

# S554: Library Systems

S554 (10856)

Spring 2009

LI002

Tuesday 5:45 - 8:30pm

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## Official Course description

*Principles for the design, selection, implementation and management of automated systems of all types in libraries, including systems for technical services processing, reference and user services, and management. Focus is on present and future applications of technology in libraries, their technical features, and their implications for library services and management. When possible, some practical experience with a particular application will be provided.*

## Introduction

The ILS (Integrated Library System) is still the most important component in an automated library. In S554, we explore the mechanics of the traditional ILS and become familiar with software, hardware, and network concerns. We examine library technological standards as well as issues involved in implementing, migrating, and protecting library systems. However, we also move beyond the ILS as we study the implications of Web 2.0/Library 2.0 on library services. As a result of current trends in technology and how services are delivered, the traditional ILS is rapidly evolving as well as competing with certain web-based technologies in order to meet patrons' needs in a more collaborative and interactive manner. Everything from the OPAC to how we communicate with our patrons is now open to radical reconsideration.

## Goals and Objectives

S554 seeks to introduce you to the traditional, current, and future automation / technological concerns facing any type of information setting. Students who complete S554 will be able to:

- Demonstrate awareness of current and upcoming library technologies
- Evaluate and set up a typical ILS (integrated library system): Koha
- Appreciate managerial, training, and maintenance aspects of automation
- Understand library patron issues and concerns: access, privacy, security
- Show familiarity with technology standards
- Work with library trends and their integration with existing technology

## Assignments

Note: Participation/presence is 15% of your class grade. Attentiveness and preparation are important

factors. Suggested lengths are given for the four assigned papers although quality is much more important than quantity.

**Assignment 1: Due February 17**

length: 5 pages

ILS component analysis: OPAC

You will choose from a provided list of library OPACS in order to perform an analysis. Approach the analysis from two perspectives: (1) library patron (2) library staff. You will comment on such factors as aesthetics, usability, accessibility, relevance of returns, options (such as faceted browsing), etc. You are not comparing your OPAC to any other product, rather you are observing it according to the principles discussed in class sessions and covered in current library literature.

**Assignment 2: Due March 10**

length: 5 pages

ILS staff component analysis: circulation, cataloging, acquisitions, serials, system administration

You will analyze one of the Koha components that we have been working with: circulation, cataloging, acquisitions, serials, or system administration. This component does not need to be the one you are assigned to in your small group work. You will discuss the efficiency and functionality of this component as related to a library staff member using this tool to accomplish his or her necessary tasks. You are not describing the component, rather you are critiquing what works well and what does not work – and adding what should be done to make this component work better.

**Assignment 3: Due April 7**

length: 5 pages

L2 trend analysis

You will analyze the usage of an L2 trend in an actual library (to be approved in advance). Trends include but are not limited to blogs, podcasts, wikis, IM, etc. Attempt to gauge the effectiveness of this service (you can be a user, also) by researching topics such as its popularity, its reach, how it serves the library community, its impact on staff, and do on. Can this service be improved in any way? Does it actually serve a current need?

**Assignment 4: Due April 28**

length: 10 pages

Evaluation of an Integrated Library System

You will provide a concise, carefully written report that includes an evaluation of a library automation software (to be approved in advance). Make use of vendor brochures and web sites, vendor or independent listservs/forums, April issues of Library Journal (review of library automation market), articles in the literature, Library Technology Guides ([www.librarytechnology.org](http://www.librarytechnology.org)), and any other resources you can discover. Prepare a summary of your findings about the systems' capabilities and limitations, covering such topics as system requirements, conformance to important standards, available components/modules, interoperability with other products, level and type of vendor support, vendor stability/growth, customer base, services/products/enhancements under development by the vendor.

The important thing is to avoid sounding like a brochure for the vendor and to avoid simply copying and pasting vendor-supplied information from the vendor's web site.

**Summary:**

Assignment 1 = 20%

Assignment 2 = 20%

Assignment 3 = 20%

Assignment 4 = 25%

Participation/presence = 15%

**Course Outline**

Note: Because of the nature of some of our areas of study, new information relevant to our work will appear frequently and may supersede previous publications. Thus some reading assignments shown on the syllabus at any particular time may change, and some readings will not be indicated until we are closer to discussing certain topics. I will notify the class via Oncourse of any additions or changes during the semester, so check often to see if reading assignments have been modified or added.

