CAREER PATHWAY CYBER INSTRUCTOR (712)

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1 712-CYBER INSTRUCTOR

1.1 WORK ROLE OVERVIEW

The table below provides an overview of various role-specific elements related to 712-Cyber Instructor.

NICE Role Description	Develops and conducts training or education of personnel within cyber domain.
	Personnel performing the 712-Cyber Instructor work role are most commonly aligned to the following Occupational Series (Top 5 Shown):
OPM Occupational Series	 1712-Training Instruction – 52% 2210-Information Technology – 17% 1701-General Education and Training – 13% 391 – Telecommunications – 7% 132 – Intelligence – 5%
	Personnel performing the 712- Cyber Instructor work role are most commonly paired with the following complimentary Work Roles (Top 5 shown):
Work Role Pairings	 711-Cyber Instructional Curriculum Developer – 67% 752-Cyber Policy and Strategy Planner – 10% 431-Knowledge Manager – 5% 801-Program Manager – 5% 722-Information Systems Security Manager – 3%
	Personnel performing the 712-Cyber Instructor work role may unofficially or alternatively be called:
Functional Titles	 Cyber Field Instructor (CFI) Cyber Trainer Cyber Training Specialist Cyber Professor Cyber Workforce Developer Learning Officer Information Security Trainer Security Training Coordinator
Distribution of GS-Levels	Personnel performing the 712-Cyber Instructor work role are most commonly found within the following grades on the General Schedule.* -
	- 🛛 GS-9 – 35%

	- 🗌 GS-10 – redacted**
	- ⊠ GS-11 – 22%
	- 🖾 GS-12 – 12%
	- 🖾 GS-13 – 9%
	- 🖾 GS-14 – 5%
	- GS-15 – redacted**
	$- \Box GS-15 - 1edacted$
	*15% of all 712s are in non-GS pay plans and excluded from this section
	**Percentages less than 3% have been redacted
	The following work roles are examples of possible roles an individual may perform
	prior to transitioning into the 712-Cyber Instructor work role:
	phor to transitioning into the 712 cyber instructor work role.
	- 211-Law Enforcement/Counterintelligence Forensics Analyst
	- 212-Cyber Defense Forensics Analyst
	- 221-Cyber Crime Investigator
	- 411-Technical Support Specialist
	- 421-Database Administrator
	- 422-Data Analyst
	- 431-Knowledge Manager
	- 441-Network Operations Specialist
	- 451-System Administrator
	- 461-Systems Security Analyst
	- 511-Cyber Defense Analyst
	- 521-Cyber Defense Infrastructure Support Specialist
	- 531-Cyber Defense Incident Responder
	- 541-Vulnerability Assessment Analyst
On Ramps	
On hamps	- 612-Security Control Assessor
	- 621-Software Developer
	- 622-Secure Software Assessor
	- 631-Information Systems Security Developer
	- 632-Systems Developer
	- 641-Systems Requirements Planner
	- 651-Enterprise Architect
	- 652-Security Architect
	 661-Research and Development Specialist
	 671-System Testing and Evaluation Specialist
	- 711-Cyber Instructional Curriculum Developer
	- 722-Information Systems Security Manager (ISSM)
	- 723-Communication Security (COMSEC) Manager
	- 731-Cyber Legal Advisor
	- 732-Privacy Officer/Privacy Compliance Manager
	 751-Cyber Workforce Developer and Manager
	751 Cyber Workforce Developer and Manager
	 752-Cyber Policy and Strategy Planner

	The following work roles are examples of common transitions an individual may pursue after having performed the 712-Cyber Instructor. This is not an exhaustive list, nor does it consider learning and development opportunities an individual may pursue to prepare themselves for performing alternate work roles:
Off Ramps	 711-Cyber Instructional Curriculum Developer 751-Cyber Workforce Developer and Manager 752-Cyber Policy and Strategy Planner 802-IT Project Manager

1.2 CORE TASKS

The table below provides a list of tasks that represent the Core, or baseline, expectations for performance in the 712-Cyber Instructor work role, as well as additional tasks that those in this role may be expected to perform.

