

# SLIS S603 - Emerging Technologies and Libraries

## Course Information

May 10 - June 16, 2011  
Tuesdays and Thursdays, 6:30-8:30p.m.  
Wells Library, Room LI002  
<http://ella.slis.indiana.edu/~amzoss/S603/>

## Instructor

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## Description

This workshop offers a hands-on approach to the topic of emerging technologies and libraries. Because emerging technologies are, by nature, a moving target, this course will offer both explorations of specific tools or services and more general techniques for surveying a changing and complex socio-technical environment. The course will follow the deployment of technological solutions from inception to evaluation, beginning with the assessment of the needs of the users and the goals of the library and finishing with development of a final project and a proposal for how the project can be incorporated into a library's regular services.

## Grading

### Indiana University School of Library and Information Science Definitions of Letter Grades

The following definitions of letter grades have been defined by student and faculty members of the Curriculum Steering Committee and have been approved by the faculty as an aid in evaluation of academic performance and to assist students by giving them an understanding of the grading standards of the School of Library and Information Science. Please visit the following web page on the SLIS website for additional information:

<http://www.slis.indiana.edu/courses/forms/grades.html>.

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|-------------------------|--|
| A (4.0; 94% and above): | 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; 90% to 93%):   | 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; 87% to 89%):   | 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; 83% to 86%):    | Student performance meets designated course expectations and demonstrates understanding of the course materials at an acceptable level.  |
| B- (2.7; 80% to 82%):   | Marginal work. Student performance demonstrates incomplete understanding of course materials.  |
| C+ (2.3; 77% to 79%):   | Unsatisfactory work. Student performance demonstrates incomplete and inadequate understanding of course materials.   |
| C (2.0; 73% to 76%):    | "  |
| C- (1.7; 70% to 72%):   | Unacceptable work. Coursework performed at this level will not count toward the MLS or MIS degree. For the course to count toward the degree, the student must repeat the course with a passing grade. |
| D+ (1.3; 67% to 69%):   | "  |
| D (1.0; 63% to 66%):    | "  |
| D- (0.7; 60% to 62%):   | "  |
| F (0.0; 59% and below): | Failing. Student may continue in program only with permission of the Dean.   |

## Assignments

### 1. Reflections on readings (10 \* 2 pts = 20 pts)

Before each of the 10 class periods for which readings have been assigned, you will contribute to the discussion on the Oncourse forum. Full credit will be given for submitting (at least) one post that shows critical engagement with the reading, synthesis with the broader themes of the course, and response to other postings. Reflections are due by 5 p.m. on the day the reading is due.

### 2. Demonstration (10 pts)

On the first day of class, you will sign up for a day and a type of emerging technology. On your assigned day, you will have 20 minutes to lead the class through a demonstration of the technology and a discussion of the role it does or can play in the provision of library services. Creativity is certainly encouraged, and this technology can be different from the technologies you survey or implement for your final project. It is expected that the demonstration will include some way for class members to interact directly with the technology, and demonstrations must be documented on the Oncourse wiki by the beginning of the assigned class period (6:30p.m.).

### 3. Final project and reports (total of 70 pts)

This workshop is organized around a large project that will guide you through the process of developing a technological solution for a library problem or user need. The project is divided into five segments that will build on each other. The segments will be due on Thursdays at 11:59 p.m. on Oncourse in Word .doc or .docx format.

- a. User needs and library goals (15 pts)  
2-3 pages, due May 19.

The first assignment will be the completion of a report that describes the user need or opportunity your project will address. You can identify user needs by conducting a literature search, working with a library professional, and/or gathering your own data on user practices. When discussing your problem area, you should make sure you situate the problem in a specific type of library and state how the goals and mission of the library relate to the user need.

- b. Technology survey (15 pts)  
2-3 pages, due May 26.

In the technology survey, you will conduct an assessment of technologies that are available and that relate to your problem area or user need. Your assessment will need to pinpoint specific features of the technologies and compare each against each other. You will need to relate the assessment specifically to the user need you have identified and the goals of the library. The survey will conclude with a description of the solution you intend to build and a summary of the reasons why you chose that solution. Given the time, resource, and expertise constraints you may experience, it is acceptable to select a solution that would not be ideal for another situation, but you should state these limitations clearly and explain how they influenced your decision.

- c. Implementation (15 pts)  
System developed and 2-3 pages documentation, due June 2.

You will complete an implementation of your chosen solution. You should design the system so that anyone in the class could access it, via either Oncourse or the internet. Your documentation should summarize the need you are addressing, outline the intended use of the system, and describe all of the important features of the system.

