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FLICC
Competencies
for Federal Librarians

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Foreword

This 2011 edition of the *FLICC Competencies for Federal Librarians* represents the Federal Library and Information Center Committee's (FLICC) ongoing commitment to periodically evaluate and update the competencies to reflect developments in the Federal Library community and workforce. *FLICC Competencies for Federal Librarians* defines the knowledge, skills, and abilities needed to perform successfully as a federal librarian. Federal librarians can use this document to assess themselves within foundational and functional competencies. Managers can use this document to develop job descriptions, recruit and train employees, create performance standards, develop succession plans, and align with agency missions and strategic goals.

Acknowledgments

The previous edition of this work, *Federal Librarian Competencies* (2008) was developed by the FLICC Human Resources Working Group at the urging of the U.S. Office of Personnel Management (OPM).

The original Competencies Project Development Team specifically acknowledged the work of ARMA International, the United States Army, the Medical Library Association, the American Library Association (ALA), Special Library Association (SLA), the American Association of Law Libraries, the National Library of Medicine, the Library Services Unit of the Library of Congress, the United States Navy, and OPM, whose previous works on competency development were heavily relied upon in the creation of this document. The original team also relied upon the six levels of the cognitive domains of *Bloom's Taxonomy* to describe the stages in the functional competencies.

FLICC gratefully acknowledges the work of the following individuals who developed the 2008 *Federal Librarian Competencies*: Barbara Christine, Karl E. Debus-López, Georgette Harris, M. Ann Parham, Jane A. Pellegrino, Carol E. Ramkey, Donna Ramsey, and Roberta I. Shaffer.

The goal of the 2011 revision team was to review and update the organizational structure and the terminology of the competencies to ensure they remain current and reflect significant changes in profession as well as within the federal library community and workforce.

In addition to the previous acknowledgements, the 2011 team used the revision of Bloom's taxonomy created by Lorin W. Anderson and David R. Krathwohl, www.section508.gov, and other resources listed in the Resources section.

Members of the 2011 Competencies Revision Team:

Tania Andreef
U.S. Tax Court

Kim Edwin
Library of Congress
Geography & Map Division

Jessica Hernandez
U. S. Food and Drug Administration
Biosciences Library

Dana Johnson
MLIS Intern
University of North Texas

Hector Morey
Acquisitions Specialist
Library of Congress

Mari-Jana "M-J" Oboroceanu
Knowledge Services
Library of Congress

Carol E. Ramkey
Director, Library of the Marine Corps
Marine Corps University

Jo Ann Remshard
Pentagon Library

Priscilla Stephenson
Chief, Library Service
Philadelphia VA Medical Center

Amy S. Taylor
Systems Librarian
Library of the Marine Corps

Amanda J. Wilson
Director, National Transportation Library
U.S. Department of Transportation

Introduction
Purpose and Scope

FLICC Competencies for Federal Librarians is a component of an overall and ongoing commitment by FLICC to maintain current professional competencies for the federal library community. The competencies are dynamic and FLICC will periodically evaluate them for relevancy. The expectation is that the competencies will be helpful to others beyond the federal librarian community including human resource professionals, information technology peers and partners, executive level management, policy-makers, product developers, vendors, educational institutions, and certifying entities, as well as other information professionals.

What Are Competencies?

The FLICC Human Resources Working Group defines competencies as the knowledge, skills, and abilities that define and contribute to performance in a particular profession. Competencies create a common bond of understanding and a common language for defining professional standards. Competencies are the foundation for competency-based management and continuous process improvement, ensuring that federal librarians have the knowledge, skills, and abilities to accomplish mission requirements. They may be organized in a framework that differentiates increasing stages of expertise. They are used to design and develop training and educational programs, position descriptions, performance evaluation instruments, and for alignment with strategic objectives.

How are Competencies Different from Performance Standards or Duty Statements?

- **Competencies** are patterns of skills, knowledge, abilities, behaviors, and other characteristics (intrinsic or acquired) that an individual needs to perform work roles or occupational functions successfully.
- **Performance standards** establish qualitative or quantitative measures for evaluating work performance.
- **Duty statements** describe tasks or processes undertaken to accomplish one's work.

This document does not include duty statements or performance standards.

Why Evaluate One's Competencies?

At an organizational level, competencies can provide benefits to the library in the areas of:

- strategic planning and budget execution
- recruiting and hiring
- performance feedback and management
- training and development
- career development
- succession management
- alignment with the agency's mission and strategic goals

From an individual's perspective, understanding and using competencies can help to:

- determine continuing education needs
- set goals for advancement
- discuss performance, career aspirations, and development needs with management
- create a professional development plan

The Organization of FLICC Competencies for Federal Librarians

This guide is organized into foundational competencies and functional competencies. Functional competencies are organized by professional stages.

- **Competencies** are observable, measurable patterns of skills, knowledge, abilities, behaviors and other characteristics that an individual needs to perform work roles or occupational functions successfully.

- **Foundational Competencies** are basic or common competencies shared across many functional areas and career stages. Not all foundational competencies are necessary for all federal librarian positions, pay grades, or levels.

- **Functional Competencies** are groups of similar or related competencies that represent the major functional responsibilities or duties that define the profession. Functional competencies are expressed as knowledge, skills, or abilities required to perform in that area. They do not describe a specific job or position, but they may be used to define job requirements. In this document competencies are non-hierarchical and non-weighted.

Rarely will the competencies for a person or position be found in only one functional area or at a single stage. Those using this document should not limit consideration to any one functional area or stage but select across all functional areas and at all stages as needed.

Each professional at every level should develop competencies in Library Leadership and Development. This functional area is not related to any personnel system and is not limited to positions as supervisors, managers, or administrators.

The Functional Competencies are organized as follows:

> Agency and Organization Knowledge
>> Agency and Organization Context and Culture
>> Agency's Regulations, Policies and Guidelines
>> Federal Laws and Regulations
> Collection Management
>> Collection Access and Control
>> Collection Acquisitions
>> Collection Development
>> Resource Protection and Preservation
>> Resource Sharing
>> Rights Management
> Content Organization and Structure
>> Content Structure, Design, and Dissemination
>> Controlled Vocabularies, Taxonomies, Thesauri, and Ontologies
>> Information Architecture
>> Resource Description
> Knowledge Management
>> Knowledge Management Principles
>> KM Methodologies
> Library Leadership and Advocacy
>> Administration and Management
>> Best Practices and Evaluation
>> Business Processes
>> Professional Development
>> Program and Project Management
>> Program Development and Outreach
>> Public Relations and Library Promotion
>> Research Funding and Publication
>> Strategic and Operational Planning
>> Supervision and Human Resources
> Library Technology Management
>> Assistive Technologies and 508 Compliance

Enterprise Information Technology (IT)
Information Assurance and Security
Library and Content Management Systems
Social Media, Collaborative, and Mobile Technologies
Technology
Reference and Research
Analytical Studies and Reports
Customer Education and Training
Reference Services
Resources, Search Strategies, and Tools
Specialized Knowledge, Skills, and Abilities
Languages
Specialized Subject Knowledge

- **Stages** reflect the amount of knowledge or experience relevant to a particular functional competency regardless of time in the profession, pay grades, or levels. At any given time all federal librarian will be at different stages in difference competencies. This document uses 3 stages:

  Basic: Federal librarians at this stage have basic knowledge, skills, and abilities. For professional growth they focus on developing and improving knowledge, skills, and abilities in the functional competencies.
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  Advanced: Federal Librarians at this stage have significant knowledge, skills, and abilities. At this stage, they understand and can explain and apply more than the basic techniques and technologies and may be developing specialized skills in particular functional areas. For professional growth they focus on fine tuning specialized skills, developing skills in different functional areas, and contributing to the library profession.

