COURSE NAME, NUMBER AND PREREQUISITES:

IRLS 506-010

Research Methods

This course is a core course for the SIRLS Masters degree. [No prerequisite]

Instructor: Heshan Sun

COURSE DESCRIPTION:

"Online instructional course on Research Methods." (3 credit hours)

General overview

"Research is fundamentally a state of mind involving continual re-examination of the doctrines and axioms upon which current thought and action are based. It is, therefore, critical of existing practices." Theobald Smith, 1929

"The maddening thing about research was that most answers just meant more questions.... " Corian Trevanni, Wintermind, Marvin Kaye and Parke Godwin, 1982

Research is the process of offering conjectures to solve problems, and of the testing, and sometimes refuting, of those conjectures. It is a process of theory building and hypothesis testing-- the sifting and winnowing of ideas that leads to new knowledge, and new interpretations of old knowledge. It is a search for truth. And what it achieves are views that might reasonably be believed to be the truth, in the light of the evidence and the critical dialog.
Research is a term that is used casually to cover everything from poking around in an encyclopaedia to rigorous experiments using control groups and sophisticated statistical techniques. There is, in fact, a continuum that encompasses both these examples. For this class, however, we are going to settle somewhere at the middle of the continuum. Research is not just looking in an encyclopedia or in a library. This course aims at what might be described as mainstream social science research as practiced in universities.

No one can be taught to be a researcher in a single three hour course. However, you can be taught to be a better consumer of research in a three hour course. There is good research, and bad research. The aim is to get you to be able to tell the difference, and understand and articulate what the differences amount to.

The course opens with a historical and intellectual background to research. It moves through experimental and quasi-experimental design, explaining the notions of evidence, validity, and reliability. Different styles of research are described including: quantitative research, qualitative research, field research, archival research, and laboratory experiments. There are discussions of sampling and elementary descriptive and inferential statistics. (Doing extensive mathematical calculations is not part of the course. We do, though, try to develop an educated and critical eye for looking at other people's choice of tests and calculations.) Research proposals and research reports are discussed. The course closes with an account of the types of research commonly found in Library and Information Science (such as evaluation research, qualitative research, surveys and questionnaires, and bibliometrics).

How this course will be taught

This is an online course taught virtually at a distance using the Web. The course is conceived of as discussions on 20 (or so) topics. A lecture course in the University of Arizona amounts to 37 1/2 hours of instruction spread through a semester. Our 'discussions' will be the virtual counterpart of 30 (or so) one and a quarter hour lectures, delivered at a rate of two a week. There will be notes, readings, discussion groups, chat, and (of course) assignments.

The course has a start date and an end date, and the class as a whole will move through the course together The primary means of introducing the scholarly material will be Notes. These are going to be posted one at a time steadily through the session, keeping the whole class moving forward through the material. There are 20 plus sets of Notes, and these normally will be delivered at a rate of 2 a week (usually put up on Friday, midnight). There will be assignments, with due dates, and formal discussions, and these will serve to check progress. There also will be readings or references to be followed up on the Web.

Almost all interactions will be asynchronous. That is, students can log on whenever they wish, and read material and post replies on timetables that suits their individual needs. A student will typically need to log on about 5 times a week. (An analog here is email-- most folk check their email at least five times a week.)

The students will also be placed in groups of about 5 students and there will be some groupwork.

d2l (desire to learn) and a wiki system will be used as the instructional and course management environment. Students who enrol in the course will be given an account. They will be able to log in to their account via the Learning Technologies Center E-Learning Portal. d2l has facilities for internal email, and this will be one way to contact the Instructor or the Graduate Assistant Teacher (GAT).

Students are expected to log on reasonably regularly, to read and study the Notes and references, to participate in the online discussions, to interact by email (and other means) with their fellow students, to write (or otherwise answer) the assignments, to download and upload files (this will be taught), and to carry out various other activities. It is hard to anticipate accurately how much time all these course related activities will take in total (and such a figure would vary from student to student and from week to week), but seven hours a week is a rough order of magnitude estimate.

The course will start in earnest a few days after the start of the semester. The d2l software can detect when students log on, and when most of the students have shown that the are present by logging on, the Instructor will get the course underway.

**COURSE OBJECTIVES:**
By the completion of this course, you will:

- know what empirical research is, and what are the typical techniques used to carry out such research in social science
- know what are the strengths and weaknesses of those techniques
- be able to say whether research you encounter is good; to say:
  - what was really being examined
  - what was the evidence, or support, or principled argument
  - what were the conclusions
  - whether the relationship between the evidence and the conclusions was adequate
  - whether we should we trust the results or the conclusions
- be able to consider the applicability of published or known research to your own libraries or information centers.
- have experienced, read, and discussed many examples of both good and poor research in Library and Information Science

REQUIRED COURSE MATERIALS:

Students need online access, either by way of their own computers and Internet connection or by public access means (such as those provided in Public Libraries or in on campus labs).

There is a set text for the course:


Other materials may also be distributed throughout the semester.

COURSE REQUIREMENTS:

The coursework requirements are:

- one group work project
- two individual projects.
- two statistics quizzes.
- class participation. Several discussion topics will be available throughout the course. You are expected to actively participate in discussions.

