On-Line Information Retrieval
Spring 2011
Syllabus, Preliminary Version, January 3, 2011

3 Credit Hours
Prerequisite: 553
Classroom: Pangborn Hall, Room 301
Tuesdays, 7:00 – 9:30 p.m.

NOTE: This Syllabus is Subject to Change

Instructor: David Shumaker
Office: 239 Marist Hall
Hours: By appointment
E-mail: shumaker@cua.edu
Phone: 202-319-5551

COURSE DESCRIPTION
Provides a solid grounding in the theory and practice of information storage and retrieval in the online environment. Special emphasis on the history of the online information industry, awareness of issues and trends in the provision of online services, types and structures of online databases, and basic search skills including the selection of an appropriate electronic source and construction of effective search strategy. Illustrates search techniques using the internet and commercial databases, such as Dialog, Lexis, and Factiva. Explores electronic reference services and discusses the management of online search services. Prerequisites: 553

Instructional Methods
The course may incorporate lecture/discussion; hands-on exercises; guest speakers; and research projects. Class meetings will be supplemented by announcements, discussion, and other materials posted on the class Blackboard site (http://bb8.cua.edu).

Required Texts


Required Readings
TBA

Required Technologies
Capabilities Required for Course Delivery and Student Participation: Blackboard; Microsoft Office or interoperable counterpart; standard CUA software; CUA library and information system accounts; ability to use ALADIN digital library resources. Every student should have daily access to a computer and high speed internet access.

Tools and Technologies Taught: This course will incorporate the use of Refworks personal bibliography management software, and may incorporate use of the Dialog, LexisNexis, and/or Factiva information retrieval systems.

Other materials (e.g. lab supplies, calculators) with specifics of what is needed and how to obtain
None.

Course Goals
The course goals are to:

- Discuss and practice professional competencies in the planning and execution of research in secondary sources using commercial digital library resources and open web-based resources.
- Discuss database characteristics, including underlying structures, interfaces, and information retrieval concepts, as they apply to information discovery and delivery.
- Develop competencies in the critical evaluation and analysis of secondary research results and synthesis of research products.
- Achieve the ability to transfer the knowledge and skills learned for one system to an unfamiliar database by the use of documentation and application of general concepts and principles.
- Cultivate informed opinions and develop an understanding of the issues facing librarians in the provision of online search services and related collection development decisions.

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<tbody>
<tr>
<td>Students who are successful in this course will:</td>
<td>The SLIS MSLS program develops graduates who:</td>
<td>Professional Competencies</td>
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<tr>
<td>Know and apply principles for planning a search, including selecting appropriate sources and developing a search strategy</td>
<td>- Are skilled in organizing, disseminating, managing and preserving information</td>
<td>Information Services</td>
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2
| Use a variety of search functions and capabilities to carry out effective searches in a variety of information retrieval systems | • Are skilled in organizing, disseminating, managing and preserving information  
• Are capable of serving information seekers in a global society; | Information Services |
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<tr>
<td>Understand and discuss the technologies and characteristics of information retrieval systems as they relate to the ability to use these systems effectively</td>
<td>• Are skilled in the use of information technologies and articulate the role of information technology in facilitating information management</td>
<td>Information Services; Information Technology</td>
</tr>
<tr>
<td>Evaluate search results and information retrieval systems</td>
<td>• Are skilled in the use of information technologies and articulate the role of information technology in facilitating information management</td>
<td>Information Services</td>
</tr>
</tbody>
</table>
| Analyze and synthesize the results of information searches to produce highly relevant and actionable research products | • Are capable of serving information seekers in a global society;  
• Interpret and apply research results from library and information science and related fields | Information Services; Information Technology |
| Understand and discuss current trends and issues in information retrieval systems technologies and commerce | • Appreciate education and service as integral to the role of the information professional in society;  
• Are dedicated to professional growth, continuous learning, and applying new knowledge to improve information systems and services to meet the needs of information users in society | Professional Identity |
**Professional Standards Addressed**

“Demonsrates expert knowledge of the content and format of information resources, including the ability to critically evaluate, select and filter them.”

