## Table of Contents

Abstract................................................................................................................................. Error! Bookmark not defined.

Introduction.......................................................................................................................... Error! Bookmark not defined.

Research Literacy.................................................................................................................. 6

Threshold Performance Skills............................................................................................... 9

MLS Core Courses including Threshold Objectives .............................................................. 10

LI 801: Foundations of Library and Information Science (3 credit hours).......................... 10
LI 810: Research in Library and Information Science (3 credit hours)............................... 11
LI 802: Information-seeking Behavior and User-centered Services (3 credit hours)............ 11
LI 804: Organization of Information (3 credit hours)........................................................... 12

Target Competence ............................................................................................................. 14

References............................................................................................................................. 15

Appendix A: Library Instruction Template, LI801................................................................. 17
Appendix B: Library Instruction Template, LI810................................................................. 19
Appendix C: Library Instruction Template, LI802................................................................. 21
Appendix D: Library Instruction Template, LI804................................................................. 24
Executive Summary

The School of Library and Information Management (SLIM) faculty members are involved in continuous Master of Library Science (MLS) curriculum review and revision. During the last three academic years (2012-2014), core MLS courses have been reviewed, revised, and new course titles, descriptions, and learning outcomes have been written and approved. Within the context of the revised MLS curriculum, each faculty member is teaching the new curriculum and working individually in partnerships with William Allen White Library (WAWL) faculty members to teach MLS students a variety of skills related to use of library resources and services. Until now, while all instruction is focused on the current, school-wide MLS curriculum and delivered the same wherever MLS students are enrolled, SLIM faculty instruction in partnership with WAWL faculty has not been coordinated or systematic across courses.

This is a plan to unify and coordinate a partnership between SLIM faculty who teach LI801, LI810, LI802, and LI804 (four MLS core courses) and WAWL faculty. This partnership will result in MLS student achievement of research literacy at the advanced beginner level, preparing all MLS students to move forward in the MLS program and into librarianship and/or the information professions. Research literacy builds on theory-based concepts of information literacy and is defined as the knowledge and skills library and information science professionals need to actively practice and instruct others to search, select, analyze, and use published research to make evidence-based claims and recommendations for best information practice. Threshold performance skills specific to each course are outlined in four phases.
Research Literacy: Master of Library Science

The goal is that all Master of Library Science (MLS) students at the end of the first four courses will successfully achieve at the advanced beginner level (Dreyfus & Dreyfus, 1980) of research literacy as a foundation for further learning in the MLS program and for future professional practice. Building on and advancing widely accepted definitions of information literacy, the term “research literacy” is defined as the knowledge and skills library and information science professionals need to actively practice and instruct others to search, select, analyze, and use published research to make evidence-based claims and recommendations for best information practice. At the advanced beginner level of research literacy, the MLS student experiences scientific research (Figure 1) through a two phase process (literature context and data context) that involves expertise of content and librarian experts.

Figure 1. Scientific Research: A Two Phase Process for Content and Librarian Experts

<table>
<thead>
<tr>
<th>Phase One: Preparation</th>
<th>Phase Two: Experimental</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITERATURE CONTEXT</td>
<td>DATA CONTEXT</td>
</tr>
<tr>
<td>Topic Selection &amp; Problem Statement</td>
<td>Design study</td>
</tr>
<tr>
<td>access*, retrieval*, evaluation*, and use* of existing research</td>
<td>Conduct experiment</td>
</tr>
<tr>
<td>publications*</td>
<td>Analysis data</td>
</tr>
<tr>
<td>Observation of relevant environment(s)</td>
<td>Draw conclusions</td>
</tr>
<tr>
<td>Question(s)</td>
<td>Communicate findings in new publications</td>
</tr>
</tbody>
</table>
Formulate Claim or Hypothesis

