendix C - Definitions of Methods of Instruction, continued

METHODS (ABBREVIATIONS)	DEFINITIONS
Video (V)	Lecture material, especially information that needs to be presented to a large number of people, can be recorded and presented using 16 mm film, videocassette player, or DVD player.
Computer-Based Training (CBT)	Series of highly structured, self-paced, learning segments presented by a computer that also provides immediate feedback to the student.

USCG Training System SOP: Curriculum Outline

Appendix D - Curriculum Information for ACE

Documentation for Resident Course

Sample Program of Instruction (POI)

1. POC: Dr. Harvey Woodrome
Curriculum and Instructional Standards Office
Naval Construction Training Center (of course this would be a Coast Guard site)
5510 CBC 8th St.
Gulfport, MS 39501-5003
(228) 871-2974
2. FULL TITLE OF COURSE (no abbreviations): Construction Planning and Estimating Specialist
3. COURSE ID NUMBER (DIN): A-412-0012 (very few Coast Guard resident courses have numbers)
4. TRAINING SITES (Include ALL):
 - a. Official Name: Naval Construction Training Center
City, State: Gulfport, MS
 - b. Official Name: Naval Construction Training Center
City, State: Port Hueneme, CA
5. LENGTH IN 5 DAY WEEKS: 10 Weeks
6. NUMBER OF ACADEMIC HOURS: 400
7. IMPLEMENTATION DATE OF CURRENT CURRICULUM: May 1997
8. COURSE MISSION: To provide selected E-5 through E-7 personnel in the BU, CE, SW, UT, and EO ratings with the knowledge and skills necessary to PLAN, ESTIMATE, SCHEDULE, and REPORT on construction projects at existing naval bases, advance bases, and selected off-base sites during peacetime and contingency operations IAW NAVFAC P-405.
9. PREREQUISITES: Selected BU, EA, CE, SW, UT and EO ratings.
10. METHOD OF INSTRUCTION: Group-paced.
11. PIPELINE INFORMATION: Not a pipeline course.
12. LIST OF MAJOR TOPICS/LEARNING OUTCOMES: See attached.
13. HOURLY BREAKDOWN OF MAJOR TOPICS/LEARNING OUTCOMES: See attached.
14. THIS COURSE IS A (CHECK ONE):
 New Course.
 Existing course never evaluated.
 Course previously evaluated by ACE, which has undergone a revision.

USCG Training System SOP: Curriculum Outline

Appendix D - Curriculum Information for ACE, continued

Documentation for Resident Course

Program of Instruction (Outline of Instruction)

Unit Zero: Course Administration

	CLASS	LAB	TOTAL
Lesson Topic 0.1 Introduction/Registration	2	0	2
Lesson Topic 0.2 Safety Practices	2	0	2
Lesson Topic 0.3 Study Techniques	2	0	2
Lesson Topic 0.4 Tests	3	0	3
Lesson Topic 0.5 Course Critique & Graduation	2	0	2
UNIT ZERO TOTAL	11	0	11

Unit One: Estimating Procedures

	CLASS	LAB	TOTAL
Lesson Topic 1.1 Construction Mathematics	12	18	30
Lesson Topic 1.2 Develop Project Package	6	3	9
Lesson Topic 1.3 Introduction to Estimating	6	4	10
Lesson Topic 1.4 Blueprints and Specifications	2	5	7
UNIT ONE TOTAL	26	30	56

Unit Two: Estimating Materials

	CLASS	LAB	TOTAL
Lesson Topic 2.1 Estimating Site work	6	6	12
Lesson Topic 2.2 Estimating Concrete	6	26	32
Lesson Topic 2.3 Estimating Masonry	5	11	16
Lesson Topic 2.4 Estimating Metal	5	19	24
Lesson Topic 2.5 Estimating Carpentry	3	2	5
Lesson Topic 2.6 Estimating Moisture Protection	4	4	8
Lesson Topic 2.7 Estimating Doors, Windows, and Hardware	3	5	8
Lesson Topic 2.8 Estimating Finishes	12	23	35
Lesson Topic 2.9 Estimating Mechanical	8	16	24
Lesson Topic 2.10 Estimating Electrical	9	14	23
UNIT TWO TOTAL	61	126	187

Unit Three: Project Planning, Scheduling, and Reporting

	CLASS	LAB	TOTAL
Lesson Topic 3.1 Material Procurement	2	6	8
Lesson Topic 3.2 Detailed Project Planning	9	16	25
Lesson Topic 3.3 Network Analysis	18	38	56
Lesson Topic 3.4 CBCM Computer Software	8	49	57
UNIT THREE TOTAL	11	0	11

Total Periods, Class 135
 Total Periods, Lab/Practical* 265
 Total Periods, of Course* 400
 Total Weeks of Course 10

*YOU MAY SUBMIT MASTER COURSE SCHEDULE INSTEAD IF IT LISTS THE TOTAL HOURS.

