Course Guide

Library Science 413
Computer Applications in Libraries

University of Idaho
3 Semester-Hour Credits

Prepared by:
Kristin Henrich, Ph.D.
University of Idaho

WR: 2016
1 – LibS 413
Copyright Independent Study in Idaho/Idaho State Board of Education
# Table of Contents

Welcome! .......................................................................................................................... 1  
Policies and Procedures ................................................................................................. 1  
Course Description ....................................................................................................... 1  
Course Materials .......................................................................................................... 1  
Course Delivery ........................................................................................................... 2  
Course Introduction ..................................................................................................... 2  
Course Objectives ...................................................................................................... 2  
Lessons ....................................................................................................................... 3  
Exams .......................................................................................................................... 3  
Grading ...................................................................................................................... 3  
Academic Honesty ..................................................................................................... 3  
Disability Accomodations ......................................................................................... 3  
About the Course Developer ..................................................................................... 3  
Contacting Your Instructor ....................................................................................... 3  

Lesson 1: Library Technology in Context .................................................................. 4  
Lesson 2: Technology Competencies ......................................................................... 7  
Lesson 3: Online Resources: Free and Not So Free .................................................. 10  
Lesson 4: Automated Library Systems ..................................................................... 13  
Lesson 5: Computers in Libraries ............................................................................. 16  
Lesson 6: The Built Environment ............................................................................. 19  
Lesson 7: Web Services ............................................................................................ 21  
Lesson 8: Library 2.0 ................................................................................................. 24  
Lesson 9: Teaching Technology ............................................................................... 27  
Lesson 10: Technology Planning .............................................................................. 30  
Lesson 11: Security and Privacy ............................................................................... 33  
Lesson 12: The Future of Library Technology ......................................................... 36  

Final Exam Information: Covers Lessons 1–12 ....................................................... 39
Welcome!
Whether you are a new or returning student, welcome to the Independent Study in Idaho (ISI) program. Below, you will find information pertinent to your course including the course description, course materials, course objectives, as well as information about assignments, exams, and grading. If you have any questions or concerns, please contact the ISI office for clarification before beginning your course.

Policies and Procedures
Refer to the ISI website at www.uidaho.edu/isi and select Students for the most current policies and procedures, including information on setting up accounts, student confidentiality, exams, proctors, transcripts, course exchanges, refunds, academic integrity, library resources, and disability support and other services.

Course Description
Theory and practice of current models of library automation, focusing on choosing, evaluating, and implementing technological tools and services for school and public libraries.

Prerequisite: LibS J410/J510
Corequisite: LibS 414 and LibS 418

This description has been approved by the curriculum committee, and may not be edited.

Required:
- Internet access
- Library visit

12 graded assignments, 12 self-study assignments, 1 proctored exam.

Course Materials
Required Course Materials
- Articles as required: these will be available free of charge through the UI Library, and instructions will be provided for accessing the articles within each lesson.
Course Delivery
All ISI courses are delivered through Canvas, an online management system that hosts the course lessons and assignments and other items that are essential to the course. Upon registration, the student will receive a Registration Confirmation Email with information on how to access ISI courses online.

Course Introduction provide a general introduction to the history, development, and trends in library technology, including hardware, software, integrated library systems, Library 2.0, and more. Lectures will supplement lesson readings, and assignments will require students to write brief summary or narrative essays. Although the material covered is technological in nature, the content of this course is conceptual in nature, and is not intended as a technical step-by-step introduction to any particular library technology.

Course Objectives
- Students will be able to think holistically about library technology and how it shapes the way libraries function.
- Students will be able to critically evaluate library technology in the field.
- Students will be able to create a library technology plan for their target library.
- Students will be able to identify resources for continued professional development in the area of library technology.

Lessons
Overview
Each lesson includes lesson objectives, important terms, assigned readings, an introductory lecture, and a written assignment and brief quiz. Most assignments will require students to reflect or otherwise critically evaluate a concept from the lesson, and write a narrative or summary essay. Each lesson will contain specific assignment instructions. Students must write in their own words, citing and quoting outside material as instructed in the tutorial required for Lesson 1.

Each lesson will include the following components:
- lesson objectives
- important terms
- reading assignments
- lecture
- written assignment, project, or activity
- quiz

Study Hints:
- Keep a copy of every assignment submitted.
- Complete all reading assignments.
- Set a schedule allowing for course completion one month prior to your personal deadline. An Assignment Submission Log is provided for this purpose.
- Web pages and URL links in the World Wide Web are continuously changing. Contact your instructor if you find a broken Web page or URL.
- Add your own recommendations here.
- Introduce and explain any terms that are essential to understanding the course.
Students may submit one assignment at a time. Students may submit up to three assignments in one week, depending on the feedback received.

Refer to the Course Rules in Canvas for further details on assignment requirements and submission.

**Exams**

- You must wait for grades and comments on all assignment prior to taking the final exam.
- For your instructor’s exam guidelines, refer to the Course Rules in Canvas.

Refer to Grading for specific information on assignment/exam points and percentages.

**Exams**

The final exam will be comprehensive, covering material found in Lessons 1-12. To plan for the exam, review your quiz answers, the questions for review in the back of each assigned chapter of the course readings, and reflect on your assignment submissions. The exam itself will consist of short answer and essay questions.

