

Information Literacy Competencies: Specific Skills

Graduates should have the skills to choose the best resource and use it effectively to find the best information.

The goal of these competencies is to ensure students possess a conceptual framework for information-seeking that can be applied to a variety of research questions and changing information environments.

Skill	Existing Resources to support learning this skill	Possible Course	Possible Assignment
Choose a manageable topic of interest and formulate a researchable question	Handouts: Library Research Checklist ; Search Strategy Checklist ; Well-Built Clinical Question	N4205	
Determine the extent of information needed.	*could use some more general resources about choosing a topic – our resources are mostly about framing a question so you can search it. Prob good resources faculty are already using??	N4205	
Understand the content and structure of different types of information retrieval systems (article indexes, library catalogs, etc.)	Tutorial: University of Minnesota QuickStudy – not health-sciences focused, but still very helpful.	N4205	
Understand the scholarly process as it relates to the generation of published information.	Recorded workshops : The Publication Process Handouts: Understanding Research Study Designs ; Primary, Secondary and Tertiary Sources in the Health Sciences ; Structure of a Research Paper	N4205	
Recognize the existence of many forms of information sources, and critically evaluate the characteristics of different types.	Handouts: Evaluating Web Resources ; Levels of Evidence and Grades of Recommendation ; Identifying Peer Review Journals	N4205	
Identify appropriate sources (e.g. databases, search engines, catalogs) to use to search for relevant information	Handouts: Library Research Checklist ; Bio-Medical Library Homepage Overview ; Subject-Based Research Guides (various); Indexes by Subject	N4205	
Be able to direct patients to reliable consumer health information on the Internet.	Consumer health page	N4201 or N4322	

Skill	Existing Resources to support learning this skill	Course	Possible Assignment
Identify keywords, synonyms and related terms to find information for a topic of interest	Handouts: Boolean Operators: A Cheat Sheet ; Ovid Medline , CINAHL , PubMed , AMED , Google Scholar , Googling the Net , PsycINFO , various other specific database guides Tutorials: Ovid Medline (coming soon), Cochrane Library , PubMed , Web of Science Recorded Classes : Ovid Medline, PubMed, Literature Search Techniques and RefWorks, Resources for Clinicians, Strategies for Interprofessional Research	N4104	Ethics in Media
Understand and use controlled vocabulary appropriately		N4205	
Construct a search strategy using appropriate commands for the information retrieval system selected (e.g., Boolean operators, truncation, and proximity for search engines; internal organizers such as indexes)			
Implement the search strategy in various information retrieval systems using different user interfaces and search engines, with different command languages, protocols, and search parameters			
Refine the search strategy if necessary based on the quantity, quality, and relevance of the search results			
Utilize local sources to retrieve full text of identified materials, and use available services (Interlibrary Loan, professional associations, institutional research offices, etc.) to obtain materials not held in local collections	Recorded classes : Finding Electronic Full Text Ordering Materials page *library developing a holistic tutorial on process of finding known materials	N4205	
Choose appropriate references for the information need at hand.	Handouts: Evaluating Web Resources ; Levels of Evidence and Grades of Recommendation ; Googling the Net ; Identifying Peer Review Journals ; Understanding Research Study Designs ; Well-Built Clinical Question ; Primary, Secondary and Tertiary Sources in the Health Sciences	N4205	
Evaluate information and its sources critically		N4205	
Incorporate selected information into a knowledge base such as RefWorks.	Handout: RefWorks ; Tutorial: RefWorks ; Recorded classes : RefWorks	N4205	

Skill	Existing Resources to support learning this skill	Course	Possible Assignment
Demonstrate appropriate use of information in an assignment	Resource page: Writing Guides and Style Manuals in the Health Sciences Also “citing sources” module of QuickStudy	N4205	
Synthesize information into a body of knowledge and communicate results effectively.			
Consistently document sources following an accepted style (e.g. APA, AMA, Chicago)			
Articulate the economic, legal, and social issues surrounding the use of information, and access and use information ethically and legally.			
Know where and when to seek help, and realize that information competency skills take time to develop and refine.	Help available on Bio-Medical Library website – links to real people , also copious handouts/tutorials in Research Help section , links to recordings of classes	N4104 or N4205	

U of M Library Resources:

-[MNCAT](#)
 -[E-Journals](#)
 -FindIt links
 -[ILL](#)
 -[WorldCat](#)

Article Indexes:

-[CINAHL](#)
 -[Ovid MEDLINE](#)
 -[PubMed](#)
 -[PsycINFO](#)
 -[AMED](#)
 -[Sociological Abstracts](#)
 -[Science Citation Index](#)

Evidence-Based Practice:

-[Cochrane](#)
 -[InfoPOEMS](#)
 -[ACP PIER](#)
 -[National Guidelines Clearinghouse](#)

Drug References:

-[Micromedex](#)
 -[Natural Medicines Comp.Database](#)
 -[Natural Standard](#)

Electronic Textbook Suites:

-[E-books page](#)
 -[Stat!Ref](#)
 -[MDConsult](#)
 -[R2 Library](#)

Bibliographic Management:

-[RefWorks](#)

Clinical Tools:

-[FirstConsult](#)
 -[UpToDate](#)

Visual tools:

-[Images.MD](#)
 -[Anatomy TV](#)

Consumer Health:

-[MedlinePlus](#)
 -[Cancer.gov](#)
 -MayoClinic.com