The distribution of the marks is as follows

- group project 30%
- two individual projects (15% each, 30% in total)
- two statistics quizzes (15% each, 30% in total)
- class participation (10%)

COURSE, SCHOOL, AND UNIVERSITY POLICIES:

Academic Code of Integrity

Students are expected to abide by The University of Arizona [Code of Academic Integrity](http://www.az.edu/). 'The guiding principle of academic integrity is that a student's submitted work must be the student's own.' If you have any questions regarding what is acceptable practice under this Code, please ask an Instructor.

Accommodating Disabilities

The University has a [Disability Resource Center](http://www.az.edu/). If you anticipate the need for reasonable accommodations to meet the requirements of this course, you must register with the Disability Resource Center and request that the DRC send me, the
Instructor, official notification of your accommodation needs as soon as possible. Please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Assignment Policies

- **Submission**: The papers are to be submitted usually by the d2l assignment Dropbox, which can be found as a link on the toolbar. (A less preferable alternative is by d2l internal email to the Instructor, put, for example, 'Assignment One' as the subject and send the assignment either as the message or as an attachment to the message. *Pure electronic documents need to be either plain text or formatted using HTML* (just 'Save As' HTML using your favorite word processor).
- **Format, style and content**: Content is all important in this course. Style should be plain and transparent (be guided by the classic Strunk and White *Elements of Style*). The format is unimportant, except that it should be html.
- **Late papers**: There will be due dates and students are expected to meet them. With an online course like this, difficulties can arise (such as computers or d2l being temporarily out of service) and appropriate decisions will be made as needed.

GRADING:

**General grading criteria**: For ordinary papers, and unless specified otherwise, you should write about the equivalent of four pages of ordinary text. Grammar, style, or spelling are not central-- provided the paper is understandable and the faults are not so severe as to be a distraction. Then, important grading criteria include:

- clear articulation of your views and arguments
- soundness of what is said
- appropriate appeal to evidence
- clear and concise exposition of the points you are making
- consideration of intellectual context and relevant literature

**How to find out your grades**: d2l has two main ways to help a student find grades. There is a link on the toolbar named 'Grades' which, if clicked on, will display all the grades. Second, if a student clicks on a submitted and graded assignment in the Dropbox, the grade, and feedback comments from the Instructor, will be displayed.

INSTRUCTOR NAME AND CONTACT ADDRESSES:

Instructor: Heshan Sun

Phone: (520) 626-0658 (office)

Availability: d2l (preferred), or office (appointment only).

Virtual Office Time: I hold an office hour every Tuesday night from 8pm-9:00pm in D2L (the Chat room).
Courses

Syllabi

Fall 11

Summer 2011

Spring 11

Fall 10

IRLS418/518 Information Quality
IRLS432/532 Online Searching Fall 2010
IRLS506-001 Research Methods
IRLS506-010 Research Methods for Fall 2010
IRLS506-011 Research Methods
IRLS515-010/011 Organization of Information (Fall 2010 Virtual, Cui)
IRLS520-010 Ethics for Library and Information Professionals (Virtual Fallis)
IRLS520-011 Ethics for Library and Information Professionals (Virtual Mathiesen)
IRLS521 Fall 2010
IRLS524 Information Resources and Services Fall 2010
IRLS550 Information Environments from Hispanic and Native American Perspectives
IRLS553 Issues in Culture & Information Technology (Draft)
IRLS561 Academic Libraries Practice and Administration
IRLS563 Readers' Advisory Services in Public Libraries
IRLS566 Small and Rural Libraries Administration and Practice
IRLS571 Introduction to Information Technology Atkinson
IRLS571-010 Introduction to Information Technology for Fall 2010
IRLS574 Digital Libraries
IRLS588-011 ISSUES IN INFORMATION RESOURCES: Intellectual Freedom
IRLS608 Fall 2010
IRLS671 Introduction to Digital Collections
IRLS675 Advanced Digital Collections (Fall 2010)

Summer 10

Winter 10-11

Spring 10

Winter 09 10

Fall 09

Summer 09

Spring 09

Winter 08 09

Fall 08

Archive of Old Syllabi

Schedules

Core Courses

Course Delivery Options

Course Descriptions

Distributed Electives

Individual Studies: Internships, Independent Studies & Practica

Registration
Required first course: IRLS504

Suggested Courses by Specialization

Suggested Out of Department Courses

Workload

Guided exploration

Click a term to initiate a search.

Audience

for Students (92)
for Faculty (28)
for Alums (24)
for Staff (17)
for Prospective Students (7)
more...

Course

IRLS417 (2)
IRLS418 (1)
IRLS432 (1)
IRLS470 (2)
IRLS488 (6)
more...

People

Adjunct Faculty (152)
Faculty (150)
Staff (17)
Friends (6)

Semester

Fall 11 (29)
Summer 11 (27)
Spring 11 (30)
Winter 10 11 (1)
Fall 10 (20)
more...

Task

Choosing Courses (27)
Advising (5)
Applying (5)
Registering (2)
Submitting Final Paperwork (2)
more...

Topic

Index (33)
Masters (33)
Research (20)
Knowledge River (16)
News (14)
more...