Note. *activities involving the research literacy expertise of the librarian*

Threshold skills for becoming research literate, in four phases, are aligned to Emporia State University’s Higher Learning Commission accreditation criterion (3.B.3) for mastering models of inquiry or creative work and developing skills for adapting to changing societies, and the American Library Association Core Competencies for Librarianship (2009) aligned in the MLS program outcomes and course objectives. The four phases of this research literacy curriculum (Table 1) include: 1) bodies of knowledge (LI801); 2) evidence-based practice (LI810); 3) customization of services (LI802); and 4) organizing information (LI804). Research literacy curriculum is the responsibility of SLIM faculty and is taught through partnership with William Allen White Library librarians beginning fall 2014.
Table 1

**Research Literacy**

Research literacy is a specialized concept that builds on theoretical understandings of information literacy. Information literacy is understood through a combination of theories and work-place vantage points. Research-based explanations of information literacy incorporate professional views of the American Library Association (ALA) as articulated in its professional
divisions as well as by other prestigious educational policy institutes. Today, information literacy goes beyond recognizing need, locating, using, and evaluation of information to include “the ability to understand and use information technology tools to carry out research, including the use of discipline-related software and online resources” (ACRL, 2011, sec. 1, What is Information Literacy?). Information literacy is also described as going beyond basic skills in using reference sources to find information to include competencies in multiple literacies, “including digital, visual, textual, and technological” (AASL, 2007, para. 6) literacy. The National Research Council (2012) asserts that a key set of information fluency skills is required to foster the necessary deep learning, higher order thinking, and college and career readiness if students are to reach their full potential.

While theoretical and professional positions inform our understanding of information literacy, it is educational and work-based vantage points that provide the platform for a shift that advances information literacy theory and practice, and leads to creation of a new, unique research literacy focus located in LIS curriculum. Educational vantage points primarily involve three crucial points-of-reference: 1) what students (PreK-12, undergraduates and graduates (who do not teach or provided instruction) must know and are able to do (learner reference point); 2) what educators, including teachers and librarians, must know and be able to do (educator reference point), and 3) what LIS institutions must do to improve societal conditions (institution reference point). Research literacy incorporates the learner reference point and deliberately moves to a specialized focus on the educator and institutional focus. Our view is captured in an outline of what pre-service and in-service educators, particularly LIS educators, must know themselves and be able to instruct others to think about and do. The resulting curriculum is located in graduate LIS higher education based on ALA core organizational values (ALA, 2011-
The curriculum is outlined in terms of transferable knowledge and skills that will prepare those enrolled in the LIS master’s program to instruct library and information users to locate and access information, connect information to prior knowledge, ask questions about what is not known, investigate answers, construct new understandings, and communicate with others to share those new understandings.
Threshold Performance Skills

Threshold performance skills strategically and systematically develop student understandings of and skills in the use of technology tools, software, and online information resources to understand and use information to carry out research.

<table>
<thead>
<tr>
<th>MLS</th>
<th>Threshold Objectives for Research Literacy Library Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase L1 801</td>
<td><strong>Bodies of Knowledge</strong> Mastering Models of Inquiry or Creative Work, HLC, 3B.3</td>
</tr>
<tr>
<td>Performance Skills</td>
<td><strong>Performance Skills</strong></td>
</tr>
<tr>
<td>Student will know</td>
<td>1. William Allen White Library &amp; Archives.</td>
</tr>
<tr>
<td>2. available databases and how to access them.</td>
<td></td>
</tr>
<tr>
<td>3. how to locate known articles.</td>
<td></td>
</tr>
<tr>
<td>4. best database choices for an assignment (bodies of literature, knowledge).</td>
<td></td>
</tr>
<tr>
<td>5. names of worthwhile LIS journals.</td>
<td></td>
</tr>
<tr>
<td>6. how to locate full-text articles.</td>
<td></td>
</tr>
<tr>
<td>7. how to narrow a search.</td>
<td></td>
</tr>
<tr>
<td>8. what is meant by “search language” and how to used it.</td>
<td></td>
</tr>
<tr>
<td>9. and accurately use APA citation rules (in-text and end-of-text citation).</td>
<td></td>
</tr>
</tbody>
</table>