USCG Training System SOP: Curriculum Outline

Appendix D - Curriculum Information for ACE, continued

Documentation for Resident Course

Date: _____

Please check: _____ Adding Course: _____ Deleting Course: _____

Name of course: _____

Short Name: _____ Length of Course: _____ *Origin Date: _____

Short Name: _____ Length of Course: _____ Revised Date: _____

Short Name: _____ Length of Course: _____ Deletion Date: _____

Is this course going off-line? ___yes___no If yes, has ACE been notified? ___yes___no

Does course replace previous course? ___yes___no If yes, what course?

Name of Training Center: _____ Location: _____

SMS: _____ Telephone No. () _____

Classification of course: ___Unclassified___Classified

If classified, give classification) _____

Who determined date for course? _____

Does course meet ACE requirements? ___yes___no

REMAINDER TO BE COMPLETED BY COAST GUARD INSTITUTE STAFF:

Was Curriculum Outline received for course? ___yes___no

Were textbooks, pamphlets received for course? ___yes___no

If yes, how many? _____

Were textbooks, pamphlets sent to ACE? ___yes___no

Date Curriculum Outline was sent to ACE: _____

Comments:

* Date course was reviewed originally by ACE. Shows historical listing for course. If course has changed, you would list the current start date for the revision in the revised date section. If course ends and is not replaced, show the ending date in the deletion date section.

USCG Training System SOP: Curriculum Outline

Appendix D - Curriculum Information for ACE, continued

Documentation for Nonresident Course

Sample Program of Instruction (POI) of Correspondence Course for ACE

1. POC: BMCM JOE COASTIE
Curriculum and Instructional Standards Office
Coast Guard Training Center
1234 Main Street.
Anywhere, ST 39501-5003
(228) 871-2974
2. FULL TITLE OF COURSE (no abbreviations): Coast Guard Course
3. COURSE ID NUMBER (List course code and edition):
4. CORRESPONDENCE COURSE SITE:

Commanding Officer
USCG Institute
5900 SW 64th Street, Room 235 MPB
Oklahoma City, OK 73169-6990
5. LENGTH IN MONTHS: 36 Months
6. IMPLEMENTATION DATE OF CURRENT CURRICULUM: May 1997
7. COURSE MISSION: To provide knowledge necessary to perform at the Boatswain's Mate Third Class level as stated in the Enlisted Qualifications Manual, COMDTINST M1414.8B.
8. PREREQUISITES:
9. METHOD OF INSTRUCTION: Self-paced.
10. PIPELINE INFORMATION: Not a pipeline course.
11. LIST OF MAJOR TOPICS/LEARNING OUTCOMES: See attached.
12. THIS COURSE IS A (CHECK ONE):
 New Course.
 Existing course never evaluated.
 Course previously evaluated by ACE, which has undergone a revision.

USCG Training System SOP: Curriculum Outline

Appendix D - Curriculum Information for ACE, continued

Documentation for Nonresident Course

Date: _____

Please check: _____ Adding Course: _____ Deleting Course:

Name of course: _____

Short Name: _____ Length of Course: _____ *Origin Date: _____

Short Name: _____ Length of Course: _____ Revised Date: _____

Short Name: _____ Length of Course: _____ Deletion Date: _____

Is this course going off-line? ___yes___no If yes, has ACE been notified? ___yes___no

Does course replace previous course? ___yes___no If yes, what course?

POC/SMS: _____

Address: _____

Telephone No: () _____

Classification of course: ___Unclassified___ Classified

If classified, give classification) _____

Who determined date for course?

Does course meet ACE requirements? ___yes___no

REMAINDER TO BE COMPLETED BY COAST GUARD INSTITUTE STAFF:

Was Curriculum Outline received for course? ___yes___no

Were textbooks, pamphlets received for course? ___yes___no

If yes, how many? _____

Were textbooks, pamphlets sent to ACE? ___yes___no

Date Curriculum Outline was sent to ACE: _____

Comments:

* Date course was reviewed originally by ACE. It shows historical listing for course. If course has changed, you would list the current start date for the revision in the revised date section. If course ends and is not replaced, show the ending date in the deletion date section.

USCG Training System SOP: Curriculum Outline

Appendix E – Checklist of Curriculum Outline Sections

Resident Curriculum Outline Checklist

No.	Section Description	X	Date Completed
1.	Curriculum Outline Cover Page		
2	Table of Contents		
3.	Course Data		
4.	Mission and Scope Statements		
5.	Units of Instruction (Terminal Performance Objectives)		
6.	Course Content Reference Table		
7.	Training Aids/Training Equipment, Exhibit 1		
8.	Texts and References, Exhibit 2		
9.	Facilities and Space Requirements, Exhibit 3		
10.	Course Limiting Factors Sheet, Exhibit 4		
11.	Instructor Contact Hours Computation Work Sheet, Exhibit 5		
12.	Additive Man-hour Computation Work Sheet, Exhibit 5a		
13.	Staffing Standards Computation Work Sheet, Exhibit 5b		