- d. Management plan (15 pts)  
2-3 pages, due June 9.

You will compose a management plan to govern the long-term maintenance and evaluation of the system. You will need to discuss how the system should be deployed, what dependencies the system has (e.g., third-party software, local hardware), how the original user need is expected to evolve over time, how to evaluate the success of the system, how much attention the system requires, etc. Incorporate information from your previous reports when determining how best to administrate the system. Should any of the other technologies from your survey be revisited in the future? Are the library's goals or resources likely to change? Whose job should it be to take care of the system?

- e. In-class presentation (10 pts)  
~10 minutes, in class on June 16.

You will give a brief presentation of your project during the final class period. You should highlight the user need you are addressing, the possible solutions available, the system you designed, and any special considerations for the maintenance of the system. The presentation should be documented and made available to the rest of the class via the Oncourse wiki by 11:59 p.m. on the 16<sup>th</sup>.

## Academic Dishonesty

Information on academic dishonesty can be found in the "Code of Student Rights, Responsibilities and Conduct" at <http://www.iu.edu/~code/index.shtml>. In this document, plagiarism is defined as follows:

"Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered 'common knowledge' may differ from course to course." Retrieved April 20, 2011 from <http://www.iu.edu/~code/code/responsibilities/academic/index.shtml>.

## Attendance

You are required to attend every class. The focus of this workshop will be to learn how to use different types of technologies from a hands-on perspective. If you are unable to attend a class, please contact me before class or as soon as possible. If you do miss a class you will be still responsible for:

- Handing in all assignments due for that day on time, and
- Obtaining notes and handouts from other students

Each unexcused absence will result in the lowering of the final grade by one level.

## Schedule of Topics and Readings

	Date	Topic
1	10 May	<p>Introduction/Definitions</p> <p><i>Recommended</i></p> <ul style="list-style-type: none"> <li>Darnton, R. (2011). 5 Myths About the 'Information Age'. <i>The Chronicle Review</i> Retrieved from <a href="http://chronicle.com/article/5-Myths-About-the-Information/127105/">http://chronicle.com/article/5-Myths-About-the-Information/127105/</a></li> </ul>
2	12 May	<p>Library Technology Goals</p> <p><i>Readings</i></p> <ul style="list-style-type: none"> <li>Cambell, J. (2006). Changing a Cultural Icon: The Academic Library as a Virtual Destination. <i>Educause Review</i>, 41(1), 16-31. Retrieved from <a href="http://connect.educause.edu/Library/EDUCAUSE+Review/ChangingaCulturalIconTheA/40602">http://connect.educause.edu/Library/EDUCAUSE+Review/ChangingaCulturalIconTheA/40602</a></li> <li>Cervone, H. F. (2010). Emerging technology, innovation, and the digital library. <i>OCLC Systems &amp; Services</i>, 26(4), 239-242. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1108/10650751011087594">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1108/10650751011087594</a></li> </ul>
3	17 May	<p>Current Understanding of Evolving User Needs</p> <p><i>Readings</i></p> <ul style="list-style-type: none"> <li>Burhanna, K. J., Seeholzer, J., &amp; Salem Jr., J. (2009). No Natives Here: A Focus Group Study of Student Perceptions of Web 2.0 and the Academic Library. <i>The Journal of Academic Librarianship</i>, 35(6), 523-532. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1016/j.acalib.2009.08.003">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1016/j.acalib.2009.08.003</a></li> <li>Todd, R. J. (2008). Youth and their Virtual Networked Words: Research Findings and Implications for School Libraries. <i>School Libraries Worldwide</i>, 14(2), 19-34. Retrieved from <a href="http://asselindoiron.pbworks.com/f/14_2todd.pdf">http://asselindoiron.pbworks.com/f/14_2todd.pdf</a></li> </ul>
4	19 May	<p>Meeting Evolving User Needs</p> <p><i>Readings</i></p> <ul style="list-style-type: none"> <li>Goetsch, L. A. (2008). Reinventing Our Work: New and Emerging Roles for Academic Librarians. <i>Journal of Library Administration</i>, 48(2), 157-172. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01930820802231351">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01930820802231351</a></li> <li>Sodt, J. M., &amp; Summey, T. P. (2009). Beyond the Library's Walls: Using Library 2.0 Tools to Reach Out to All Users. <i>Journal of Library Administration</i>, 49(1), 97-109. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01930820802312854">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01930820802312854</a></li> </ul> <p><i>Assignment</i></p> <p>Final project, part 1</p>
5	24 May	<p>Surveying the Changing Technology Environment</p> <p><i>Readings</i></p> <ul style="list-style-type: none"> <li>Anderson, B. (2008). Electronic Roundup: Emerging Technologies in Higher Education. <i>Behavioral &amp; Social Sciences Librarian</i>, 27(3), 214-217. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01639260802365814">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/01639260802365814</a></li> <li>Johnson, L., Smith, R., Willis, H., Levine, A., &amp; Haywood, K. (2011). The 2011 Horizon Report. Austin, Texas: The New Media Consortium. Retrieved from <a href="http://wp.nmc.org/horizon2011/">http://wp.nmc.org/horizon2011/</a></li> </ul>
6	26 May	<p>Assessing Emerging Technologies</p> <p><i>Readings</i></p> <ul style="list-style-type: none"> <li>Cegielski, C. G., Reithel, B. J., &amp; Rebman, C. M. (2005). Emerging Information Technologies: Developing a Timely IT Strategy. <i>Communications of the ACM</i>, 48(8), 113-117. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1076211.1076214">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1076211.1076214</a></li> </ul>