And C3:

“Researches, analyzes and synthesizes information into accurate answers or actionable information for clients, and ensures that clients have the tools or capabilities to immediately apply these.”


**Course Requirements**
Assignments and their weighting in the overall course grade are:

1. **Graded Search Exercises (3 @ 10% each)**
2. **Term Research Project (50%)**
   a. Research Proposal and Preliminary Bibliography (10%)
   b. Research Strategy (10%)
   c. Final Research Paper (20%)
   d. Final Annotated Bibliography (10%)
3. **Final Exam (10%)**
4. **Class Participation (10%)** Each student's learning experience depends on active class participation. Regular attendance and active participation both in class and online are expected. Those who contribute most to the course knowledge base will receive the highest grades in this area.

**Expectations and policies**

**Academic honesty:** Academic honesty is expected of all CUA students. Faculty are required to initiate the imposition of sanctions when they find violations of academic honesty, such as plagiarism, improper use of a student’s own work, cheating, and fabrication. The following sanctions are presented in the University procedures related to Student Academic Dishonesty (from http://policies.cua.edu/academicundergrad/integrityprocedures.cfm): “The presumed sanction for undergraduate students for academic dishonesty will be failure for the course. There may be circumstances, however, where, perhaps because of an undergraduate
student’s past record, a more serious sanction, such as suspension or expulsion, would be appropriate. In the context of graduate studies, the expectations for academic honesty are greater, and therefore the presumed sanction for dishonesty is likely to be more severe, e.g., expulsion. ...In the more unusual case, mitigating circumstances may exist that would warrant a lesser sanction than the presumed sanction.”

Please review the complete texts of the University policy and procedures regarding Student Academic Dishonesty, including requirements for appeals, at http://policies.cua.edu/academicundergrad/integrity.cfm.

**Other Policies and Expectations.**

Successful completion of this course entails on-time delivery of assignments, work that meets or exceeds the standard for graduate-level programs, and regular, active participation in class discussions, exercises, and activities. Class attendance and participation are important. If you must miss a class for any reason, you are expected to notify the instructor as early as possible, and to take responsibility for catching up and making up any work missed. Students must have access to word processing and presentation software, email, CUA libraries and the ALADIN system, and the World Wide Web.

Assignments are due before class on the date indicated. Unless prior permission is obtained, the grade for late assignments will be reduced by 4 points (out of 100) per day; however, any work not turned in on or before the end of the term will receive a zero grade. Grades are based on work submitted; rewriting, resubmission, and extra credit are not allowed.

In case of bad weather, students should monitor official CUA media for announcements. If class is canceled due to bad weather or any other unexpected reason, the instructor will communicate alternative arrangements via Blackboard.

**Important University Resources:**

CUA Computer and Network Resources:
All students should be familiar with and use their:
- NT (CUA network) account information
- Cardinalmail account
- Blackboard account

Contact the Center for Planning and Information Technology at 202-319-4357 for assistance.

CUA Libraries:
All students should be able to use the CUA library resources, including the ALADIN online system. Visit the CUA Library homepage at http://libraries.cua.edu for assistance and directions. See also the Mullen Library welcome page at http://libraries.cua.edu/welcome.html, or phone (202) 319-5070.