- Periodical articles can be found on the Academic Search Premier database.
- Some readings are given as links in this syllabus.
- Lecture slides (PowerPoint) will be available in the Resources section of this class on Oncourse and indicated on the syllabus.

## **January 13 (1)**

Concepts:

- The history of library systems
- A look at the typical Integrated Library System (ILS)
- Introduction to open-source and proprietary ILS products (Koha, Polaris)

Lecture slides:

- ILS\_components.pptx

## **January 20 (2)**

Concepts:

- Hardware, Software, Networks

Lecture slides:

- Intro\_hardware\_software.pptx
- Intro\_networking.pptx

Readings:

- Hardware: Introduction to hardware:  
<http://ella.slis.indiana.edu/~whelling/L526/classnotes/hardware.html>
- Software: Introduction to software:  
<http://ella.slis.indiana.edu/~whelling/L526/classnotes/software.html>
- Networks: Introduction to networks:  
<http://ella.slis.indiana.edu/~whelling/L526/classnotes/networking.html>

## January 27 (3)

Concepts:

- The ILS marketplace (historical)
- ILS perceptions

Lecture slides:

- Automated\_System\_Marketplace.pptx

Readings:

- Perceptions 2007: An International Survey of Library Automation (Marshall Breeding)  
<http://www.librarytechnology.org/perceptions2007.pl>
- Perceptions 2008: An International Survey of Library Automation (Marshall Breeding)  
<http://www.librarytechnology.org/perceptions2008.pl>
- Bahr, Ellen. (2007, October). Dreaming of a better ILS. *Computers in Libraries*, 27(9), 11-14.
- Cibarelli, Pamela R. (2008, October). Helping You Buy ILSs. *Computers in Libraries*, 28(9), 6-9, 45-53.
- Breeding, Marshall. (2008, November/December). Open source library automation. *Library Technology Reports*, 44(8), 5-10.
- Breeding, Marshall. (2008, November/December). The commercial angle. *Library Technology Reports*, 44(8), 11-15.

## February 3 (4)

Concepts:

- Open Source
- OPACs: Koha, Evergreen, Polaris, Sirsi-Dynix, Ex Libris, Follett

Lecture slides:

- Open\_source.pptx
- ILS\_today.pptx

Readings:

- Breeding, Marshall. (2008, November/December). Major open source ILS products. *Library Technology Reports*, 44(8), 16-31.
- Koha: <http://www.koha.org/about-koha/>
- Evergreen: [http://evergreen-ils.org/dokuwiki/doku.php?id=fags:evergreen\\_faq\\_1](http://evergreen-ils.org/dokuwiki/doku.php?id=fags:evergreen_faq_1)
- Polaris: <http://www.polarislibrary.com/products-services/ILS-system.html>
- Sirsi-Dynix: <http://www.sirsidynix.com/Solutions/Products/integratedsystems.php>
- Ex Libris: <http://www.exlibrisgroup.com/category/ILSOVeriew>
- Follett: [http://www.fsc.follett.com/sub/destiny\\_solutions/](http://www.fsc.follett.com/sub/destiny_solutions/)

Read all for Koha Administration > Global System Preferences found at:

<http://sites.google.com/a/liblime.com/koha-manual/Home/Table-of-Contents>

## February 10 (5)

Concepts:

- OPAC and 3rd-party enhancements: AquaBrowser, Endeca, Encore, Primo
- ILS item types
- Koha configuration

Lecture slides:

- ILS\_item\_types.pptx

Readings:

- Bouman, K., Jenks-Brown, A., Tran, T., & Vose, D. (2007, June). Visualize Your Catalog. (Cover story). *Library Journal NetConnect*, 132, 10-11.
- Breeding, M. (2007, July). AquaBrowser. *Library Technology Reports*, 43(4), 15-18.
- Breeding, M. (2007, July). Endeca. *Library Technology Reports*, 43(4), 19-22.
- Breeding, M. (2007, July). Encore. *Library Technology Reports*, 43(4), 23-27.
- Breeding, M. (2007, July). Primo. *Library Technology Reports*, 43(4), 28-32.
- Breeding, M. (2007, July). Next-Generation Flavor in Integrated Online Catalogs. *Library Technology Reports*, 43(4), 38-41.

