Palmer School of Library and Information Science
Long Island University

LIS 514 Introduction to Research in Library & Information Science
SYLLABUS
Manhattan Campus, Fall 2011

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Instructor: Heting Chu
Telephone: 516-299-2177
E-mail: hchu@liu.edu

Class Time: Tuesdays, 4:30-6:20pm; Office Hours: Before & After Classes
OR
By Appointment

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BULLETIN DESCRIPTION

Theoretical and applied research design, methodologies, and evaluation in library and information science. Review of existing research in the field, proposal preparation, and design of instruments used in the field.

Pre- or co-requisite: LIS 510

PALMER SCHOOL STUDENT LEARNING OBJECTIVES

1C. Students will use effective communication techniques and critical thinking skills, such as problem solving and decision making skills. (Assessment Method: Research Proposal)
5B. Students will understand the fundamentals of quantitative and qualitative research. (Assessment Methods: Statistical Exercises, Research Proposal)
5C. Students will assess the actual and potential value of research. (Assessment Methods: Critical Reviews, Research Proposal)
5G. Students will articulate the importance of research, teaching and service for the advancement of the field of Library and Information Science. (Assessment Methods: Statistical Exercises, Critical Reviews, Research Proposal)

COURSE OBJECTIVES

- To understand the basics of research from the perspective of library and information science.
- To obtain an overview of research conducted in the area of library and information science.
- To become familiar with the various research methods commonly used in the field.
- To gain the ability to comprehend, evaluate and use the research literature of our field.
<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
<th>Topics/Assignments</th>
</tr>
</thead>
</table>
| 9/13 | 1    | Introduction and overview  
Research basics  
READ:  
Connaway & Powell, Chapter 1; Rowntree, Introduction  
Lynch 1984 (Recommended) |
| 9/20 | 2    | Research basics (Continued)  
READ:  
Connaway & Powell, Chapter 2; Rowntree, Chapter 1 & 2 |
| 9/27 | 3    | Frequency distribution  
Measuring central tendency  
(Bring a calculator to class starting from this session.)  
READ:  
Connaway & Powell, Chapter 9 (covering both descriptive & inferential data analysis); Rowntree, Chapter 3 |
| 10/4 | 4    | Measuring dispersion  
How to read research  
Statistical Exercise I Due  
READ:  
Drott (1984); Mancall; Swisher |
| 10/11| 5    | Instructor in New Orleans for a conference  
Software for data analysis – Practice  
Identification of proposal topics  
READ:  
Lynch 2003 |
| 10/18| 6    | Normal distribution  
Sampling  
Critical Review #1 Due  
READ:  
Connaway & Powell, Chapter 4; Rowntree, Chapter 4-5 |
| 10/25| 7    | Hypothesis testing  
Statistical Exercise II Due  
READ:  
Rowntree, Chapter 6-7 |
| 11/1 | 8    | Correlation  
Regression  
Submit a Paper for Review #2 for Approval  
READ:  
Rowntree, Chapter 8 |
| 11/8 | 9    | Quantitative research vs. qualitative research  
Submit Your Research Proposal Topic for Approval  
READ:  
Connaway & Powell, Chapter 3 & 7  
Bradley & Sutton; Sandstrom & Sandstrom |
<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
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</tr>
</thead>
</table>
| 11/15 | 10   | Research designs and methods  
*Critical Review #2 Due*  
READ: (Including some readings for next week)  
Connaway & Powell, Chapter 5-6  
Haas & Kraft |
| 11/22 | 11   | Research designs and methods *(Continued)*  
READ:  
Connaway & Powell, Chapter 8  
Ikppahindi; Smith (Recommended) |
| 11/29 | 12   | Research report and presentation  
READ:  
Connaway & Powell, Chapter 10-11; Rowntree, Postscript  
Tufte, Chapter 1-3 |
| 12/6  | 13   | Presentation of your research proposal |
| 12/13 |      | **NO CLASS – Study/Snow/Alternative Class Day** |
| 12/20 | 14   | Presentation of your research proposal  
*Research Proposal Due* |

**Blackboard Online Learning System**

Blackboard (https://blackboard.liu.edu), an online learning system, will be the main vehicle for us to communicate besides the face-to-face classroom meetings. Information regarding how to use Blackboard can be found after logging into your account and by clicking on the Help link on the left-hand side panel.