  Expert: Federal librarians at this stage have extensive knowledge, skills, and abilities within certain functional areas. They may make strategic decisions, partner with organizational management, and provide enterprise direction to library program staff and customers, or may be an expert in a specific functional area. They may establish best practices and use advanced techniques and technology. For professional growth, they may focus on technical skills, organizational positioning, strategic alignment, leading people, change management, and leadership in the profession.

The stages represent a progression in competencies regardless of years in practice. **The stages do not represent pay grades or pay bands. These competencies are designed to be used as a "pick list."** An individual does not need to demonstrate all of the competencies in a stage or functional areas before progressing to the next stage. The order of the competency statements does not indicate significance or priority.

Foundational Competencies

Cognitive Analysis

- **Attention to Detail –** Ability to be thorough and accurate when performing work.
- **Creative Thinking** – Ability to use imagination to find innovative courses of action.
- **Decision Making** – Ability to select and commit to a course of action**.**
- **Mathematical Reasoning** – Ability to use mathematical methods and formulas to solve problems or evaluate outcomes.
- **Problem Solving** – Ability to identify problems and to evaluate and select methods to resolve them.
- **Reasoning** – Ability to identify and analyze rules, principles, or relationships and to make logical inferences or conclusions.

Communication

- **Listening** – Ability to actively listen, interpret, and provide feedback to individuals and groups.
- **Oral Comprehension** – Ability to understand information expressed verbally by others.
- **Oral Expression** – Ability to present information verbally so that others can understand.
- **Reading** – Ability to understand and interpret written material.
- **Writing** – Ability to use proper English grammar, punctuation, and spelling and to write in a succinct and organized manner appropriate for the intended audience or purpose.
- **Written Comprehension** -- Ability to understand information written by others.
- **Written Expression**— Ability to present information in writing so that others can understand.

Emotional Intelligence

- **Conflict Management** – Ability to prevent, manage, and resolve conflicts, grievances, confrontations, or disagreements.
- **External Awareness** – Ability to identify and understand economic, political, and social trends that affect the organization.
- **Flexibility** – Ability to change and adapt behavior or work methods in response to new information, changing conditions, or unexpected obstacles.
- **Influencing/Negotiating** – Ability to persuade others to accept recommendations, cooperate, or change their own or others' behaviors and to reach mutually acceptable solutions.
- **Interpersonal Skills** – Ability to show respect, concern, and empathy for others.
- **Self-Management** – Ability to set well-defined and realistic work objectives, display initiative, and demonstrate responsible behavior.
- **Teamwork and Collaboration** – Ability to work with others to achieve shared goals and recognize the value of diverse perspectives.

Leadership

- **Advocacy** – Ability to advance the values of the library profession and advocate for libraries.
- **Integrity** – Ability to be honest and ethical.
- **Mentorship** – Ability to mentor others and encourage and support professional development.
- **Personal Leadership** – Ability to influence, motivate, and challenge others; ability to adapt leadership style to a variety of situations.

Professional Knowledge

- **Applied Learning** – Knowledge and skill to apply formal training, education, or experience to accomplishing one's work.
- **Ethical Framework** – Knowledge and application of the ethics, values, and foundational principles of the library and information profession.
- **Foundational Knowledge** – Knowledge and application of the corpus of knowledge of libraries and librarianship.

Technology Application

- **Hardware** – Ability to use computers, peripherals, mobile devices, and standard office equipment.
- **Software** – Ability to use software, social media, or mobile applications.

Functional Competencies

Agency and Organizational Knowledge

Basic Stage	Advanced Stage	Expert Stage
Agency and Organization Context and Culture		
Has knowledge of... • mission and goals of the agency or organization. • library's place and role in the agency or organization. • agency's publications and information products. • interagency and government-wide library initiatives and programs.	**Has knowledge, skill, or ability to...** • understand and explain the mission, goals, programs, initiatives, and structure of the agency or organization. • explain the history and culture of the agency or organization. • understand the interrelationships within the agency or organization and their impact on the library. • explain and use publications and information products of external entities related to the home agency or organization. • understand external environments and cultures and their impact on the agency or organization. • understand and use interagency and government-wide library initiatives and programs. • identify key internal and external stakeholders.	**Has knowledge, skill, or ability to...** • interpret the mission, goals, programs, initiatives, and structure of the agency or organization. • anticipate and plan for issues and trends relating to the future direction of the agency or organization. • assess and explain the agency or organization's place and role within the federal government, its relationships with other government entities, and their impact on the library. • assess and plan for emerging issues and trends relating to the home agency or organization publications and information products. • assess and describe key internal and external stakeholders and their impact on the library. • assess and plan for external environments, cultures, and trends and their impact on the agency or organization. • interpret, explain, or propose interagency and government-wide library initiatives and programs.
Agency's Regulations, Policies and Guidelines		
Has knowledge of... • agency's regulations, directives, standards, and policies applicable to	**Has knowledge, skill, or ability to...** • understand and apply the agency's regulations, directives, standards,	**Has knowledge, skill, or ability to...** • interpret and explain the agency's regulations, directives, standards,

the library.	and policies applicable to the library.	and policies applicable to the library.
• agency's equal employment opportunity (EEO) and diversity regulations, polices, and guidelines.	• understand and apply the agency's equal employment opportunity (EEO) and diversity regulations, polices, and guidelines.	• interpret and explain agency's equal employment opportunity (EEO) and diversity regulations, polices, and guidelines.
• agency's property accountability regulations and guidelines.	• understand and apply the agency's property accountability regulations and guidelines.	• interpret and explain agency's property accountability regulations and guidelines.
• agency's or organization's security classifications, data protection, and access policies.	• understand and apply the agency's or organization's security classifications, data protection, and access policies.	• create, assess, or modify the agency's or organization's library property accountability regulations or policies.
• agency's records management regulations and policies.	• understand and apply the agency's records management regulations and policies.	• interpret and explain the agency's or organization's security classifications, data protection, and access policies.
• agency's customer access and privacy policies.	• understand and apply the agency's customer access and privacy policies.	• interpret and explain the agency's records management regulations and policies.
• agency and organization information policies and products.	• understand and apply information policies and products of external entities related to the home agency or organization.	• interpret and explain the agency's customer access and privacy policies.
• agency and organization Information Management or Information Technology (IT) policies, procedures, and regulations.	• understand and apply agency or organization Information Management or Information Technology policies, procedures, and regulations.	• create, assess, or modify the library's customer access and privacy policies.
		• assess and plan for emerging issues and trends relating to the home agency or organization information policies and products.
		• interpret and explain agency or organization Information Management or Information Technology policies, procedures, and regulations.

Federal Laws and Regulations		
Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• federal laws, regulations, directives, standards, and policies applicable to the library.	• understand federal laws, regulations, directives, standards, and policies applicable to the library.	• interpret and explain or write draft federal laws, regulations, directives, standards, and policies applicable to the library.
• the Federal Acquisition Regulations (FAR) and subordinate agency regulations.	• understand and apply Federal Acquisition Regulations (FAR) and subordinate agency regulations.	• interpret, explain, and apply Federal Acquisition Regulations (FAR) and subordinate agency
• copyright and intellectual property		

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

laws and guidelines. • Freedom of Information Act (FOIA).	• understand and apply copyright and intellectual property laws and guidelines. • understand the implications of Congressional, agency, Freedom of Information Act (FOIA) and other investigative inquiries.	regulations. • interpret, explain, and advise on copyright and intellectual property laws and guidelines. • develop and write responses to Congressional, agency, Freedom of Information Act (FOIA) and other investigative inquiries.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Collection Management