		<ul style="list-style-type: none"> <li>Kern, M. K. (2009). Selecting Software. In <i>Virtual Reference Best Practices: Tailoring Services to Your Library</i> (pp. 46-60). Chicago: American Library Association.</li> </ul> <p>Assignment Final project, part 2</p>
7	31 May	<p>Implementing New Technologies</p> <p>Readings</p> <ul style="list-style-type: none"> <li>Charette, R. N. (2005). Why Software Fails. <i>IEEE Spectrum</i>, 42(9), 42-49. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1109/MSPEC.2005.1502528">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1109/MSPEC.2005.1502528</a></li> <li>Nieminen, M. P., Mannonen, P., &amp; Turkki, L. (2004). User-Centered Concept Development Process for Emerging Technologies <i>Proceedings of NordiCHI '04</i> (pp. 225-228). Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1028014.1028048">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1028014.1028048</a></li> </ul>
8	2 June	<p>Documentation of Services, Education of Users and Professionals</p> <p>Readings</p> <ul style="list-style-type: none"> <li>Mehlenbacher, B. (2003). Documentation: Not Yet Implemented But Coming Soon! In A. Sears &amp; J. Jacko (Eds.), <i>The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies and Emerging Applications</i> (pp. 527-543). Mahwah, NJ: Lawrence Erlbaum. Retrieved from <a href="http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.84.1285&amp;rep=rep1&amp;type=pdf">http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.84.1285&amp;rep=rep1&amp;type=pdf</a></li> </ul> <p>Assignment Final project, part 3</p>
9	7 June	<p>Dissemination/Adoption of New Technologies</p> <p>Readings</p> <ul style="list-style-type: none"> <li>Harrison, M., Summerton, S., &amp; Peters, K. (2005). EndNote Training for Academic Staff and Students: The Experience of the Manchester Metropolitan University Library. <i>New Review of Academic Librarianship</i>, 11(1), 31-40. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/13614530500417594">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1080/13614530500417594</a></li> <li>Zhang, C. (2010). Technology Acceptance in Learning Settings from a Student Perspective: A Theoretical Framework <i>Proceedings of SIGITE'10</i> (pp. 37-41). Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1867651.1867663">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1867651.1867663</a></li> </ul>
10	9 June	<p>Long-Term Considerations (Maintenance, Evaluation, Preservation)</p> <p>Readings</p> <ul style="list-style-type: none"> <li>Ferdig, R. E. (2006). Assessing technologies for teaching and learning: understanding the importance of technological pedagogical content knowledge. <i>British Journal of Educational Technology</i>, 37(5), 749-760. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1111/j.1467-8535.2006.00559.x">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1111/j.1467-8535.2006.00559.x</a></li> <li>Mookerjee, R. (2005). Maintaining enterprise software applications. <i>Communications of the ACM</i>, 48(11), 75-79. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1096000.1096008">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1145/1096000.1096008</a></li> </ul> <p>Assignment Final project, part 4</p>
11	14 June	<p>Services to Improve Information and Technological Literacy</p> <p>Readings</p> <ul style="list-style-type: none"> <li>Bawden, D. (2001). Information and digital literacies: A review of concepts. <i>Journal of Documentation</i>, 57(2), 218-259. Retrieved from <a href="http://dx.doi.org.ezproxy.lib.indiana.edu/10.1108/EUM0000000007083">http://dx.doi.org.ezproxy.lib.indiana.edu/10.1108/EUM0000000007083</a></li> </ul>
12	16 June	Final Presentations