| Phase L1 810 | **Evidence-based Practice** Collecting, Analyzing, and Communicating Information HLC, 3B.3 |
| Performance Skills | **Performance Skills** |
| Student will know and be able to | 10. locate published research relevant to a specific topic/problem. |
| 11. select and analyze publications on basis of topic, problem, research-evidence. | |
| 12. communicate research-based evidence to recommend practice in presentation format appropriate to target library type, topic, and audience (e.g., paper, poster, etc.). | |
| 13. accurately use APA citation rules (in-text and end-of-text citations). | |

| Phase L1 802 | **Customization of Resources** Collecting, Analyzing, and Communicating Information HLC, 3B.3 |
| Performance Skills | **Performance Skills** |
| Student will know | 14. and use indexes and databases to answer specific questions (e.g., law, health, education, business, government, lives of people, etc.). |
| 15. how to identify, access, evaluation, and use bibliographic resources. | |
| 16. how bibliographic resources can be used for specific ready reference questions and in-depth research (with examples). | |
| 17. strengths and weakness (with examples) of Internet resources. | |
| 18. best formats (electronic and paper) for communicating specialized resources on an identified topic (to answer a range of questions) to a target audience (reference guides). | |
| 19. and accurately use APA rules for creating an academic paper or presentation | |

| Phase L1 804 | **Organizing Information** Collecting, Analyzing, and Communicating Information HLC, 3B.3 |
| Performance Skills | **Performance Skills** |
| Students will | 20. Recognize models of and mechanisms for information organization as they are used in library information resources (e.g. OPAC, databases, etc.) |
| 21. Understand the advantages and disadvantages of models of and mechanisms for information organization as they are used in library information resources (e.g. OPAC, databases, etc.) | |
| 22. Apply their recognition and understanding to personal academic information retrieval problems and achieve successful results | |
| 23. Know and accurately use APA rules for creating an academic paper or presentation | |
MLS Core Courses including Threshold Objectives

The first four core courses provide the context for teaching research literacy in four cumulative stages. The logo below will appear in each of the four, core course syllabus (taught by SLIM faculty) and in the corresponding library instruction materials (taught by library faculty) to clearly communicate the comprehensive four-part teaching and learning progress. The appropriate phase will be bolded and circled.

![Research Literacy Diagram](image)

LI 801: Foundations of Library and Information Science (3 credit hours)
An introduction to information agencies and professions, this course examines the philosophical and ethical underpinnings, roles and societal contexts, and current issues of the global information society. Students explore the role of information in society, change as reflected in paradigm shifts, the theory and processes of information transfer, and the characteristics of information professionals and professional practices. (Required) Recommended for all new MLS students in their first semester. (Approved 11/9/11)

**MLS Research Literacy Phase #1, Bodies of Knowledge:** Students develop research literacy through exposure to library and information studies literature and other academic bodies of knowledge, and through identification and access to bodies of knowledge in various academic disciplines. Focus is on how information professionals use theories from various academic disciplines to share and reshape professional practices.

**Course Learning Outcomes**

1. Describe the missions and values of libraries and information organizations from past to present.
2. Identify and discuss current and developing issues in library and information management taking into account a variety of political, economic, technological, and social forces.
3. Explain and apply the information life cycle.
4. Demonstrate knowledge of the basic principles of information ethics and the ability to apply a model for ethical decision-making.
5. Identify and integrate personal values, beliefs, and behaviors with core tenets of the library and information management profession.
6. Develop a vision of professional service and demonstrate adaptability and openness to new ideas.
7. Work effectively and collaboratively with others, online, one-to-one, and in large and small groups.