USCG Training System SOP: Curriculum Outline

Appendix E – Checklist of Curriculum Outline Sections

Nonresident Curriculum Outline Checklist

No.	Section Description	X	Date Completed
1.	Curriculum Outline Cover Page		
2.	Table of Contents		
3.	Course Data		
4.	Mission and Scope Statements		
5.	Units of Instruction (Terminal Performance Objectives)		
6.	Course Content Reference Table		
7.	Training Aids/Training Equipment, Exhibit 1		
8.	References Listed in TPOs, Exhibit 2		
9.	Training Center Pamphlets Issued to the Student, Exhibit 3		
10.	Reserve Retirement Points Work Sheet, Exhibit 4		
11.	Total Reserve Retirement Points added to cover sheet?		
12.	Objectives consistent with the PQG?		
13.	References in the outline consistent with references in the PQG?		
14.	Pamphlet numbers listed in curriculum outline match PQG?		
15.	Course name, course ID, and course code with edition number listed in curriculum outline?		

USCG Training System SOP: Curriculum Outline

Appendix F - Job Aid for Funding Computation

"This section is currently under review by CG-1323."
September 2006

COURSE COST:

This cost is based on the support for a course regardless of the number of convenings. If there is only one course convening per year, the cost to support it would be the **course cost**.

Consider the following as a **gauge**:

1. If the item does not fall into the above two categories (STUDENT OR CONVENING COST), then it probably goes into this category.
2. If the item is needed due to the likelihood of training aid or equipment failure, use this category.
3. If the item is required to administer the course, but is not consumed by students or instructors per convening, use this category.
4. If the item is needed as reference material, use this category.
5. If the item was deleted, would it result in canceling a convening or incompleteness of a TPO/EO? If **YES**, then it should be put into the **Convening Cost** category; if **NO**, then it can remain in this category.

Examples of COURSE COST:

- ◆ Training aid maintenance
- ◆ Equipment maintenance
- ◆ Special instructor training
- ◆ AV equipment computer equipment (not IRM's responsibility, such as classrooms)
- ◆ Maintenance of reference books/pubs
- ◆ Instructor clothing
- ◆ Stationery (notebooks, stapler, folders, markers, printer toner)

USCG Training System SOP: Curriculum Outline

Appendix F - Job Aid for Funding Computation, continued

- ◆ Upgrades or Replacements (tools, books, aids, equipment, parts)

Note: Most of the above items in this category are used by **multiple convenings** and/or have a typical life expectancy. When estimating line item cost, calculate cost by dividing the number of years noted for the life cycle. This method won't get funding for all items, but it will at least allow for yearly **recapitalization**.

CONVENING COST:

This cost is based on **ONE** course convening regardless of the number of students. Respectively, what does it take (\$) to convene a course?

If the convening was canceled, would this cost be saved? Or, if the convening was added, would you need this much money? If the answer for both is **Yes**, then you are on track. If the answer is **No**, then maybe it needs to be in another category.

Consider the following as a **gauge**:

1. If the items you listed were deleted, would the convening or training objective(s) have to be canceled? If the answer is Yes, then it fits into this category. If the answer is No, then it probably belongs in another category.
2. If an item is **consumed** by an instructor, it should be in this category. If the item is actually used/consumed after every second, third, or more convenings, then it probably should be in the **COURSE COST** category.
3. If the item is used to maintain training aids or equipment, it has to be consumed in **ONE** convening. Examples: It is a requirement to renew the band saw blades after each convening; it is a requirement to renew the fluids after each convening; it is a requirement to flush the system after each convening or it's a requirement to pay for a guest speaker for each convening.

Examples of CONVENING COST:

- ◆ Training Aid/Equipment Maintenance (fluids, printer toner, gaskets, parts, rags)
- ◆ Instructor Consumables (ammo, targets, lumber, argon, wire/solder, elec. supplies, cleaning supplies)
- ◆ Guest Speaker

USCG Training System SOP: Curriculum Outline

Appendix F - Job aid for Funding Computation, continued

- ◆ Stationary Supplies (paper, pens, pencils)
- ◆ Clothing/Protective Wear (disposable aprons, gloves, hats, filter mask or inserts for breathing apparatus)

STUDENT COST:

These items are consumed by the students per convening. It doesn't matter if there are 1 or 20 students. The cost associated with a line item should be related to **ONE** student. Another view: If you only have one student, what would that cost be for a consumable item? To assist you in identifying these incurred cost, review the course's TPOs/EOs.

Consider the following as a **gauge**:

1. If cost changes because you have one more or one less students in class, then you're on track. But, if the cost does not change if you add one more or one less student, then it should be put into another category.
2. If an item used by a student is also used for another course convening, it should be put into another category.
3. If an instructor **consumes** the same item(s) that the students consume, it should be listed in both "**student**" and "**convening**" categories.

Examples of STUDENT COST:

- Stationary (notebooks, pens, pencils, paper)
- OBA Canisters
- Ammunition
- Wire/Solder
- Rags
- Gaskets (seals, grommets, O-rings)

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