Basic Stage	Advanced Stage	Expert Stage
Collection Access and Control		
Has knowledge of... • access to and circulation of library resources. • licenses or agreements governing access to the library's electronic resources and digital collections. • standards for data collection, management, curation, and accessibility. • remote or shared storage of physical or digital collections.	**Has knowledge, skill, or ability to…** • interpret and apply concepts and best practices of access to and circulation of the library resources. • interpret and apply licenses or agreements governing access to the library's electronic resources and digital collections. • interpret, explain, and apply standards for data collection, management, curation, and accessibility. • interpret, explain, and apply digital data management plans. • select and use remote or shared storage options for physical or digital collections.	**Has knowledge, skill, or ability to…** • create, evaluate, and modify the library's access and circulation policies and procedures. • evaluate and modify licenses and other agreements governing access to the library's electronic resources and digital collections. • develop access policies conforming to established licenses and other agreements. • evaluate, select, modify, or create standards for data collection, management, curation, and accessibility. • evaluate and assess emerging trends in digital data management • evaluate changes and recommend improvements in digital data management • formulate and adapt policies and procedures for digital data management plans. • create policies and procedures for remote access to resources.
Collection Acquisitions		
Has knowledge of... • Federal, agency and organization laws, regulations, and guidelines for acquisitions practices and procedures. • the library's acquisitions policies and procedures. • trends in information formatting, production, packaging, and dissemination.	**Has knowledge, skill, or ability to…** • explain and apply Federal, agency, and organization laws, regulations, and guidelines for library acquisitions practices and procedures. • compare and select processes and procedures for acquiring library resources. • interpret, explain, and apply the library's acquisitions policies and	**Has knowledge, skill, or ability to…** • interpret Federal, agency and organization laws, regulations, and guidelines in developing library's acquisitions practices and procedures. • advocate for and defend exemptions or exceptions to Federal, agency, and organization acquisition policies.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

	procedures.	• create, evaluate, and modify the library's acquisitions policies and procedures.
	• apply knowledge of trends and changes in information formatting, production, packaging, and dissemination to the library's acquisitions policies and procedures.	• justify and defend selected acquisition processes and procedures.
		• modify and adapt the library's acquisitions policies and procedures in response to changes and trends in information formatting, production, packaging, and dissemination.
		• evaluate and modify acquisitions policies and procedures in response to changes in national or agency funding.

Collection Development

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• theory, principles, and standards and practices in the life cycle of library collections.	• interpret, explain, and apply theories, principles, and standards in the life cycle of library collections.	• create, evaluate review, and modify library collection development plans and supporting policies.
• principles and practices of collection development and collection development plans.	• interpret, explain, and apply the principles and practices of collection development and collection development plans.	• evaluate and select standard and nonstandard bibliographic resources.
• standard bibliographic resources used in collection development.	• use bibliographic resources in collection assessment and development.	• modify and adapt collection assessment and development in response to changes and trends in the publishing and information industry.
• use of bibliographic resources in collection development.	• understand how publishing and information industry trends and changes affect collection assessment and development.	• modify and adapt collection assessment and development in response to changes and trends in the needs of the organization.
• the publishing and information industry in relation to collection development.	• explain the library's collection development plans and policies.	• validate, justify, and defend the library's collection development plans and policies.
• the library's collection development plans and policies.	• interpret, explain, and apply collection evaluation and assessment tools.	• influence trends and changes in the publishing and information industry.
• standard collection evaluation and assessment tools.		• evaluate and justify exceptions to the library's collection development plans.

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Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

		• evaluate and select standard and nonstandard collection assessment tools. • discover uses of emerging technologies for collection management.

Resource Protection and Preservation

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• theories, trends, and practices of conservation, preservation, or archiving of physical or digital resources. • tools for creating, extracting, capturing, or migrating of metadata. • disaster planning. • the library and organization's disaster plans. • concepts of planning for permanent access to information resources.	• interpret and apply theories, trends, and best practices of conservation, preservation, or archiving of physical or digital resources. • select and apply tools for creating, extracting, capturing, or migrating of metadata. • interpret and implement the library's disaster plan. • interpret and implement plans for permanent access to information resources.	• assess and select conservation, preservation, or archiving methodologies and technologies for physical or digital resources. • evaluating and adapting tools for creating, extracting, capturing, or migrating of metadata. • develop, evaluate, modify, and defend the library's disaster plan. • coordinate the library's disaster plan with that of the larger organization. • develop, evaluate, modify, and defend a plan for permanent access to information resources.

Resource Sharing

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• concepts, principles, and guidelines of library resource sharing. • using resource sharing tools. • the library's interlibrary loan (ILL) policies and procedures. • using resource sharing networks.	• interpret, explain, and apply the library's resource sharing policies. • evaluate and select resource sharing tools. • interpret and apply national policies to the library's interlibrary loan (ILL) policies. • select and use networks, partnerships, or consortia for resource sharing	• develop, justify, evaluate, and modify the library's resource sharing policies. • identify, evaluate, and adopt emerging trends in resource sharing practices and tools. • interpret national ILL policies in developing the library's interlibrary loan (ILL) policies and procedures. • develop networks, partnerships, or consortia for resource sharing.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Rights Management

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• digital rights laws, regulations, and guidelines applicable to the library's information resources.	• interpret, explain, and apply digital rights laws, regulations, and guidelines.	• develop, evaluate, modify, and defend digital rights policies and procedures for the library's resources, programs, products, and services.
• digital rights laws, regulations, and guidelines applicable to the organization's resources and products.	• interpret, explain, and apply digital rights laws, regulations, and guidelines applicable to the organization's resources and products.	• develop, evaluate, modify, and defend digital rights policies and procedures for the organization's resources and products.
• copyright, licensing, and intellectual property laws and guidelines.	• interpret, explain, and apply copyright, licensing, and intellectual property laws and guidelines.	• develop, evaluate, modify, and defend copyright, licensing, and intellectual property policies and procedures.
• how to use the Copyright Clearance Center (CCC), U.S. Copyright Office, and World Intellectual Property Organization (WIPO).	• interpret and explain the differences between national and international intellectual property rights laws, regulations and guidelines.	• develop, evaluate, modify, and defend library policies and procedures that comply with privacy laws, regulations, and guidelines.
• privacy laws, regulations, and guidelines.	• interpret, explain, and apply privacy laws, regulations, and guidelines.	• develop, evaluate, modify, and defend library or organization policies and procedures for open access and use of Creative Commons.
• open access and Creative Commons.	• interpret, explain, and apply open access and Creative Commons.	• coordinate with vendors regarding Federal acquisition guidelines on copyrights and licensing.
• differences between copyright and licensing laws, regulations, and guidelines.	• explain and apply differences between copyright and licensing.	• coordinate with vendors regarding changes to licensing contracts.
	• read and understand licensing contracts.	

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Content Organization and Structure

Basic Stage	Advanced Stage	Expert Stage

Content Structure, Design, and Dissemination

Basic Stage	Advanced Stage	Expert Stage
Has knowledge of... • library content management and document management structures, protocols, and systems. • developments and trends in library content management and document management structures and tools. • principles and practices of search engine optimization (SEO). • principles, practices, and trends of findability. • theories and principles of the semantic web. • principles and practices of HTML, XML, RDF, and other encoding schemes for information and data. • theories and principles of linked data.	**Has knowledge, skill, or ability to…** • interpret, explain, and apply library content management and document management structures, protocols, and systems. • select and apply emerging library content and document management structures and tools. • interpret, explain, and apply principles and practices of search engine optimization (SEO). • interpret, explain, and apply the principles, practices, and trends of findability. • interpret, explain, and apply theories and principles of the semantic web. • interpret, explain, and apply the principles and practices of HTML, XML, RDF, and other encoding schemes for information and data. • interpret, explain, and apply linked data techniques.	**Has knowledge, skill, or ability to…** • design the schema and protocols for library content management structures and systems. • evaluate and select or create new library content management and document management structures and tools. • evaluate and adapt the principles and practices of search engine optimization (SEO). • assess and modify search engine optimizer. • create, evaluate, or modify library or organization findability practices and techniques. • Create, evaluate and modify library or organization semantic web practices and techniques.. • create and modify library or organization HTML, XML, RDF, and other encoding schemes practices and techniques. • evaluate, modify, and adapt linked data techniques.