Task ID	Task Description	Core or Additional
T0030	Conduct interactive training exercises to create an effective learning environment.	Core
T0443	Deliver training courses tailored to the audience and physical/virtual environments.	Core
T0467	Ensure training meets the goals and objectives for cybersecurity training, education, or awareness.	Core
T0101	Evaluate the effectiveness and comprehensiveness of existing training programs.	Core
T0451	Participate in development of training curriculum and course content.	Core
T0519	Plan and coordinate the delivery of classroom techniques and formats (e.g., lectures, demonstrations, interactive exercises, multimedia presentations) for most effective learning environment.	Core
T0535	Recommend revisions to curriculum end course content based on feedback from previous training sessions.	Core
T0224	Review training documentation (e.g., Course Content Documents [CCD], lesson plans, student texts, examinations, Schedules of Instruction [SOI], and course descriptions).	Core
T0536	Serve as an internal consultant and advisor in own area of expertise (e.g., technical, copyright, print media, electronic media).	Core
T0230	Support the design and execution of exercise scenarios.	Core
T0444	Apply concepts, procedures, software, equipment, and/or technology applications to students.	Additional
T0320	Assist in the development of individual/collective development, training, and/or remediation plans.	Additional
T0073	Develop new or identify existing awareness and training materials that are appropriate for intended audiences.	Additional
T0316	Develop or assist in the development of computer based training modules or classes.	Additional
T0317	Develop or assist in the development of course assignments.	Additional
T0318	Develop or assist in the development of course evaluations.	Additional
T0319	Develop or assist in the development of grading and proficiency standards.	Additional
T0321	Develop or assist in the development of learning objectives and goals.	Additional
T0322	Develop or assist in the development of on-the-job training materials or programs.	Additional
T0323	Develop or assist in the development of written tests for measuring and assessing learner proficiency.	Additional
T0520	Plan non-classroom educational techniques and formats (e.g., video courses, mentoring, web-based courses).	Additional
T0247	Write instructional materials (e.g., standard operating procedures, production manual) to provide detailed guidance to relevant portion of the workforce.	Additional

Table 2. 712-Cyber Instructor Core Tasks

1.3 CORE KNOWLEDGE, SKILLS, AND ABILITIES

The table below provides a ranking of KSAs that represent the Core, or baseline, expectations for performance in the 712-Cyber Instructor work role, as well as additional KSAs that those in this role may be expected to demonstrate.

KSA ID	Description	Competency	Importance to Work Role
K0004	Knowledge of cybersecurity principles.	Information Systems/Network Security	Foundational to all work roles.
K0001	Knowledge of computer networking concepts and protocols, and network security methodologies.	Infrastructure Design	Foundational to all work roles.
K0003	Knowledge of national and international laws, regulations, policies, and ethics as they relate to cybersecurity.	Legal, Government, and Jurisprudence	Foundational to all work roles.
кооо2	Knowledge of risk management processes (e.g., methods for assessing and mitigating risk).	Risk Management	Foundational to all work roles.
К0005	Knowledge of cyber threats and vulnerabilities.	Vulnerabilities Assessment	Foundational to all work roles.
коооб	Knowledge of specific operational impacts of cybersecurity lapses.	Vulnerabilities Assessment	Foundational to all work roles.
A0016	Ability to facilitate small group discussions.	Client Relationship Management	Core
КОЗ19	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment	Core
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication	Core
S0070	Skill in talking to others to convey information effectively.	Oral Communication	Core
K0146	Knowledge of the organization's core business/mission processes.	Organizational Awareness	Core
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well- organized manner through verbal, written, and/or visual means.	Presenting Effectively	Core
A0017	Ability to gauge learner understanding and knowledge level.	Teaching Others	Core
A0020	Ability to provide effective feedback to students for improving learning.	Teaching Others	Core
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others	Core
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others	Core

Table 3. 712-Cyber Instructor Core KSAs

KSA ID	Description	Competency	Importance to Work Role
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others	Core
K0124	Knowledge of multiple cognitive domains and appropriate tools and methods for learning in each domain.	Teaching Others	Core
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others	Core
K0115	Knowledge of emerging computer-based technology that has potential for exploitation by adversaries.	Technology Awareness	Core
K0059	Knowledge of new and emerging information technology (IT) and cybersecurity technologies.	Technology Awareness	Core
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment	Core
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management	Additional
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment	Additional
A0012	Ability to ask clarifying questions.	Oral Communication	Additional
K0130	Knowledge of virtualization technologies and virtual machine development and maintenance.	System Administration	Additional
A0022	Ability to apply principles of adult learning.	Teaching Others	Additional
A0024	Ability to develop clear directions and instructional materials.	Teaching Others	Additional
A0006	Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures.	Teaching Others	Additional
K0204	Knowledge of assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others	Additional
K0208	Knowledge of computer based training and e- learning services.	Teaching Others	Additional
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others	Additional
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others	Additional
K0217	Knowledge of Learning Management Systems and their use in managing learning.	Teaching Others	Additional
K0215	Knowledge of organizational training policies.	Teaching Others	Additional
K0226	Knowledge of organizational training systems.	Teaching Others	Additional