Approved 11/9/11

Library Instruction Template (See Appendix A)

LI 810: Research in Library and Information Science (3 credit hours)
Introduction to qualitative and quantitative research methods and their applications in library and information science. Principles and procedures for analyzing and evaluating research are introduced. Students learn to be better consumers and critics of published research literature. (Required) Prerequisite: LI 801. (Approved 11/30/11)

MLS Research Literacy Phase #2, Evidence-based Practice: Students develop research literacy through practicing access, selection, analyze, evaluation of research, and use of research-based evidence to recommend best practices, take action, and lead change in library and information agencies.

Course Learning Outcomes
1. Describe the importance of research to the practice of library and information science.
2. Discuss ethical issues involved in conducting research.
3. Explain the stages of the research process.
4. Define the characteristics of quantitative, qualitative, and mixed methods.
5. Analyze, critique, and evaluate methods and findings from current library and information science literature.

Approved 11/30/11

Library Instruction Template (See Appendix B)

LI 802: Information-seeking Behavior and User-centered Services (3 credit hours)
An introduction to the theories of information-seeking behavior and their application to user-centered services. Students are introduced to models of information seeking, retrieval and sharing; the selection, evaluation, and use of appropriate electronic and print resources; information literacy, learning styles, and best practices in providing user-centered services. (Required) Prerequisite: LI 801 or concurrent enrollment. (Approved 11/9/11)
MLS Research Literacy Phase #3, Customization of Resources: Students develop research literacy through learning that individuals have different interests, information needs, abilities, and styles. Focus is on human information behavior, information use environments, and how librarians and information specialists select and recommends information resources to individuals and groups.

Course Learning Outcomes

1. Identify major models of information-seeking behavior as applied to the design, implementation, and evaluation of information services.
2. Describe individual differences, including learning styles, and their effects on user services.
3. Identify, describe, and evaluate the basic types of electronic and print information sources available in libraries and other information organizations.
4. Discuss the components of information literacy and the related instructional methods strategies.
5. Apply instructional strategies for user-centered services.
6. Create and deliver an instructional model related to course topic.

Approved 11/09/11

Library Instruction Template (See Appendix C)

LI 804: Organization of Information (3 credit hours)
Introduction to the individual, social, and institutional perspectives of organizing information. Students examine the assumptions, practices, issues and tools of commonly used subject analysis and classification systems in various types of information organizations. The impact of different approaches to accessing information is emphasized. (Required) Prerequisite: LI 801 or concurrent enrollment. (Approved 11/30/11)

MLS Research Literacy Phase #4, Organizing Information: Students develop research literacy through exploration of how information is organized, learning to access and use information through the study of models of information organization, and learning research implications for organization and lack of organization of information.

Course Learning Outcomes

1. Describe information access systems and how they reflect the role of organization in human endeavors.
2. Explain and provide examples of systems that have been developed to make sense of collections of information.
3. Explain how theories of organization of information can be applied to the design of information retrieval systems.
4. Identify appropriate approaches to the organization of information objects in various situations and environments.

5. Demonstrate knowledge of theories of organization of information relevant to information objects, collections of information objects, and systems for organizing information objects.

   Approved 4/23/2014

Library Instruction Template (See Appendix D)
Target Competence
By their successful completion of the first four core courses, students will have demonstrated successful achievement of research literacy at the advanced beginner level. An advanced beginner has had enough expert-directed practice at a task to be able to recognize recurring patterns in task outcomes. An advanced beginner is able to follow guidelines for action based upon those patterns (Dreyfus & Dreyfus, 1980). In the context of research literacy, an advanced beginner is able to: recall the context or situation in which they have successfully used library resources to

1. fulfill an information need;
2. to locate, select, analyze and communicate research based evidence;
3. to recognize differences among and to choose an appropriate bibliographic resource;
4. or to recognize and understand the impact of models and mechanisms of information organization.