Controlled Vocabularies, Taxonomies, Thesauri, and Ontologies

Basic Stage	Advanced Stage	Expert Stage
Has knowledge of... • theories and principles of taxonomies, thesauri, and ontologies. • principles and practices for identifying common words and concepts of a domain. • national and international standards (e.g., ANSI/NISO and ISO) for creating thesauri and ontologies. • library policies and procedures for	**Has knowledge, skill, or ability to…** • apply principles, standards, and protocols for thesauri, taxonomies, and ontologies. • interpret, explain, and apply principles and practices for identifying common words and concepts of a domain. • interpret, explain, and apply national and international standards (e.g., ANSI/NISO and ISO) for	**Has knowledge, skill, or ability to…** • adapt theories and develop techniques for creation and application of thesauri, taxonomies, and ontologies. • Develop, evaluate, and modify library policies and procedures to comply with national and international standards (e.g., ANSI/NISO and ISO) for creating thesauri and ontologies. • evaluate changes and recommend

	creating thesauri and ontologies.	improvements to national and international standards for creating thesauri and controlled vocabularies.
	• apply library policies and procedures for taxonomies, thesauri, and ontologies.	• evaluate and synthesize across thesauri to create new taxonomies and ontologies.
	• select and apply crosswalks among taxonomies, thesauri, and ontologies.	• evaluate, modify, or create crosswalks among taxonomies, thesauri, and ontologies.
	• select and apply tools to build, maintain, and display taxonomies, thesauri, and ontologies.	• evaluate and modify tools to build, maintain, and display taxonomies, thesauri, and ontologies.
		• evaluate changes and recommend improvements to existing and emerging tools to build, maintain, and display taxonomies, thesauri, and ontologies.

Information Architecture

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• library or organization goals for delivering information to customers and stakeholders.	• interpret and explain library or organization goals for delivering information to customers and stakeholders.	• formulate and evaluate library or organization goals for delivering information to customers and stakeholders.
• structure of library or organization content.	• identify and select competitors or benchmarks for delivering information.	• analyze and evaluate competitors or benchmarks for delivering information.
• impact of customer needs on content organization.	• interpret and explain impact of customer needs on content organization.	• create, evaluate, or modify library or organization, policies, and practices in response to customer needs in content organization.
• principles and practices of web design.	• interpret, explain, and apply the principles and practices of web design.	• evaluate and prioritize customer needs in content organization.
• taxonomies, thesauri, and ontologies in search, browse, and navigation applications.	• interpret explain and apply taxonomies, thesauri, and ontologies in search, browse, and navigation applications.	• create, evaluate, or modify library or organization web design policies and practices.
• principles, practices, and trends of usability.	• interpret, explain, and apply the principles, practices, and trends of usability.	• evaluate and modify taxonomies, thesauri, and ontologies in search, browse, and navigation applications.
		• create, evaluate, or modify library or organization practices to comply with best practices of usability.

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Resource Description

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• theories, principles, and techniques of information organization.	• interpret and apply theories, principles, and techniques of information organization.	• adapt theories and principles and develop techniques of information organization.
• established cataloging, classification, metadata, and other content description standards and protocols.	• interpret, explain, and apply established cataloging, classification, metadata, and other content description standards and protocols.	• create, evaluate, and adapt cataloging, classification, metadata, and other content description standards and protocols.
• established non-descriptive metadata standards, including technical, administrative, and structural standards.	• interpret, explain and apply established non-descriptive metadata standards, including technical, administrative, and structural standards.	• create, evaluate, and adapt established and emerging technical, administrative, structural, or other metadata standards.
• impact of customer needs on content descriptions.	• interpret and incorporate customer needs in content descriptions.	• evaluate customer needs in order to modify or create content descriptions.
• concepts and practices of customer participation in content descriptions.	• interpret and analyze customer input to modify content descriptions.	• evaluate and validate customer input to modify or create content descriptions
• OCLC and other bibliographic databases and tools.	• compare and select among multiple bibliographic databases and tools.	• evaluate and synthesize data to create or integrate new bibliographic databases and tools.
• bibliographic and authority records.	• produce bibliographic and authority records.	• evaluate changes and recommend improvements to OCLC and other bibliographic databases.
• schemes and protocols for existing resources or formats.	• adapt and use schemes and protocols for existing or emerging resources or formats.	• develop new standards and protocols for bibliographic and authority records.
• principles and practices of indexing and abstracting.	• interpret, explain, and apply the principles and practices of indexing and abstracting.	• design, evaluate, and adapt schemes and protocols for existing or emerging resources or formats.
• principles and practices of crowd-sourcing, user-tagging, and social and collaborative technologies to gather descriptive data.	• interpret, explain, and apply principles and practices of crowd-sourcing, user-tagging, and social and collaborative technologies to gather descriptive data.	• evaluate and judge complex issues and discrepancies in the application of cataloging and metadata standards and protocols.
	• Select, interpret, explain, or apply crosswalks among metadata standards.	• create, evaluate, and modify indexing and abstracting standards, protocols, and structures.
		• evaluate and modify or create crowd-sourcing, user-tagging, and social and collaborative techniques to gather descriptive data.
		• evaluate, modify, or create crosswalks among metadata

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

		standards.
		• Develop, evaluate, or modify library or organization policies and practices of metadata standards.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Knowledge Management

Basic Stage	Advanced Stage	Expert Stage
Knowledge Management Principles		
Has knowledge of… • knowledge management (KM) principles, theories, and methodologies.		**Has knowledge skill or ability to…** • evaluate, select, develop, or modify knowledge management (KM) methodologies and techniques. • create, assess, or modify collaborative tools and knowledge sharing methods. • explain organizational culture from the perspective of employees, customers, and the organization, and the larger federal environment.
KM Methodologies		
Has knowledge of… • knowledge sharing, assessment, assets, and retention techniques. • KM best practices. • narrative, storytelling, and interviewing techniques. • knowledge (concept) maps. • human computer interaction (HCI) techniques.	**Has knowledge, skill, or ability to…** • interpret, explain, and apply knowledge sharing techniques. • explain and apply knowledge assessment, knowledge assets, and knowledge retention. • explain and apply KM best practices. • explain and apply narrative, storytelling, and interviewing techniques. • explain and apply knowledge (concept) mapping. • select, interpret, and apply human computer interaction (HCI) techniques.	**Has knowledge, skill, or ability to…** • create, assess, and modify knowledge sharing techniques. • evaluate outcomes and adapt knowledge assessment, assets, and retention techniques. • create, assess, and modify KM best practices. • evaluate outcomes and adapt narrative, storytelling, and interviewing techniques. • create, modify, and adapt knowledge (concept) mapping. • create or adapt human computer interaction (HCI) techniques.