**Grading**

The course grade will be based upon the following considerations:

<table>
<thead>
<tr>
<th>Lessons</th>
<th>Points</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons 1-11</td>
<td>110 (10 points each)</td>
<td>55% (5% each)</td>
</tr>
<tr>
<td>Lesson 12</td>
<td>20</td>
<td>10%</td>
</tr>
<tr>
<td>Exam</td>
<td>70</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>200</td>
<td>100</td>
</tr>
</tbody>
</table>

The final course grade is issued after all assignments and exams have been graded.

Acts of academic dishonesty, including cheating or plagiarism, are considered a very serious transgression and may result in a grade of F for the course.

**About the Course Developer**

Kristin Henrich is Associate Professor and Reference and Instruction Librarian at the University of Idaho, and is project manager for The MILL, the library’s makerspace. She received her MLS from Indiana University in 2008 and previously worked in the publishing industry.

**Contacting Your Instructor**

Instructor contact information is posted on your Canvas site under Course Rules.
Lesson Objectives

- Students will be able to identify key developments in the chronology of library technologies.
- Students will be able to understand and articulate the motivations for developments in library technology.
- Students will be able to define and identify plagiarism and be familiar with ways to prevent plagiarism.

Reading Assignment

Burke, Library Technology Companion, Chapter 1


Modules 6.4-6.8 of the University of Idaho’s Information Literacy Tutorial

http://www.webpages.uidaho.edu/info_literacy/modules/module6/6_4.htm

Important Terms

| Machine-Readable Cataloging (MARC) record | Personal Computers (PC) | Internet |
| Classification systems | Online searching | Gopher sites |
| Card catalog | Audiovisual / Media items | Digital literacy |

Introductory Lecture

Although there are endless technology applications for libraries, the overwhelming majority of them can be categorized as meeting one of two primary needs, according to Burke: “better serving the needs of the library’s community, and streamlining the workflow of the staff” (p. 4). Chapter One covers ten key developments that shaped our profession, beginning with the written word and the printing press. The development of classification systems in the late 1800s ushered in the current era of American librarianship, shaped first by Melvil Dewey’s numeric organization scheme, predominantly used by public and school libraries, and later by the Library of Congress’ alphanumeric classification scheme, mostly used by academic libraries. Both systems have limitations, but remain the most efficient way of organizing library collections of size, and were quite an impressive feat at the time—and remain so today, despite conversations about alternative taxonomic structures such as folksonomies or social tagging. For more information about the development of the Dewey Decimal System or the Library of Congress Classification system, see the Wikipedia entries about Melvil Dewey, Charles Ammi Cutter, and Herbert Putnam. Classification systems allowed for library collections to be organized in a standardized way, and as the systems gained in popularity, they allowed both library staff and patrons to become familiar with the way books might be organized, meeting both technology goals outlined by Burke. The concurrent adoption of
the card catalog in America meant greater access to collections, since patrons could search for books by title, author, or subject by themselves, without having their search mediated by a librarian.

Print card catalogs remained the latest in library information technology until the 1960s, when card catalogs became automated due to advancements in the computer sciences that allowed mainframe computers to read MARC records for each item. The development of the MARC record and the transition towards automated library systems marked the beginning of the digital age of library information technology we see today. Personal computers (PCs) were the next stage in technological advancement, becoming common in homes, schools, and libraries across the country in the 1980s. Personal computers created opportunities for new information search and retrieval methods, compounded by the development of the World Wide Web or Internet in the 1990s. Libraries were able to offer patrons Gopher sites, a precursor of the internet, and were also able to host online searching as well as a wider array of audiovisual materials like cassettes and VHS tapes, to be replaced by CDs and DVDs, and devices on which to view those materials. Libraries today rely heavily on web or internet products, whether to provide access to their catalogs or to provide chat reference or email service to patrons, and are constantly exploring new ways to leverage the accessibility the internet provides to better serve their communities.

Finally, Burke notes, the impetus for new library technology adoption can come from the community of patrons the library serves, in the form of “a society that wants and requires technology” (p. 12). The educational, professional, and personal needs of patrons require access to technology, and providing access to patrons is our professional responsibility. Whether that’s lending ebook readers like Kindles or Nooks to support a public library’s Overdrive collection, or making the school media center open after hours for students who may not have internet access at home with which to complete assignments, libraries are a vital part of creating a digitally literate community.

Written Assignment
Before beginning the first written assignment, refer to the Course Rules in Canvas for your instructor’s assignment requirements. If emailing assignments to your instructor, please copy the ISI office at indepst@uidaho.edu.

Review the University of Idaho Expectations regarding academic honesty:
https://www.uidaho.edu/student-affairs/dean-of-students/student-conduct/academic-integrity/students

Then, complete Modules 6.4-6.8 of the University of Idaho’s Information Literacy Tutorial:
http://www.webpages.uidaho.edu/info_literacy/modules/module6/6_4.htm

Finally, take a screenshot of your completed Self-Quiz in Module 6.8; save the file as an image and upload it to Canvas to complete the assignment for this lesson.

Quiz
Although they will not be graded, quiz questions are intended to give you practice in advance of the final exam. Some questions in the final exam will be taken directly from the quiz questions at the end of each lesson. Submit your quiz answers at the end of each assignment submission; although they will not be graded, I will give you feedback to ensure you are on the right track.
1. Name three technology developments that contributed to libraries as we know them today.
2. Define technology.
3. Define plagiarism; list several forms that plagiarizing could take.