**ASSIGNMENTS**

I. **Statistical Exercises**

Two statistical exercises will be described in class and distributed via Blackboard.

IIA. **Critical Review #1**

Choose one of the following two articles, and write a critical review of it. A critical review normally includes a bibliographical description of the article being reviewed, a summary of its major points, its strengths and weaknesses, and your comments. Consult the review guidelines (See below) when needed. But do not try to answer every question listed there as they are intended to serve simply as “food for thoughts”. Hand in the review only.

- Head, Alison J. (2007). Beyond Google: How do students conduct academic research?  
  *First Monday, 12*(8). Available at:  


Guidelines for Reviewing Research Papers

==================================================================
NOTE: The guidelines are provided to facilitate the review process. You should NOT attempt to answer all the questions listed below one by one.
==================================================================

- What is the specific research problem? Is it clearly stated? Are related key concepts identified and defined?
- Is the research literature identified and evaluated? Are their findings reported? Did the review adequately show the relationship between the research reviewed and the current study?
- Is the study well-justified?
- Are there any research questions/hypotheses specified for the study? If yes, are they clearly stated and well-formulated?
- What are the variables and how are they defined operationally?
- What methodology is used to solve the problem? Is the choice appropriate for the defined research problem? Does the study provide enough information for explaining the methodology employed?
- Are the data analysis techniques suitable for the data collected and for answering the research questions posed?
- Are the findings interpreted, presented and discussed adequately in relation to the research problems of the study?
- What is the validity and reliability of the study?
- Are there any limitations in the study? Does the study have any implications?

IIB. Critical Review #2

Select a research article from journals published in the field of library and information science. College and Research Libraries, Library and Information Science Research, Public Library Quarterly, The Reference Librarian are some of the journals that commonly carry research papers. Submit your choice of a paper, electronically or otherwise, by November 1, 2011 for approval. (Note: Do not submit what you select directly from a database used for choosing the paper.)

Write a critical review for the chosen paper. Hand in the review together with the paper.
III. Research Proposal

You may work in groups. But each group should not have more than two people.

Identify a problem for your research proposal. Talk with the instructor if you have any question about it. Submit a brief description of your chosen problem by November 8, 2011. Prepare a research proposal for a problem of your choice. The proposal should consist of the following parts:

1. Introduction
   • Identify a research problem.
   • Provide context and background information of the chosen problem.
   • Indicate the importance of your proposed study.

2. Literature review
   • Describe and discuss (up to 10) documents previously published in the area.
   • Do the following where appropriate:
     o Articulate important findings and issues;
     o Indicate limitations and the need for further research;
     o Find out if any ideas/methodology can be applied in the current proposal.

3. Formulation of your own research questions/hypotheses
   • Translate the chosen problem (i.e., problem statement) into a list of questions
   • Formulate hypotheses if appropriate. The hypotheses need not to be in statistical terms.

4. Methodology to be used
   • Describe and justify the methodology to be followed.
   • The methodology should be described in detail so that the study could be replicable if needed.

5. Concluding remarks
   • State possible implications of the study
   • List limitations of your proposed study, if you can.

6. References
   • List all the documents you consulted during your proposal preparation according to an established citation style. Examples of such citation styles can be found at http://www2.liu.edu/cwis/cwp/library/workshop/citation.htm.

EVALUATION & CRITERIA

I. Statistical exercises -- 10% (2 x 5%)

<table>
<thead>
<tr>
<th>Criteria (Weight)</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>Calculation (0.25)</td>
<td>Excellent: Makes required calculations correctly.</td>
</tr>
<tr>
<td></td>
<td>Good: Makes required calculations but with minor mistakes.</td>
</tr>
<tr>
<td></td>
<td>Poor: Makes required calculations incorrectly.</td>
</tr>
<tr>
<td>Interpretation &amp; Discussion (0.75)</td>
<td>Excellent: Interprets and discusses the assignment properly and coherently.</td>
</tr>
<tr>
<td></td>
<td>Good: Interprets and discusses the assignment adequately.</td>
</tr>
<tr>
<td></td>
<td>Poor: Interprets and discusses the assignment inadequately.</td>
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IIA. Critical review #1 -- 15%