They are further able to apply that recollection to a current interaction with library resources in order to choose an action that will result in successfully finding and/or using research.
References


American Library Association (ALA). (2011-15). *Core Organizational Values* (A.1.4). Retrieved from http://www.ala.org/aboutala/governance/policymanual/updatedpolicymanual/section1/1mission#A.1.4 Core Organizational Values (Old Number 1.3.1)


Social Sciences and Education. Washington, DC: The National Academies Press
Appendix A: Library Instruction Template, LI801

LI 801: Foundations of Library and Information Science (3 credit hours)

An introduction to information agencies and professions, this course examines the philosophical and ethical underpinnings, roles and societal contexts, and current issues of the global information society. Students explore the role of information in society, change as reflected in paradigm shifts, the theory and processes of information transfer, and the characteristics of information professionals and professional practices. (Required) Recommended for all new MLS students in their first semester. (Approved 11/9/11)

MLS Research Literacy Thread #1, Bodies of Knowledge: Students develop research literacy through exposure to library and information studies literature and other academic bodies of knowledge, and identification and access to bodies of knowledge in from various academic disciplines. Focus is on how information professionals use theories from various academic disciplines to share and reshape professional practices.

Threshold Objectives for Research Literacy Thread #1

Instructor’s Name and Contact Info

Performance Skills:

Student will know
1. William Allen White Library & Archives.
2. Available databases and how to access them.
3. How to locate known articles.
4. Best database choices for an assignment (LI801, bodies of literature, knowledge).
5. Names of worthwhile LIS journals.
6. How to locate full-text articles.
7. How to narrow a search.
8. What is meant by “search language” and how to use it?
9. Accurately use APA citation rules (in-text and end-of-text citation).

**Learning Activities**

*To be written by academic librarian*

**Examples**

Students will

- Activity 1 – participate in an interactive tour of William Allen White Library.
- Activity 2 –
- Activity 3 –
- Activity 4 –
- Activity 5 –

**Assessment of Learning**

Evaluation of student learning for these learning activities are embedded in the LI801, Foundations of Library and Information Science course assignments. Mastery of stated threshold objectives is necessary for successful completion of course assignments.
Appendix B: Library Instruction Template, LI810

LI 810: Research in Library and Information Science (3 credit hours)

Introduction to qualitative and quantitative research methods and their applications in library and information science. Principles and procedures for analyzing and evaluating research are introduced. Students learn to be better consumers and critics of published research literature. (Required) Prerequisite: LI 801. (Approved 11/30/11)

MLS Research Literacy Phase #2, Evidence-based Practice: Students develop research literacy through practicing access, selection, analyze, evaluation of research, and use of research-based evidence to recommend best practices, take action, and lead change in library and information agencies.

Course Learning Outcomes
1. Describe the importance of research to the practice of library and information science.
2. Discuss ethical issues involved in conducting research.
3. Explain the stages of the research process.
4. Define the characteristics of quantitative, qualitative, and mixed methods.
5. Analyze, critique, and evaluate methods and findings from current library and information science literature.

Approved 11/30/11

Threshold Objectives for Research Literacy Thread #2
Instructor’s Name and Contact Info

 Semester

Performance Skills:

Student will know

1. Locate published research relevant to a specific topic/problem.

2. Select and analyze publications on basis of topic, problem, research-evidence.

3. Communicate research-based evidence to recommend practice in presentation format appropriate to target library type, topic, and audience (e.g., paper, poster, etc.).

4. Accurately use APA citation rules (in-text and end-of-text citations).

Learning Activities

*To be written by academic librarian*

*Examples*

Students will

Activity 1 –

Activity 2 –

Activity 3 –

Activity 4 –

Activity 5 –

Assessment of Learning

Evaluation of student learning for these learning activities are embedded in the LI810, Research in Library and Information course assignments. Mastery of stated threshold objectives is necessary for successful completion of course assignments.
Appendix C: Library Instruction Template, LI802

LI 802: Information-seeking Behavior and User-centered Services (3 credit hours)

An introduction to the theories of information-seeking behavior and their application to user-centered services. Students are introduced to models of information seeking, retrieval and sharing; the selection, evaluation, and use of appropriate electronic and print resources; information literacy, learning styles, and best practices in providing user-centered services. (Required) Prerequisite: LI 801 or concurrent enrollment. (Approved 11/9/11)

MLS Research Literacy Phase #3, Customization of Resources: Students develop research literacy through learning that individuals have different interests, information needs, abilities, and styles. Focus is on human information behavior, information use environments, and how librarians and information specialists select and recommends information resources to individuals and groups.