KSA ID	Description	Competency	Importance to Work Role
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others	Additional
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others	Additional
A0014	Ability to communicate effectively when writing.	Written Communication	Additional

1.4 CORE COMPETENCIES

The table below is a compilation of competencies aligned to the 712-Cyber Instructor work role, and their associated importance. Listed competencies are collections of three or more similar Knowledge, Skills, or Abilities aligned to the Work Role. *These competencies originate from the <u>NICE Framework</u> <u>Competency Pivot Tool</u>.*

Technical Competency	Com p. ID	Definition	Work Role Related KSAs	Importance
Oral Communication	C036	This area contains KSAs that relate to the process of expressing information or ideas by word of mouth	 Ability to answer questions in a clear and concise manner. (A0011) Skill in talking to others to convey information effectively. (S0070) Ability to ask clarifying questions. (A0012) 	Core

Table 4. 221-Cyber Crime Investigator Core Competencies

Teaching Others	C052	This area contains KSAs that relate to imparting knowledge of or giving information about or instruction in (a subject or skill)	 Ability to gauge learner understanding and knowledge level. (A0017) Ability to provide effective feedback to students for improving learning. (A0020) Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience. (A0057) Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic). (K0218) Knowledge of modes of learning (e.g., rote learning, observation). (K0220) Knowledge of multiple cognitive domains and appropriate tools and methods for learning in each domain. (K0124) Skill in developing and executing technical training programs and curricula. (S0064) Ability to apply principles of adult learning. (A0022) Ability to develop clear directions and instructional materials. (A0024) Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures. (A0006) Knowledge of computer based training and e- learning services. (K0208) Knowledge of computer based training and e- learning services. (K0208) Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation). (K0213) Knowledge of learning levels (i.e., Bloom's Taxonomy of learning). (K0216) Knowledge of organizational training policies. (K0225) Knowledge of organizational training systems and their use in managing learning. (K0217) Knowledge of organizational training systems. (K0226) Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises). (S0100) Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes. (S0101) 	Core
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Vulnerabilities Assessment	C057	This area contains KSAs that relate to the principles, methods, and tools for assessing vulnerabilities and developing or recommending appropriate mitigation countermeasures.	 Knowledge of cyber threats and vulnerabilities. (K0005) Knowledge of specific operational impacts of cybersecurity lapses. (K0006) Knowledge of emerging security issues, risks, and vulnerabilities. (K0147) 	Core
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1.5 Suggested Qualifications / Capability Indicators

Table 5. 712-Cyber Instructor Suggested Qualifications / Capability Indicators

For indicators of capability for the 712-Cyber Instructor work role, please see <u>Draft NISTR 8193</u> - <u>National Initiative for Cybersecurity Education (NICE) Framework Work Role Capability Indicators</u>.

Section to be populated with updated DoD-8140 Qualification Matrix for 712-Cyber Instructor.

2 APPENDIX: 712-CYBER INSTRUCTOR TASK ANALYSIS AND KSA MAPPING

2.1 KEY TO READING THE TASK ANALYSIS AND KSA MAPPING

Table 6. Key to Reading the Task Analysis and KSA Mapping

Proficiency	Task Statement	Importance
As Written	Task as written within the NICE Cybersecurity Workforce Framework (NICE Framework).	Overall Importance to Work
As written	As written Task as written within the Nice Cybersecurity Workforce Framework (Nice Framework).	
Entry	Example behavioral indicator / task permutation for performing this task at an Entry skills proficiency level.	
Intermediate	Example behavioral indicator / task permutation for performing this task at an Intermediate skills proficiency level.	
Advanced	Example behavioral indicator / task permutation for performing this task at an Advanced skills proficiency level.	

Table 7. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
ID of K, S, or A	Knowledge, Skill or Ability needed to perform the task as written within the NICE Framework	Competency mapped to the individual K, S, or A.

2.2 712-Cyber Instructor Task Analysis and KSA Mapping

Proficiency	Task Statement	Importance
As Written within Framework	Conduct interactive training exercises to create an effective learning environment.	Core
Entry	Proctor/assist in supporting interactive training exercises to create an effective learning environment. Conduct training module under supervision. Address technology issues during training.	
Intermediate	Conduct interactive training exercises to create an effective learning environment.	
Advanced	Conduct interactive training exercises to create an effective learning environment. Use advanced instructional strategies. Adapt to trainee needs using adult learning theories (e.g., ADDIE).	