<table>
<thead>
<tr>
<th>Criteria (Weight)</th>
<th>Evaluation</th>
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</thead>
<tbody>
<tr>
<td>Bibliographic Description (0.05)</td>
<td>Follows closely a style manual (e.g., Chicago) and accurately describes the research publication being reviewed.</td>
</tr>
<tr>
<td></td>
<td>Follows a style manual (e.g., Chicago) and describes the research publication being reviewed.</td>
</tr>
<tr>
<td></td>
<td>Follows poorly a style manual (e.g., Chicago) and describes inadequately the research publication being reviewed.</td>
</tr>
<tr>
<td>Summary of Major Points (0.15)</td>
<td>Summarizes well the major points in the research publication being reviewed.</td>
</tr>
<tr>
<td></td>
<td>Summarizes the major points in the research publication being reviewed.</td>
</tr>
<tr>
<td></td>
<td>Summarizes poorly the major points in the research publication being reviewed.</td>
</tr>
<tr>
<td>Critical Review (0.6)</td>
<td>Identifies correctly and clearly the strengths and weaknesses of the research publication being reviewed along with convincing arguments to support the assessment.</td>
</tr>
<tr>
<td></td>
<td>Identifies the strengths and weaknesses of the research publication being reviewed along with proper arguments to support the assessment.</td>
</tr>
<tr>
<td></td>
<td>Identifies poorly the strengths and weaknesses of the research publication being reviewed. Fails to provide proper arguments to support the assessment.</td>
</tr>
<tr>
<td>Organization &amp; Presentation (0.2)</td>
<td>Organizes and presents the critical review coherently. Also clearly meets the writing requirements at the graduate level.</td>
</tr>
<tr>
<td></td>
<td>Organizes and presents the critical review in some order. Also meets the writing requirements at the graduate level.</td>
</tr>
<tr>
<td></td>
<td>Organizes and presents the critical review in no particular order. Also fails to meet the writing requirements at the graduate level.</td>
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IIB. Critical review #2 -- 20%

III. Research proposal -- 40%

<table>
<thead>
<tr>
<th>Criteria (Weight)</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>Problem Identification &amp; Research Que’n Formulation (0.3)</td>
<td>Clearly identifies a problem in need of research and then successfully translates it into research question(s).</td>
</tr>
<tr>
<td></td>
<td>Identifies a problem in need of research and then translates it into research question(s).</td>
</tr>
<tr>
<td></td>
<td>Fails to identify a problem in need of research and then translate it into research question(s).</td>
</tr>
<tr>
<td>Literature Review (0.15)</td>
<td>Effectively selects and reviews research publications related to the proposed topic.</td>
</tr>
<tr>
<td></td>
<td>Selects and reviews research publications related to the proposed topic.</td>
</tr>
<tr>
<td></td>
<td>Fails to select and review research publications related to the proposed topic.</td>
</tr>
<tr>
<td>Methodology Development</td>
<td>Properly develops a research methodology for the topic.</td>
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<tr>
<td></td>
<td>Develops a research methodology for the topic.</td>
</tr>
<tr>
<td></td>
<td>Fails to develop a research methodology.</td>
</tr>
<tr>
<td>(0.35)</td>
<td>the proposed topic.</td>
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</tr>
<tr>
<td><strong>Organization &amp; Presentation (0.2)</strong></td>
<td>Organizes and presents the research proposal coherently. Also clearly meets the writing requirements at the graduate level.</td>
</tr>
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**IV. Class participation & attendance -- 15%**

<table>
<thead>
<tr>
<th>Criteria (Weight)</th>
<th>Evaluation</th>
<th>Excellent</th>
<th>Good</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation (0.7)</td>
<td>Actively participates in classes.</td>
<td>Participates in classes.</td>
<td>Fails to participate in classes.</td>
<td></td>
</tr>
<tr>
<td>Attendance (0.3)</td>
<td>Attends all classes.</td>
<td>Attends classes and misses one(s) with justifiable reasons.</td>
<td>Misses class(es) with no particular reasons.</td>
<td></td>
</tr>
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**TEXTS**


**ADDITIONAL READINGS**


**WEBITES**

See Relevant Sites for LIS 514 at Blackboard.

**STATE EDUCATION DEPARTMENT REQUIREMENT:** (150 hours)

- Class meetings: 30 hours
- Readings: 60 hours
- Statistical exercises: 5 hours
- Critical reviews: 25 hours
- Research proposal: 30 hours