Read all for Koha Administration > Basic Parameters found at:

<http://sites.google.com/a/liblime.com/koha-manual/Home/Table-of-Contents>

## February 17 (6)

Concepts:

- Adaptive technologies for OPAC
- Mobile PAC
- ILS patron types & issuing rules
- Koha configuration

Lecture slides:

- Adaptive\_Technologies.pptx
- ILS\_patron\_types.pptx

Readings:

- Blansett, Jim. (2008, August). Digital discrimination. *Library Journal*, 133(13), 26-29.
- Vielmetti, Edward. (2008, Fall). Focus on the Interface. *Library Journal NetConnect*, 133, 6-8.
- (2008, July) Library mobile initiatives. *Library Technology Reports*, 44(5), 33-38.

Read all for Koha Administration > Patrons & Circulation and Patrons found at:

<http://sites.google.com/a/liblime.com/koha-manual/Home/Table-of-Contents>

## February 24 (7)

Concepts:

- Library standards past, present, future
- Cataloguing
- Circulation

Lecture slides:

- Standards.pptx

Readings:

- Evans, Peter. (2001). Z39.50: Part 1- an overview: [http://www.biblio-tech.com/html/z39\\_50.html](http://www.biblio-tech.com/html/z39_50.html)
- Grogg, J. (2006, January). On the Road to the OpenURL. *Library Technology Reports*, 42(1), 8-13.
- Wikipedia: Dublin Core ([http://en.wikipedia.org/wiki/Dublin\\_Core](http://en.wikipedia.org/wiki/Dublin_Core))
- Wikipedia: Open Archives Initiative ([http://en.wikipedia.org/wiki/Open\\_Archives\\_Initiative](http://en.wikipedia.org/wiki/Open_Archives_Initiative))

Note: Examine The RFP Writer's Guide to Standards for Library Systems. This is a document to help RFP writers understand the relevant library standards and evaluate the compliance of a software application:

[http://www.niso.org/standards/resources/RFP\\_Writers\\_Guide.pdf](http://www.niso.org/standards/resources/RFP_Writers_Guide.pdf)

Read all for Koha Administration > Cataloguing Settings and Cataloging found at:

<http://sites.google.com/a/liblime.com/koha-manual/Home/Table-of-Contents>

## March 3 (8)

Class visit: Jeff Humphries – Incolsa: SCION

Concepts:

- Library consortia: Shared Catalog of Indiana Online, PALNI
- Acquisitions
- Serials

Readings:

- Private Academic Library Network of Indiana (PALNI): <http://home.palni.edu/InfoShare/>
- Shared Catalog of Indiana Online (SCION): <http://scion.incolsa.net/>

Read all for Koha *Acquisitions* and *Serials* found here:

<http://sites.google.com/a/liblime.com/koha-manual/Home/Table-of-Contents>

## March 10 (9)

Class visit: Jeff Beck, Wabash College

PALNI acquisition of Aleph 500 (Ex Libris)

Concepts:

- Choosing and implementing an ILS

Lecture slides:

- ILS\_procurement.pptx

Readings:

- (May, 2003) How to evaluate and purchase an ILS. *Library Technology Reports*, 39(6), 18-24.
- Blyberg, J. (2007, June). Always pushing information. *Library Journal NetConnect*, 132, 2-4.
- Blyberg, J. ILS Customer Bill-of-Rights: <http://www.blyberg.net/2005/11/20/ils-customer-bill-of-rights/>

## March 24 (10)

Concepts:

- Instituting new technologies for new services: Web 2.0 to Library 2.0

Lecture slides:

- Library2.pptx
- Implementing\_and\_Managing\_Library 2.pptx

- Library2\_technologies.pptx

#### Readings:

- Casey, Michael E. and Savastinuk, Laura C. (September 2006). Library 2.0. *Library Journal*, 13(14), 40-43
- Wikipedia: Library 2.0 ([http://en.wikipedia.org/wiki/Library\\_2.0](http://en.wikipedia.org/wiki/Library_2.0))
- Wikipedia: Social Software ([http://en.wikipedia.org/wiki/Social\\_software](http://en.wikipedia.org/wiki/Social_software))
- Wikipedia: Blogs (<http://en.wikipedia.org/wiki/Blogs>)
- Wikipedia: Podcasting (<http://en.wikipedia.org/wiki/Podcasting>)
- Wikipedia: Video Podcast (<http://en.wikipedia.org/wiki/Vodcasting>)
- Wikipedia: Instant Messaging ([http://en.wikipedia.org/wiki/Instant\\_messenger](http://en.wikipedia.org/wiki/Instant_messenger))
- Wikipedia: Short Message Service ([http://en.wikipedia.org/wiki/Text\\_messaging](http://en.wikipedia.org/wiki/Text_messaging))
- Wikipedia: Wiki (<http://en.wikipedia.org/wiki/Wiki>)

## March 31 (11)

Richard Deuschle - Associate Director of Information Technology and Facilities

Niles Ingalls - UNIX & Web Administrator and EI Developer

Hussey-Mayfield Public Library

Evergreen Indiana implementation

#### Concepts:

- Choosing and implementing an ILS

#### Readings:

- Evergreen Hussey-Mayfield brochure: [http://www.zionsville.lib.in.us/eg\\_brochure.pdf](http://www.zionsville.lib.in.us/eg_brochure.pdf)
- Evergreen Development Roadmap: [http://evergreen-ils.org/dokuwiki/doku.php?id=faq:evergreen\\_roadmap](http://evergreen-ils.org/dokuwiki/doku.php?id=faq:evergreen_roadmap)
- Indiana Open Source ILS Initiative: <http://www.in.gov/library/files/EvergreenAll.pdf>
- Evergreen Indiana: <http://www.in.gov/library/5592.htm>
- Evergreen Governance Documents: <http://www.in.gov/library/6486.htm>
- Evergreen Indiana Governance (read minutes): <http://www.in.gov/library/6477.htm>
- Evergreen Michigan: <http://www.mlcnet.org/evergreen/>

## April 7 (12)

Class visit: Penny Gillie, Reference Librarian

Monroe County Public Library, Ellettsville Branch

#### Concepts:

- Choosing and implementing an ILS
- Technology training and retooling

#### Readings:

- Houghton-Jan, S. (2007, March). Competencies: Do We or Don't We? *Library Technology Reports*, 43(2), 14-17.
- Houghton-Jan, S. (2007, March). Assessing Staff on the Competencies. *Library Technology Reports*, 43(2), 44-47.
- Houghton-Jan, S. (2007, March). Planning for Technology Training. *Library Technology Reports*, 43(2), 48-55.
- Houghton-Jan, S. (2007, March). Creating Technology Training and Materials. *Library Technology Reports*, 43(2), 56-58.
- Houghton-Jan, S. (2007, March). Conducting Technology Training. *Library Technology Reports*, 43(2), 59-63.

## April 14 (13)

#### Concepts:

- Automated system marketplace

#### Lecture slides:

- Automated\_System\_Marketplace2006-2009.pptx

#### Readings:

- Breeding, Marshall. (April 2007). Automated System marketplace 2007: An industry redefined, *Library Journal*, 132(6), 36-43.
- Breeding, Marshall. (April 2008). Automated System marketplace 2008: Opportunity out of turmoil, *Library Journal*, 133(6), 32-44.
- 2009 Automated System marketplace (when it appears)

GuidePosts: Perspective and commentary by Marshall Breeding (review of recent news from <http://www.librarytechnology.org>).

## April 21 (14)

#### Concepts:

- Identifying items: barcodes vs RFID
- Item security devices

#### Lecture slides:

- Barcodes\_rfid.pptx
- Item\_security.pptx

Readings:

- Boss, R. (2003, November). An overview of RFID. *Library Technology Reports*, 39(6), 7-17.
- Boss, R. (2003, November). The technology of RFID. *Library Technology Reports*, 39(6), 18-24.
- Biblio Tech review: Bar-coding (<http://www.biblio-tech.com/html/barcoding.html>)

## April 28 (15)

ILS vendor discussions

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### Library Technology Web Sites and Journals

ALA TechSource

<http://www.techsource.ala.org>

Computers in Libraries

<http://www.infotoday.com/cilmag/ciltop.htm>

Information Technology and Libraries (Library & Information Technology Association)

<http://www.lita.org/ital/index.htm>

Library Technology Guides

<http://www.librarytechnology.org/>

oss4lib: open source systems for libraries

<http://www.oss4lib.org>

WebJunction

<http://www.webjunction.org>

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### Grading Policy

To receive a passing grade in this course, you must turn in all the assignments. You cannot pass this course without doing all the assigned work. Note: Turning in all the work is not a guarantee that you will pass the course. Grades of I (Incomplete) may be assigned in this course only after discussion with the instructor.