Table 8. T0030 Task Analysis

Table 9. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
A0016	Ability to facilitate small group discussions.	Client Relationship Management
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management
K0319	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment
S0070	Skill in talking to others to convey information effectively.	Oral Communication
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0012	Ability to ask clarifying questions.	Oral Communication
K0146	Knowledge of the organization's core business/mission processes.	Organizational Awareness
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well- organized manner through verbal, written, and/or visual means.	Presenting Effectively
K0124	Knowledge of multiple cognitive domains and tools and methods applicable for learning in each domain.	Teaching Others
K0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0208	Knowledge of computer based training and e- learning services.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others

KSA ID	Description	Competency
K0217	Knowledge of Learning Management Systems and their use in managing learning.	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
K0226	Knowledge of organizational training systems.	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others
A0006	Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures.	Teaching Others
A0017	Ability to gauge learner understanding and knowledge level.	Teaching Others
A0020	Ability to provide effective feedback to students for improving learning.	Teaching Others
A0022	Ability to apply principles of adult learning.	Teaching Others
A0024	Ability to develop clear directions and instructional materials.	Teaching Others
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others
K0059	Knowledge of new and emerging information technology (IT) and cybersecurity technologies.	Technology Awareness
K0115	Knowledge that technology that can be exploited.	Technology Awareness
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment
A0014	Ability to communicate effectively when writing.	Written Communication

Table 10. T0443 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Deliver training courses tailored to the audience and physical/virtual environments.	Core
Entry	Under supervision, deliver training courses tailored to the audience and physical environments. Assist students as needed.	
Intermediate	Deliver training courses tailored to the audience and physical/virtual environments.	
Advanced	Deliver training courses tailored to intermediate and advanced audiences and physical/virtual environments. Use lessons learned from own experiences. Adapt to various levels of student experience and manage the classroom.	

Table 11. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
A0016	Ability to facilitate small group discussions.	Client Relationship Management
K0319	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment
S0070	Skill in talking to others to convey information effectively.	Oral Communication
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0012	Ability to ask clarifying questions.	Oral Communication
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
K0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others
A0017	Ability to gauge learner understanding and knowledge level.	Teaching Others
A0020	Ability to provide effective feedback to students for improving learning.	Teaching Others
A0024	Ability to develop clear directions and instructional materials.	Teaching Others

KSA ID	Description	Competency
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment

Table 12. T0467 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Ensure training meets the goals and objectives for cybersecurity training, education, or awareness.	Core
Entry	Understand the foundation of cybersecurity concepts. Be aware of the goals and objectives for cybersecurity training, education, or awareness.	
Intermediate	Ensure training meets the goals and objectives for cybersecurity training, education, or awareness.	
Advanced	Master the foundation of cybersecurity concepts. Integrate the training for cybersecurity training, education, or awareness. Ap objectives are met in training.	-

Table 13. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment
S0070	Skill in talking to others to convey information effectively.	Oral Communication
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0012	Ability to ask clarifying questions.	Oral Communication
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
К0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0217	Knowledge of Learning Management Systems and their use in managing learning.	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
A0006	Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures.	Teaching Others
A0017	Ability to gauge learner understanding and knowledge level.	Teaching Others
A0020	Ability to provide effective feedback to students for improving learning.	Teaching Others

KSA ID	Description	Competency
A0024	Ability to develop clear directions and instructional materials.	Teaching Others
К0059	Knowledge of new and emerging information technology (IT) and cybersecurity technologies.	Technology Awareness
K0115	Knowledge that technology that can be exploited.	Technology Awareness
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment

Table 14. T0101 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Evaluate the effectiveness and comprehensiveness of existing training programs.	Core
Entry	Review previous course evaluations. Distribute course evaluations. Discuss with supervisors the effectiveness and comprehensiveness of existing training programs.	
Intermediate	Evaluate the effectiveness and comprehensiveness of existing training programs. Suggest modifications to existing training programs.	
Advanced	Modify existing training programs to improve their effectivene on feedback and evaluations.	ss and comprehensiveness based