Library Leadership and Advocacy

Basic Stage	Advanced Stage	Expert Stage
Administration and Management		
Has knowledge of …	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• general management theories and practices.	• employ general management theories and practices in the library environment.	• synthesize and adapt general management theories and practices to the library environment.
• library policies and procedures	• develop and execute policies and procedures aligned with library's mission, goals and objectives.	• anticipate and plan for library policies and procedures aligned with the organization's mission, strategic goals, and objectives.
• localized needs and workflows.	• track and anticipate changes in funding, policies, regulation and legislation that impact the library.	• create, assess, or modify the library and functional areas policies and procedures.
• the library and functional areas policies and procedures.	• interpret and explain the library and functional areas policies and procedures.	• evaluate and plan for changes in funding, policies, regulation, and legislation that impact the library.
• specialized reports and briefings relating to library products, programs and services.	• interpret and explain FLICC and FEDLINK programs and services.	• develop proposals to justify library projects, products, programs, and services.
• delivering library programs and services.	• interpret, explain, and use federal library initiatives and programs.	• evaluate and modify library programs.
• customer's needs regarding resources allocations.	• interpret, explain, or apply change management and organizational development techniques.	• evaluate existing or propose new FLICC and FEDLINK policies, programs, and services.
• FLICC and FEDLINK programs and services.	• write and implement library facilities and space allocation plans.	• evaluate existing or propose new federal library initiatives and programs.
• federal library initiatives and programs.	• advocate for and defend support of the library or library functional areas.	• evaluate outcomes and adapt change management and organizational development methods
• change management and organizational development techniques.		• design and evaluate library facilities and space management plans and justify requirements.
• the impact of changes in funding, policies, regulations, and legislation on the library.		• formulate and employ strategies to advocate, justify, and defend library needs.
• the principles of library facilities planning and space management.		
• advocating for support of the library or functional area of the library.		

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Best Practices and Evaluation

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• theories and principles of library science, information content management, and scholarly communications. • library and information science best practices, benchmarks, and norms. • library assessment tools and measures. • advisory committees or champions in support of library programs, products, and services.	• interpret, explain, and apply theories and principles of library science, information content management, and scholarly communications. • interpret, explain, and apply library best practices, benchmarks, and norms. • select and implement tools for evaluation of library products, services, programs, and systems. • assess library products, services, programs, and systems. • interpret, explain, and apply recommendations or results of advisory committees or champions.	• synthesize and adapt theories and principles of library science, information content management, and scholarly communications to develop library policies and practices. • evaluate and select library best practices, benchmarks, and norms to design, defend, and adapt library policies, products, services, and programs. • serve as the recognized authority on library and information science principles and best practices within the parent organization. • evaluate complex data and document findings. • design, evaluate, and modify library performance tools, and measures. • evaluate and explain the outcomes of library performance tools and measures. • design the evaluation process for library products, services, programs, and systems. • evaluate, select, and integrate standard industry performance tools and measures. • assemble advisory committees and recruit champions. • create and modify library products, programs, and services based on advisory committee or champion input.

Business Processes

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• federal, agency and organization laws, regulations, and guidelines for receipt, expenditure, and accounting	• explain and apply federal, agency, and organization laws, regulations, and guidelines for receipt,	• interpret federal, agency and organization laws, regulations, and guidelines in developing the

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of funds.	expenditure, and accounting of funds.	library's plans, policies, and procedures for receipt, expenditure, and accounting of funds.
• the principles of library financial management, planning, and budgeting.	• interpret and apply library finance and budgeting plans, policies, and procedures.	• advocate for and defend exemptions or exceptions to federal, agency and organization laws, regulations.
• library licenses and other agreements.	• understand and apply cost analyses to resource allocation.	• formulate, defend, and execute library finances, budgeting, cost analysis, and resource allocation.
• federal, agency, or organizational procurement or payment processes and systems.	• interpret and explain library licenses and other agreements.	• evaluate library licenses and coordinate agreements between the vendors and the organization.
• federal contracting procedures.	• apply federal, agency, or organizational procurement or payment processes and systems.	• evaluate, select, and justify contracting options.
	• understand and use Statements of Work (SOW), Requests for Proposals (RFP), or other contracting documents and federal contracting procedures.	• monitor contract compliance.
		• evaluate and select procurement and payment options.
		• evaluate and modify library programs and acquisitions in response to changes in national or agency funding.
		• develop and write the work requirements and measurement methods for Statements of Work (SOW), Requests for Proposals (RFP) or other contracting documents.

Professional Development

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• library and information science and related professional associations.	• distinguish the roles and missions of library and information science and related professional associations.	• design and evaluate programs and services for library and information science and related professional associations.
• issues and trends in library and information science and related professions.	• identify the professional implications of issues and trends in library and information science and related professions.	• evaluate and assess professional implications of issues and trends in library science and related professions.
• using FLICC and FEDLINK educational programs and services.	• recognize emerging trends in library and information science.	• evaluate and assess emerging trends in library and information science.
• library and information science educational and professional development initiatives and programs.	• interpret and explain FLICC and FEDLINK educational programs and services.	• evaluate existing or propose new FLICC and FEDLINK educational policies, programs, and services.
	• interpret, explain, and use library	

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

	educational and professional development initiatives and programs.	• evaluate existing and propose or develop new library educational and professional development initiatives and programs.

Program and Project Management

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• program or project management principles, methodologies, and practices. • project procedures, workflow processes, and requirements. • standard program or project management documentation.	• apply program or project management principles and practices. • adapt and apply program or project management methodologies and practices. • execute and monitor program or project procedures, workflows, and processes. • analyze and determine project or program requirements. • interpret, modify, and apply program or project management documentation	• design program or project management programs and services. • analyze and synthesize the lifecycle requirements when developing, implementing, and monitoring programs and projects. • evaluate outcomes and modify procedures and workflows for programs or projects • create policies and procedures for program or project management documentation

Program Development and Outreach

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• principles and practices of program and event planning and development. • principles and practices of outreach to existing and potential clienteles. • the role of alliances and collaborative relationships in program development and outreach.	• apply the principles and practices of program and event planning and development. • apply the principles and practices of outreach to existing and potential clienteles. • recognize and use alliances and collaborative relationships in program development and outreach. • identify and distinguish existing and potential clienteles.	• evaluate and adapt the principles and practices of program and event planning and development. • evaluate and adapt the principles and practices of outreach to existing and potential clienteles. • create, develop, and evaluate alliances and collaborative relationships in program development and outreach. • evaluate and categorize existing and potential clienteles to customize programs and outreach.

Public Relations and Library Promotion

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• the principles and practices of customer surveys or studies. • library promotional materials.	• explain the value of library programs, products, and services. • apply the principles and practices	• interpret and explain the Return on Investment (ROI) of library programs, products, and services.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

• the principles and practices of customer relations management. • library marketing activities. • Social media and mobile technologies	of customer satisfaction surveys or studies on customer attributes and demographics. • select and use library promotional materials. • implement library marketing plans. • apply marketing research to library products, services, and programs. • apply the principles and practices of customer relations management. • Explain and apply social media and mobile technologies	• design and evaluate customer satisfaction surveys or studies on customer attributes and demographics. • design and adapt library products, services and programs based on results of surveys and studies. • Design, evaluate, and modify library promotional materials. • create, evaluate, and modify library marketing plans. • select messages and media targeted to customer attributes and demographics. • evaluate and select marketing research for relevance to library products, services, and programs. • evaluate and adapt the principles and practices of customer relations management. • evaluate library marketing outcomes • create, evaluate, and modify library marketing activities.
Research Funding and Publication		
	Has knowledge, skill, or ability to… • select and apply scientific, technical, or social science research principles and methodologies. • select and apply grant writing techniques and methods. • select and apply research design methods. • write, edit, or publish reports of original research.	**Has knowledge, skill, or ability to…** • evaluate outcomes of scientific, technical, or social science research principles and methodologies. • evaluate and select or justify research funding sources. • evaluate and select grant writing techniques and methods. • evaluate and select proposed research projects. • evaluate, advocate for, or justify research projects. • teach grant writing techniques and methods. • evaluate and select grant proposals. • evaluate, create, and adapt research design methods, concepts, and principles.