All assignments must be submitted on the dates specified in this syllabus. If you cannot submit an item on the date it is due, it is your responsibility to discuss your situation with the instructor, preferably in advance. Arrangements for the completion of the outstanding work can be made only at the discretion

of the instructor. Work turned in after the assigned date will reflect a penalty, of course, applied at the discretion of the instructor.

Indiana University and School of Library and Information Science policies on academic dishonesty will be followed. Students found to be engaging in plagiarism, cheating, and other types of dishonesty will receive a failing grade for the course.

Grade Computation: (<http://www.slis.indiana.edu/Courses/forms/grades.html>):

A (4.0) Outstanding achievement

Student performance demonstrates full command of the course materials and evinces a high level of originality and/or creativity that far surpasses course expectations.

A- (3.7) Excellent achievement

Student performance demonstrates thorough knowledge of the course materials and exceeds course expectations by completing all requirements in a superior manner.

B+ (3.3) Very good work

Student performance demonstrates above-average comprehension of the course materials and exceeds course expectations on all tasks as defined in the course syllabus.

B (3.0) Good work

Student performance meets designated course expectations, demonstrates understanding of the course materials and is at an acceptable level.

B- (2.7) Marginal work

Student performance demonstrates incomplete understanding of course materials.

C+ (2.3) Unsatisfactory work

Student performance demonstrates incomplete and inadequate understanding of course materials.

C (2.0) Unsatisfactory work

Student performance demonstrates incomplete and inadequate understanding of course materials.

C- (1.7) Unacceptable work

Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count towards the degree, the student must repeat the course with a passing grade.

D+ (1.3) Unacceptable work

Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count towards the degree, the student must repeat the course with a passing grade.

D (1.0) Unacceptable work

Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count towards the degree, the student must repeat the course with a passing grade.

D- (1.7) Unacceptable work

Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count towards the degree, the student must repeat the course with a passing grade.

F (0.0) Failing

Student may continue in program only with permission of the Dean.

Note: If you are a student with a special need, please feel free to discuss it with me.

Academic Misconduct

(Taken from Academic Handbook, 2006 and the Code of Student Rights, Responsibilities, and Conduct)  
[http://www.indiana.edu/~deanfac/acadhbkb/acad\\_handbk\\_2006.pdf](http://www.indiana.edu/~deanfac/acadhbkb/acad_handbk_2006.pdf)

### 1. Cheating

A student must not use or attempt to use unauthorized assistance, materials, information, or study aids in any academic exercise, including, but not limited to, the following:

A student must not use external assistance on any "in-class" or "take-home" examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, and calculators.

A student must not use another person as a substitute in the taking of an examination or quiz.

A student must not steal examinations or other course materials.

A student must not allow others to conduct research or to prepare work for him or her without advance authorization from the instructor to whom the work is being submitted. Under this prohibition, a student must not make any unauthorized use of materials obtained from commercial term paper companies or from files of papers prepared by other persons.

A student must not collaborate with other persons on a particular project and submit a copy of a written report which is represented explicitly or implicitly as the student's individual work.

A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on field work.

A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor to whom the work is being submitted.

A student must not alter a grade or score in any way.

### 2. Fabrication

A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citations to the sources of information.

### 3. Plagiarism

A student must not adopt or reproduce ideas, words, or statements of another person without appropriate acknowledgment. A student must give credit to the originality of others and acknowledge an indebtedness whenever he or she does any of the following:

Quotes another person's actual words, either oral or written;

Paraphrases another person's words, either oral or written;

Uses another person's idea, opinion, or theory; or

Borrows facts, statistics, or other illustrative material, unless the information is common knowledge.

### 4. Interference

A student must not steal, change, destroy, or impede another student's work. Impeding another student's work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

A student must not give or offer a bribe, promise favors, or make threats with the intention of affecting a grade or the evaluation of academic performance.