Table 15. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management
К0319	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment
S0070	Skill in talking to others to convey information effectively.	Oral Communication
K0146	Knowledge of the organization's core business/mission processes.	Organizational Awareness
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
K0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
A0017	Ability to gauge learner understanding and knowledge level.	Teaching Others
A0022	Ability to apply principles of adult learning.	Teaching Others
K0059	Knowledge of new and emerging information technology (IT) and cybersecurity technologies.	Technology Awareness
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment
A0014	Ability to communicate effectively when writing.	Written Communication

Table 16. T0451 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Participate in development of training curriculum and course content.	Core
Entry	Participate in development of training curriculum and course content under supervision. Assist in refreshing/updating content.	
Intermediate	Develop training curriculum and course content. Recommend emerging technologies.	
Advanced	<i>Supervise the development of training curriculum and course content. Approve the inclusion of emerging technologies.</i>	

Table 17. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0319	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
K0124	Knowledge of multiple cognitive domains and tools and methods applicable for learning in each domain.	Teaching Others
К0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
К0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others
A0022	Ability to apply principles of adult learning.	Teaching Others
A0024	Ability to develop clear directions and instructional materials.	Teaching Others
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others

KSA ID	Description	Competency
К0059	Knowledge of new and emerging information technology (IT) and cybersecurity technologies.	Technology Awareness
K0115	Knowledge that technology that can be exploited.	Technology Awareness
K0147	Knowledge of emerging security issues, risks, and vulnerabilities.	Vulnerabilities Assessment
A0014	Ability to communicate effectively when writing.	Written Communication

Table 18. T0519 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Plan and coordinate the delivery of classroom techniques and formats (e.g., lectures, demonstrations, interactive exercises, multimedia presentations) for most effective learning environment.	Core
Entry	Assist in coordinating the delivery of classroom techniques and formats (e.g., lectures, demonstrations, interactive exercises, multimedia presentations) for most effective learning environment.	
Intermediate	Independently plan and coordinate the delivery of classroom techniques and formats (e.g., lectures, demonstrations, interactive exercises, multimedia presentations) for most effective learning environment.	
Advanced	Approve plan and coordination of the delivery of classroom techniques and formats (e.g., lectures, demonstrations, interactive exercises, multimedia presentations) for most effective learning environment. Redesign and approve changes to classroom techniques. React to situational changes.	

Table 19. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0319	Knowledge of technical delivery capabilities and their	Information Technology
10313	limitations.	Assessment
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0012	Ability to ask clarifying questions.	Oral Communication
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
К0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0208	Knowledge of computer based training and e-learning services.	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0217	Knowledge of Learning Management Systems and their use in managing learning.	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
K0226	Knowledge of organizational training systems.	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others
A0014	Ability to communicate effectively when writing.	Written Communication

Table 20. T0535 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Recommend revisions to curriculum end course content based on feedback from previous training sessions.	Core
Entry	Collect and review revisions to curriculum and course content based on feedback from previous training sessions.	
Intermediate	Recommend revisions to curriculum and course content based on feedback from previous training sessions.	
Advanced	Approve and implement revisions to curriculum and course content based on feedback from previous training sessions. Create/modify evaluation forms.	

Table 21. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment
K0124	Knowledge of multiple cognitive domains and tools and methods applicable for learning in each domain.	Teaching Others
K0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0208	Knowledge of computer based training and e-learning services.	Teaching Others
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
K0226	Knowledge of organizational training systems.	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
A0020	Ability to provide effective feedback to students for improving learning.	Teaching Others
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others
A0014	Ability to communicate effectively when writing.	Written Communication

Table 22. T0224 Task Analysis

Proficiency	Task Statement	Importance	
As Written	Review training documentation (e.g., Course Content		
within	Documents [CCD], lesson plans, student texts, examinations,	Core	
Framework	Schedules of Instruction [SOI], and course descriptions).		
Entry	Review training documentation (e.g., Course Content Documents [CCD], lesson plans, st		
Entry	texts, examinations, Schedules of Instruction [SOI], and course	inations, Schedules of Instruction [SOI], and course descriptions).	
	Analyze and suggest revisions to training documentation (e.g., Course Content DocumentsIntermediate[CCD], lesson plans, student texts, examinations, Schedules of Instruction [SOI], and course		
Intermediate			
	descriptions).		
	Approve and implement changes to training documentation (e.g., Course Content Documents		
Advanced	[CCD], lesson plans, student texts, examinations, Schedules of I	nstruction [SOI], and course	
	descriptions).		