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Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

| | | • evaluate, create, or adapt research reporting or publication methods. |
| | | • create, coordinate, and modify research activities. |

Strategic and Operational Planning

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• the library's vision.	• interpret and explain the library's vision.	• create and articulate a vision for the library.
• the relationship of the library to an agency's or agency division's national interests.	• use customer relations management in strategic and operational planning.	• develop, evaluate, and justify managerial, strategic, operational, and long-range plans for the library within the organization's plans.
• the library's Continuity of Operations Plan (COOP) and risk management programs	• activate the library's Continuity of Operations Plan (COOP) and risk management programs.	• create and align the library's mission, goals, and objectives with the organization.
• the library's mission, goals, and objectives.	• interpret, explain, and apply the library's Continuity of Operations Plan (COOP) and risk management programs.	• design, justify, and manage the library's Continuity of Operations Plan (COOP) and risk management programs.
• the impact of the library's mission, goals, and objectives on library functions and functional areas.	• interpret, explain, and apply library policy in relation to an agency's or agency division's national interests.	• develop and justify library policy in relation to an agency's or agency division's national interests.
	• interpret and implement library managerial, strategic, operational, and long-range plans within the organization's plans.	• evaluate and synthesize customer needs in strategic planning and resource allocation
	• interpret and implement library's mission, goals, and objectives.	• evaluate and select Return on Investment(ROI) methods and processes.
		• Formulate, calculate, and assess Return on Investment (ROI) of library programs, products, and services.
		• Advocate and justify Return on Investment (ROI) to stakeholders.
		• evaluate and modify strategic and operational plans in response to changes in national or agency priorities and goals

Supervision and Human Resources

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• federal personnel laws and agency regulations, and policies in the	• interpret, explain, and apply Federal personnel laws and agency	• evaluate and incorporate Federal personnel laws and agency

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recruitment, training, and promotion of library staff.	regulations and policies in the recruitment, training, supervision, and development of library staff.	regulations and policies in personnel planning and management.
• agency and library equal opportunity and diversity policies.	• interpret, explain, apply, and follow agency and library diversity and equal opportunity policies.	• create an environment that promotes equal opportunity and diversity in the library.
• processes for individual development, performance plans, and evaluations.	• interpret, explain, and apply the principles of individual development, performance plans, and evaluations.	• evaluate outcomes and revise and modify individual development, performance plans, and evaluations.
• principles and practices of human resources management and labor relations in a diverse workforce.	• interpret and apply principles and practices of human resources management and labor relations in a diverse workforce.	• critique, adapt, and validate the principles and practices of human resources management and labor relations in a diverse workforce.
• library workforce and succession plans.	• interpret and incorporate library workforce and succession plans in daily practice.	• create and implement workforce and succession plans.
• methods and techniques used to support and motivate subordinates, peers, and colleagues.	• select and apply personnel performance measures.	• create personnel performance measures and evaluate their efficacy.
• staff training programs.	• apply principles of staff development, coaching, and mentoring.	• design staff development, coaching, and mentoring programs.
• principles and practices of team building and team work.	• monitor and implement staff training programs.	• evaluate and adapt the principles and practices of team building and team work.
	• interpret, explain, and apply the principles and practices of team building and teamwork.	

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Library Technology Management

Basic Stage	Advanced Stage	Expert Stage
Assistive Technologies and 508 Compliance		
Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• Federal requirements to make the library's electronic and information technologies accessible to people with disabilities. • library or organization 508-compliant policies and procedures. • assistive or adaptive technologies. • assistive or adaptive technologies provided by the library.	• explain and apply federal requirements to make library products, services, and programs accessible to people with disabilities. • Interpret, explain or apply library or organization 508-compliant policies and procedures • train customers or staff in using assistive or adaptive technologies. • analyze, select, and implement assistive or adaptive technologies for library products, services, and programs.	• create, interpret, evaluate, and adapt methods of making library products, services, and programs accessible to people with disabilities. • develop library or organization 508-compliant plans and policies. • create, evaluate, and modify assistive or adaptive technologies for increasing access to library products, services, and programs. • implement library products, services, and programs compliant with laws such as the Americans with Disabilities Act, the Rehabilitation Act Section 508, and the Web Accessibility Initiative (WAI).
Enterprise Information Technology (IT)		
Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• computer hardware and peripherals and their functions. • using and troubleshooting computer operating systems and software. • the library's information technology infrastructure and IT staff organization and functions. • the library's information technology policies and procedures.	• use and trouble shoot computer hardware, operating systems, and software. • coordinate and collaborate with the library, organization, or agency's IT staff. • develop and implement library staff technology training. • interpret and apply the library's IT policies and procedures. • explain and apply IT best practices.	• evaluate, select, modify, and implement hardware, operating systems, or software applications. • develop, coordinate, evaluate and modify plans and solve problems with library, organization, or agency IT staff. • asses IT training needs and outcomes. • plan, develop, and evaluate library staff technology training. • create, explain, defend, and modify the library's IT policies and procedures. • create, evaluate, explain, and modify library IT best practices.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Information Assurance and Security

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• federal, agency and library information security policies and best practices. • system certification and accreditation (C&A) regulations. • continuous monitoring regulations • marking, storing, and accessing processes for classified or controlled access information. • authentication protocols and their application.	• interpret, explain, and apply federal, agency and library information security policies and best practices. • explain and apply system certification and accreditation (C&A) regulations. • explain and apply continuous monitoring regulations. • apply policies and procedures for marking, handling, and dissemination of classified and controlled access information. • interpret, explain, and apply authentication protocols and processes.	• create, evaluate, modify, and defend the library's information security policies and best practices. • interpret the certification and accreditation regulations. • assess and ensure compliance with system certification and accreditation (C&A) regulations. • interpret the continuous monitoring regulations. • assess and ensure compliance with continuous monitoring regulations. • create, evaluate, modify, and defend marking, handling, and dissemination processes for classified and controlled access information. • evaluate and select authentication protocols and processes. • create, assess, or modify library specific applications to information assurance requirements.

Library and Content Management Systems

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• theories, principles, and practices of library and content management systems. • current library and content management technologies and applications. • using technological solutions for permanent access. • standard performance measures for library technology applications.	• interpret and apply the theories, principles, and practices of library and content management systems. • analyze, select, test, and implement library and content management technologies and applications. • select and adapt technological solutions for permanent access. • interpret and apply standard performance measures for library technology applications.	• evaluate, adapt, or develop theories, principles, and practices of library and content management systems. • create, evaluate, select, or modify existing or emerging library and content management technologies and applications. • Analyze and develop new content management technologies and applications. • evaluate and develop technological solutions for permanent access. • evaluate and develop performance measures for library technology applications.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

		• evaluate, select, modify, or create technical policies and protocols for library and content management technologies and applications.

Social Media, Collaborative, and Mobile Technologies

Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• social media, collaborative, and mobile technologies, devices and applications (apps). • customer needs and uses of social media collaborative, and mobile technologies, devices and applications. • library and agency policies regarding social media, collaborative, and mobile technologies.	• social media, collaborative, and mobile technologies used for library services. • deliver customer or staff training for social media, collaborative, and mobile technologies. • interpret, explain, and apply library and agency policies regarding social media, collaborative, and mobile technologies. • evaluate, select, explain and apply social media, collaborative, and mobile devices and applications (apps).	• evaluate, select, and implement social media, collaborative, and mobile for the library's products, services, and programs. • identify needs and develop customer or staff training for social media, collaborative, or mobile technologies, devices or applications. • create, develop, and modify the library's social media, collaborative and mobile strategy policies, or procedures. • evaluate, select, modify, and integrate social media, collaborative, and mobile technologies and applications, into the library's technology plan. • create, mashup, or modify social media, collaborative and mobile applications (apps).