CUA Center for Academic Success:
See http://success.cua.edu
Pryzbyla Center
Phone: (202) 319-5655
CUA Counseling Center:
See http://counseling.cua.edu/services/
127 O'Boyle Hall
Phone: (202) 319-5765

**Accommodations for students with disabilities:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. Please contact Disability Support Services (at 202 319-5211, room 207 Pryzbyla Center) to coordinate reasonable accommodations for students with documented disabilities. To read about the services and policies, please visit the website: http://disabilitysupport.cua.edu

**Assessment**

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<th>Assignment</th>
<th>Weight</th>
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<tr>
<td>Graded Search Exercises (3 @ 10% each)</td>
<td>30%</td>
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<tr>
<td>Term Research Project (Proposal and Preliminary Bibliography – 10%; Research Strategy 10%; Final Paper 20%; Final Annotated Bibliography 10%)</td>
<td>50%</td>
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<tr>
<td>Final Exam (Take Home)</td>
<td>10%</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Based on scores for individual assignments, final letter grades will be assigned as follows:

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<tr>
<th>Grade</th>
<th>Percentage</th>
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<tr>
<td>A</td>
<td>93-100</td>
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<tr>
<td>A-</td>
<td>91-92</td>
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<tr>
<td>B+</td>
<td>89-90</td>
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<tr>
<td>B</td>
<td>82-88</td>
</tr>
<tr>
<td>B-</td>
<td>80-81</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>F</td>
<td>&lt;70</td>
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**University grades:**
The University grading system is available at http://policies.cua.edu/academicgrad//gradesfull.cfm#iii for graduate students.

Reports of grades in courses are available at the end of each term on http://cardinalstation.cua.edu.
# COURSE SCHEDULE:

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<tr>
<th>Date</th>
<th>Class Number and Topic</th>
<th>Assignments</th>
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| Jan. 11 | Class 1: Introductions of students and instructor  
Course overview | Read: Chowdhury Ch. 1, 2  
Assigned: Search Exercise 1 |
| Jan. 18 | Class 2: Fundamentals of Research Strategy and Planning  
| | Read: Bell Ch. 1, 9, 10; Chowdhury Ch. 8, 9, 10, 11  
Assigned: Term Research Project |
| Jan. 25 | Class 3: Metadata for Information Retrieval | Read: Bell Ch. 2, 6; Chowdhury Ch. 3, 4, 5  
Due: Search Exercise 1 |
| Feb. 1 | Class 4: Text Information Retrieval | Read: Bell Ch. 3  
Due: Term Research Proposal and Preliminary Bibliography |
| Feb. 8 | Class 5: Lexis/Nexis | Read: Bell Ch. 4, 7  
Assigned: Search Exercise 2 |
| Feb. 15 | Class 6: Dialog | Read: Bell Ch. 5 |
| Feb. 22 | No Class: Administrative Monday | |
| March 1 | Class 7: Non-Text Information Retrieval | Read: Bell Ch. 8; Chowdhury Ch. 16  
Due: Search Exercise 2 |
| March 8 | No Class: Spring Break | |
| March 15 | Class 8: Advanced Research and Analysis Techniques | Read: Chowdhury Ch. 21, 22  
Assigned: Search Exercise 3 |
| March 22 | Class 9: Focus on the Web | Read: Chowdhury Ch. 17, 18  
Due: Term Research Project Search Strategy |
| March 29 | Class 10: Natural Language Processing | Read: Chowdhury Ch. 19, 20  
Due: Search Exercise 3 |
<p>| April 5 | Class 11: Subject Analysis for Information Retrieval | Read: Chowdhury, Ch. 6, 7 |
| April 12 | Class 12: Evaluating Information Retrieval Systems | Read: Bell, Ch. 11; Chowdhury Ch. 12, 13, 14 |
| April 19 | Class 13: Course Synthesis | Read: Chowdhury Ch. 23 |</p>
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<tr>
<th>Date</th>
<th>Event</th>
<th>Read: none</th>
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<tr>
<td>April 26</td>
<td>Class 14: Discussion of Term Projects and Course Wrapup</td>
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<td>Term Research Final Paper and Annotated Bibliography Due</td>
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<tr>
<td>May 3</td>
<td>Final Exam: 8 – 10 p.m.</td>
<td>Final Exam due Tues. May 3, 10:00 p.m.</td>
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**NOTE:**
The instructor reserves the right to make changes to this syllabus.