Table 23. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0287	Knowledge of an organization's information classification program and procedures for information compromise.	Information Management
A0023	Ability to design valid and reliable assessments.	Information Technology Assessment
K0146	Knowledge of the organization's core business/mission processes.	Organizational Awareness
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
К0204	Knowledge of learning assessment techniques (rubrics, evaluation plans, tests, quizzes).	Teaching Others
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
K0220	Knowledge of modes of learning (e.g., rote learning, observation).	Teaching Others
K0226	Knowledge of organizational training systems.	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others

KSA ID	Description	Competency
A0006	Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures.	Teaching Others
A0022	Ability to apply principles of adult learning.	Teaching Others
A0014	Ability to communicate effectively when writing.	Written Communication

Table 24. T0536 Task Analysis

Proficiency	Task Statement	Importance
As Written	Serve as an internal consultant and advisor in own area of	
within	expertise (e.g., technical, copyright, print media, electronic	Core
Framework	media).	
Entry	Serve as an internal consultant in own area of expertise (e.g., t	echnical, copyright, print
Entry	media, electronic media).	
Intermediate	Serve as an internal consultant and advisor in own area of expertise (e.g., technical,	
mermediale	copyright, print media, electronic media).	
Advanced	Serve as an internal consultant and advisor in own field of expertise (e.g., technical, copyright,	
Advanced print media, electronic media). Broaden own area of expertise.		

Table 25. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
K0319	Knowledge of technical delivery capabilities and their	Information Technology
	limitations.	Assessment
S0070	Skill in talking to others to convey information effectively.	Oral Communication
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0012	Ability to ask clarifying questions.	Oral Communication
A0013	Ability to communicate complex information, concepts, or	
	ideas in a confident and well-organized manner through	Presenting Effectively
	verbal, written, and/or visual means.	
K0124	Knowledge of multiple cognitive domains and tools and	Teaching Others
	methods applicable for learning in each domain.	
A0006	Ability to prepare and deliver education and awareness	
	briefings to ensure that systems, network, and data users	Teaching Others
	are aware of and adhere to systems security policies and	
	procedures.	
A0024	Ability to develop clear directions and instructional	Teaching Others
	materials.	Teaching Others
K0059	Knowledge of new and emerging information technology (IT)	Technology Awareness
	and cybersecurity technologies.	
K0115	Knowledge that technology that can be exploited.	Technology Awareness
K0147	Knowledge of emerging security issues, risks, and	Vulnerabilities Assessment
	vulnerabilities.	
A0014	Ability to communicate effectively when writing.	Written Communication

Table 26. T0230 Task Analysis

Proficiency	Task Statement	Importance
As Written within Framework	Support the design and execution of exercise scenarios.	Core
Entry	Support the execution of exercise scenarios.	
Intermediate	Support the design and execution of exercise scenarios.	
Advanced	Design and Execute exercise scenarios.	

Table 27. Primary Knowledge, Skills, and Abilities Required to Perform the above Task

KSA ID	Description	Competency
К0319	Knowledge of technical delivery capabilities and their limitations.	Information Technology Assessment
A0011	Ability to answer questions in a clear and concise manner.	Oral Communication
A0013	Ability to communicate complex information, concepts, or ideas in a confident and well-organized manner through verbal, written, and/or visual means.	Presenting Effectively
K0124	Knowledge of multiple cognitive domains and tools and methods applicable for learning in each domain.	Teaching Others
K0213	Knowledge of instructional design and evaluation models (e.g., ADDIE, Smith/Ragan model, Gagne's Events of Instruction, Kirkpatrick's model of evaluation).	Teaching Others
K0215	Knowledge of organizational training policies.	Teaching Others
K0216	Knowledge of learning levels (i.e., Bloom's Taxonomy of learning).	Teaching Others
K0218	Knowledge of learning styles (e.g., assimilator, auditory, kinesthetic).	Teaching Others
S0064	Skill in developing and executing technical training programs and curricula.	Teaching Others
S0100	Skill in utilizing or developing learning activities (e.g., scenarios, instructional games, interactive exercises).	Teaching Others
S0101	Skill in utilizing technologies (e.g., SmartBoards, websites, computers, projectors) for instructional purposes.	Teaching Others
A0006	Ability to prepare and deliver education and awareness briefings to ensure that systems, network, and data users are aware of and adhere to systems security policies and procedures.	Teaching Others
A0022	Ability to apply principles of adult learning.	Teaching Others
A0024	Ability to develop clear directions and instructional materials.	Teaching Others
A0057	Ability to tailor curriculum that speaks to the topic at the appropriate level for the target audience.	Teaching Others