Technology

Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• Information technology (IT) theories, practices, and protocols. • information management theories, practices, and principles. • Web or cloud based services practices and protocols. • web site design and web authoring. • systems analysis principles and techniques. • communications and information infrastructures. • the concepts and principles of human computer interaction (HCI)	• interpret and apply IT theories, practices, and protocols. • interpret and apply information management theories, practices, and principles. • select and apply web or cloud based services practices and protocols. • explain and use web site design and web authoring. • apply systems analysis principles and techniques to library products, services, and systems.	• evaluate, select, and modify IT practices and protocols for library use. • evaluate, select, and modify information management practices and standards for library use. • evaluate and select existing or emerging web or cloud services. • evaluate, select, and modify web site design and web authoring methods and standards. • evaluate and select systems analysis techniques for library products,

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Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

and information seeking behaviors. • library technology tools, trends and practices. • how customer needs impact IT or information management system design. • performance measures for library systems and applications. • performance measures for IT and information management systems. • using technological solutions for library work flows and business processes. • the World Wide Web Consortium's (W3C) technical program activities.	• use communications and information infrastructures for library products, services, and systems. • interpret, explain, and apply the concepts and principles of human computer interaction (HCI) and information seeking behaviors to library products, services, and systems. • evaluate and select existing and emerging technology tools, trends and practices • interpret and explain how customer needs impact IT or information management systems design. • select and apply performance measures for library systems and applications. • apply and interpret performance measures for IT and information management systems. • adapt and implement technological solutions for library work flows and business processes. • interpret, explain, and apply W3C technical program activity results.	services, and systems. • evaluate and select communications and information infrastructures for library products, services, and systems. • evaluate and synthesize human computer interaction (HCI) and information seeking behaviors to select, modify, or create library products, services, and systems. • create new tools or applications. • incorporate customer needs in evaluating, developing, and managing IT or information management systems. • create, evaluate, or modify performance measures for library systems and applications. • create, evaluate, or modify performance measures for IT and information management systems. • evaluate, select, and develop technological solutions for library work flows and business processes. • evaluate and adapt W3C technical program activity results for delivery of library products, programs, and services. • evaluate changes and recommend improvements to W3C technical program activities. • create library technology policies and procedures that comply with W3C standards.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Reference and Research

Basic Stage	Advanced Stage	Expert Stage
Analytical Studies and Reports		
Has knowledge of… • principles and methods of information analysis. • critical thinking methods • informatics principles and practices. • the intelligence cycle. • concepts of multidisciplinary thinking. • different sources of intelligence information, including Human Intelligence (HUMINT) and Signal Intelligence (SIGINT). • Geospatial Intelligence Systems or Geographic Information Systems (GIS). • Analysis of Competing Hypothesis (ACH). • theories and concepts of situational logic. • statistical testing and analysis. • theories and concepts of evidence based research. • methods and techniques of technical and analytical writing. • research or intelligence assessments, reports, plans, and briefings. • visualization methods and techniques.	**Has knowledge, skill, or ability to…** • explain and apply principles and methods of information or analysis. • explain and apply critical thinking methods. • interpret, explain, and apply informatics principles and practices. • interpret, explain, and apply the intelligence cycle. • participate in operations or research teams. • apply multidisciplinary thinking. • select and apply different sources of intelligence information, including Human Intelligence (HUMINT) and Signal Intelligence (SIGINT). • interpret, explain, and apply Geospatial Intelligence Systems or Geographic Information Systems (GIS). • select and apply tools for generating geospatial representations of data or information. • create reports or other products based on Analysis of Competing Hypothesis (ACH). • select and apply situational logic. • interpret, explain, and apply statistical tests and analyses. • interpret, explain, and apply evidence-based research methods. • identify gaps in data or information. • apply methods and techniques of	**Has knowledge, skill, or ability to…** • evaluate, modify, adapt, or teach principles and methods of information analysis. • evaluate, modify, adapt, or teach critical thinking methods. • evaluate, modify, adapt, or teach informatics principles and practices. • evaluate outcomes and adapt methodologies within operations or research teams. • evaluate and synthesize different sources of intelligence information, including Human Intelligence (HUMINT) and Signal Intelligence (SIGINT). • evaluate and synthesize geospatial or geographic data or systems. • evaluate outcomes or teach Analysis of Competing Hypothesis (ACH). • apply predictive situational logic. • assess and evaluate outcomes of statistical tests and analyses. • assess and evaluate outcomes of evidence based research. • evaluate gaps in data or information and develop solutions. • evaluate, modify, or adapt methods and techniques of technical and analytical writing. • create, evaluate, modify, or adapt research or intelligence assessments, reports, plans, and briefings. • evaluate, justify, or defend research or intelligence analyses or

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	technical and analytical writing. • present research or intelligence assessments, reports, plans, and briefings. • select and apply visualization methods and techniques.	assessments. • evaluate, modify, or adapt visualization methods and techniques.

Customer Education and Training

Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• principles and practices of bibliographic instruction. • principles and practices of information literacy. • standard or emerging training and instructional techniques. • locate and use standard instructional materials. • principles of proven education and training delivery methodologies. • web –based or library education and training products, services, and programs. • standard learning style models and theories. • web based instructional applications and educational resources.	• apply the principles and practices of bibliographic instruction. • apply the principles and practices of information literacy. • use and adapt standard or emerging training and instructional techniques. • evaluate and select existing or emerging instructional materials. • apply proven education and training principles and delivery methodologies. • interpret, explain, and apply web-based or library education and training products, services and programs. • differentiate among learning styles and customize instruction.	• evaluate bibliographic instruction outcomes and adapt delivery methods. • evaluate and adapt information literacy programs. • evaluate and adapt standard or emerging training and instructional techniques. • adapt or design instructional materials. • evaluate, design, and create education and training delivery methodologies for instructional purposes. • Plan, create, evaluate or modify education and training products, services, and programs.. • apply understanding of diverse learning styles to evaluate the efficacies of customized education and training programs.

Reference Services

Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• reference and research principles and methodologies. • current reference and research practices and tools. • reference interview techniques. • types of information seeking behaviors. • virtual reference principles and practices	• interpret and apply reference and research principles and methodologies. • analyze and select the reference interview techniques appropriate to the customer and information resources. • differentiate information seeking behaviors and adjust instructional responses.	• develop or adapt reference and research principles and methodologies. • create the library's reference products, services, and programs. • develop or adapt reference interview techniques appropriate to the customer and information resources. • analyze and evaluate information

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		seeking behaviors to facilitate information delivery.
• distance education and distance services principles and practices.	• apply virtual reference principles and practices.	• implement, evaluate, and adapt virtual reference services
• social media and collaborative technologies and applications.	• apply distance education and distance services principles and practices.	• implement, evaluate, and adapt distance education and distance services.
• embedded librarianship techniques and practices.	• deploy social media and collaborative technologies and applications.	• evaluate and select emerging reference and research practices and tools.
• reference management systems	• adapt and use emerging reference and research practices and tools.	• analyze and evaluate social media and collaborative technologies and applications for library reference services.
	• adapt and use embedded librarianship techniques.	• incorporate the customers' information needs, preferences, and abilities in creating Internet and library reference and research products, services, and programs.
	• interpret and explain and use reference management systems.	• evaluate outcomes, adapt embedded librarian policies , practices and procedures
		• advocate for and justify the concept and practice of embedded librarianship..
		• create, evaluate, customize, or modify reference management systems.