Course Learning Outcomes

1. Identify major models of information-seeking behavior as applied to the design, implementation, and evaluation of information services.
2. Describe individual differences, including learning styles, and their effects on user services.
3. Identify, describe, and evaluate the basic types of electronic and print information sources available in libraries and other information organizations.
4. Discuss the components of information literacy and the related instructional methods
strategies.
5. Apply instructional strategies for user-centered services.
6. Create and deliver an instructional model related to course topic.

Approved 11/09/11

Threshold Objectives for Research Literacy Thread #3

Instructor’s Name and Contact Info

Semester

Performance Skills:

Student will know:

1. And use indexes and databases to answer specific questions (e.g., law, health, education, business, government, lives of people, etc.).

2. How to identify, access, evaluation, and use bibliographic resources.

3. How bibliographic resources can be used for specific ready reference questions and in-depth research (with examples).

4. Strengths and weakness (with examples) of Internet resources.

5. Best formats (electronic and paper) for communicating specialized resources on an identified topic (to answer a range of questions) to a target audience (reference guides).

6. And accurately use APA rules for creating an academic paper or presentation

Learning Activities

To be written by academic librarian

Examples

Students will

Activity 1 –
Activity 2 –
Activity 3 –
Activity 4 –
Activity 5 –

Assessment of Learning
Evaluations of student learning for these learning activities are embedded in the LI802, Information-seeking Behavior and User-centered Services course assignments. Mastery of stated threshold objectives is necessary for successful completion of course assignments.
Appendix D: Library Instruction Template, LI804

LI 804: Organization of Information (3 credit hours)

Introduction to the individual, social, and institutional perspectives of organizing information. Students examine the assumptions, practices, issues and tools of commonly used subject analysis and classification systems in various types of information organizations. The impact of different approaches to accessing information is emphasized. (Required) Prerequisite: LI 801 or concurrent enrollment. (Approved 11/30/11)

MLS Research Literacy Phase #4, Organizing Information: Students develop research literacy through exploration of how information is organized, learning to access and use information through the study of models of information organization, and learning research implications for organization and lack of organization of information.

Course Learning Outcomes

1. Describe information access systems and how they reflect the role of organization in human endeavors.
2. Explain and provide examples of systems that have been developed to make sense of collections of information.
3. Explain how theories of organization of information can be applied to the design of information retrieval systems.
4. Identify appropriate approaches to the organization of information objects in various situations and environments.
5. Demonstrate knowledge of theories of organization of information relevant to information objects, collections of information objects, and systems for organizing information objects.
Approved 4/23/2014

Threshold Objectives for Research Literacy Thread #4

Instructor’s Name and Contact Info: Semester:

Performance Skills:

Student will:

1. Recognize models of and mechanisms for information organization as they are used in library information resources (e.g. OPAC, databases, etc.)

2. Understand the advantages and disadvantages of models of and mechanisms for information organization as they are used in library information resources (e.g. OPAC, databases, etc.)

3. Apply their recognition and understanding to personal academic information retrieval problems and achieve successful results

4. Know and accurately use APA rules for creating an academic paper or presentation.

Learning Activities

   To be written by academic librarian

   Examples

   Students will
   Activity 1 –
   Activity 2 –
   Activity 3 –
   Activity 4 –
   Activity 5 –

Assessment of Learning

   Evaluation of student learning for these learning activities is embedded in the LI804, Organization of Information course assignments. Mastery of stated threshold objectives is necessary for successful completion of course assignments.