Resources, Search Strategies, and Tools

Has knowledge of...	Has knowledge, skill, or ability to…	Has knowledge, skill, or ability to…
• established approaches to research analysis and the development of search strategies.	• compare and choose diverse approaches to research analysis and development of search strategies.	• create innovative approaches to research analysis and the development of search strategies.
• how to locate and use the library's existing reference and research resources.	• interpret, explain and customize Internet and library reference and research products, services and programs.	• analyze, create or adapt finding and research aids and bibliographic tools.
• web based or mobile resources and applications .	• analyze and select web-based or mobile resources and applications.	• evaluate and select web-based or mobile resources and applications.
• use of finding and research aids and bibliographic tools.	• interpret and explain finding and research aids and bibliographic tools.	• create and adapt web-based or mobile resources and applications.
• theory and principles of search strategy. principles of authority, veracity, and utility of information resources.	• select and employ diverse search strategies to maximize information	• adapt collaborative technologies and applications.
		• formulate and execute complex

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• principles of authority, veracity, and utility of data and data collection methodologies. • database structure and organization. • attributes and use of standard information resources. • current technologies and information resources. • national or international databases for reference and research purposes. • data mining techniques. • current research practices and tools. • selection and dissemination tools, methods, and technologies for continuous information flow.	retrieval. • interpret and explain the authority, veracity, and utility of specific information resources. • apply and explain the principles of authority, veracity and utility of data and data collection methodologies. • understand and apply database structure and organization. • understand the attributes and use of specialized or non-standard information resources. • adapt and use current technologies and information resources for reference and research. • adapt and use emerging technologies and information resources for reference and research • adapt and use emerging reference technologies and information resources. • interpret and explain using national or international databases for reference and research purposes. • apply data mining techniques for Internet and library products and services. • employ selection and dissemination tools, methods, and technologies for continuous information flow. • identify or test information systems' requirements and specifications for Internet and library reference and research products, services, and programs.	search strategies to maximize information retrieval. • make judgments on the authority, veracity, and utility of information resources. • evaluate authority, veracity, and utility of data and data collection methodologies. • deconstruct and evaluate database structures and organizations. • evaluate specialized or non-standard information resources. • evaluate and select emerging technologies and information resources. • evaluate and select national or international databases for reference and research purposes. • evaluate and select data mining techniques for Internet and library products and services. • formulate and assess selection and dissemination tools, methods, and technologies for continuous information flow. • create the library's research products, services, and programs. • evaluate and adapt the library's research products, services, and programs. • incorporate customers' information needs, preferences, and abilities in creating Internet and library reference and research products, services, and programs. • develop information systems' requirements and specifications for library reference and research products, services, and programs.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Specialized Knowledge, Skills and Abilities

Basic Stage	Advanced Stage	Expert Stage
Languages		
Has knowledge of…	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• a non-English language specified by the organization or agency, or required by the discipline.	• read or write with comprehension in a non-English language specified by the organization or agency, or required by the discipline. • provide instruction in a non-English language specified by the organization or agency, or required by the discipline.	• fluently read or write in a non-English language specified by the organization or agency, or required by the discipline. • collaborate with others speaking a non-English language specified by the organization or agency, or required by the discipline.
Specialized Subject Knowledge		
Has knowledge of...	**Has knowledge, skill, or ability to…**	**Has knowledge, skill, or ability to…**
• discipline specific culture and information seeking behaviors of the organization or agency. • specialized subject matter or discipline required by the organization or agency. • discipline specific research methodologies and citation guides and systems. • discipline specific metadata, bibliographic descriptions, classifications, and taxonomies. • specialized resources and delivery methods tailored to specific audiences.	• apply discipline specific culture and information seeking behaviors to library practices • interpret, explain, or apply specialized subject matter or discipline specific resources required by the organization or agency to support library products, services, and programs. • apply discipline specific research methodologies and citation guides and systems. • interpret, explain, and apply discipline specific metadata, bibliographic descriptions, classifications, and taxonomies. • interpret, explain, and apply resources and delivery methods for specialized audiences.	• create, modify, and adapt library products, services, and programs for discipline specific culture and information seeking behavior. • create, modify, and adapt library products, services, and programs using expertise in specialized subject matter. • analyze, interpret, and explain discipline specific research methodologies and citation guides and systems. • evaluate, select, and create discipline specific, metadata bibliographic descriptions, classifications, and taxonomies. • evaluate, modify, select, and create resources and delivery methods for specialized audiences.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Glossary

For additional definitions and further explanations, see the Resources page.

508 or Section 508: Section 508 requires federal agencies to make electronic and information technology accessible to people with disabilities. It is more formally: Section 508 of the Rehabilitation Act (29 U.S.C. '794 d), as amended by the Workforce Investment Act of 1998 (P.L. 105 - 220), August 7, 1998.

Advocacy: The act or process of promoting, defending, or supporting a cause or proposal.

Content management: A set of processes and technologies that support the evolutionary life cycle of information.

Continuity of Operations Plan (COOP): a detailed plan providing for the survival of operations in the case of a disaster or catastrophic events which could destroy significant parts of the government in a short space of time.

Data mining: The process of sorting through large data sets to select specific information.

Federal Acquisition Regulations (FAR): the primary set of rules that guide the Federal Acquisition Regulation System. It is used by all Federal Executive agencies in their acquisition of supplies and services with appropriated funds.

FEDLINK: Federal Library and Information Network, serves federal libraries and information centers as their purchasing, training, and resource-sharing consortium.

FLICC: Federal Library and Information Center Committee, fosters excellence in federal library and information services through interagency cooperation and provides guidance for the Federal Library and Information Network (FEDLINK).

Geographic Information Systems (GIS): computer-based systems that facilitate the capture, storage, manipulation, and analysis of geographically referenced data.

Human Computer Interaction (HCI): The multidisciplinary study of how humans interact with computers, including how humans use computers and are affected by them, with the goal of increasing usability by improving design.

Informatics: The study of information and the interaction of people with it, including information technology and information systems engineering.

Information assurance: The set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication,

confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities.

Information technology: All technology for processing, managing, and accessing information in digital formats, including hardware and software.

Metadata: Literally means, "data about data." Structured information describing information resources or objects for a variety of purposes. Although *AACR2*/MARC cataloging is formally metadata, the term is generally used in the library community for non-MARC schemes.

OCLC: OCLC describes itself as the world's largest library cooperative, owned, governed and sustained by members, with the purpose of sharing information and reducing costs through collaboration.

Ontology: The formal representation of a set of concepts within a domain and the relationships between those concepts.

Permanent access: Preventing loss of digital content due to obsolete formats or platforms or limitations of proprietary software or data.

Property accountability: The obligations, imposed by law, lawful order, or regulation, to keep an accurate record of property, documents, or funds.

Return on Investment (ROI): A comparison of the value versus the cost of a project or program. ROI is usually expressed as a percentage. ROI is part of a comprehensive measurement and evaluation system. There are various models to determine ROI.

Request for Proposal (RFP): A government procurement document in which the government invites potential contractors or providers to submit proposals for work or products.

Stakeholder: An individual or group who will be impacted in some way by a change. The person or group has an interest (positive or negative) in the effects of a project, initiative, or transformation.

Social Media: Web-based, interactive applications that allow group communication and media sharing, e.g., Facebook, Twitter, Flickr, YouTube, Foursquare etc.

Statement of Work (SOW): A document used to specify work requirements for a contract. An organization desiring to contract for work produces an SOW as part of a Request for Proposals.

Taxonomy: The science of classification, including the general principles by which objects and phenomena are divided into explicit hierarchical relationships.

Thesaurus: List of words or phrases that comprise a controlled vocabulary in an index, sometimes with explicit relationships, for the purposes of improving information retrieval.

Visualization: Making complex information more understandable through the creation of graphics or visual representations.

Select appropriate competencies to meet requirements. Stages do not correspond to pay grades or pay bands.

Resources

Bloom's Taxonomy: http://www.odu.edu/educ/roverbau/Bloom/blooms_taxonomy.htm

Competencies of other organizations
      ALA: http://www.ala.org/ala/educationcareers/careers/corecomp/index.cfm

      SLA: http://www.sla.org/content/learn/members/competencies/index.cfm

      Webjunction: http://me.webjunction.org/competencies

Definitions:
      ODLIS, *The Online Dictionary for Library and Information Science*
      http://lu.com/odlis/about.cfm.

      Webopedia: http://www.webopedia.com/

      Wikipedia: http://en.wikipedia.org/wiki/Main_Page

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