IRLS506-001 Research Methods (On Campus Higgins)

Updated Mon, 08/24/2009 - 19:00

COURSE NAME, NUMBER AND PREREQUISITES:

Research Methods

IRLS 506 Section One

This is a core course for the SIRLS Masters degree; there are no course prerequisites.

Instructor: Margaret Higgins

COURSE DESCRIPTION:

"The course introduces research techniques and their application in social research, while emphasizing the need for good research design. Students will gain both an appreciation of factors involved in research and an ability to critically evaluate research. Statistics will be addressed, with the emphasis being on developing a level of familiarity with statistical concepts. This course will not create statisticians: it will, however, provide a platform for discussion, with experts, of the statistics required for research." Three credit hours.

The course is taught face to face.

My approach to teaching this course is to emphasise, via the use of group work, a critical appraisal of research designs, and to understand that there is no one 'best' design: the driving force behind any chosen design is the problem being addressed.

While learning, we will consider the multiple times that any one of us may have been involved in research - whether it be answering surveys or taking part in experiments. We have nearly all been involved in research, even if unbeknownst to us at the time. We will also be addressing research as reported in the media, to ascertain the quality of the reporting and of the results (as conveyed to the public). I need students to understand that this is NOT a course that covers searching for material in a library or information center as a result of a user's request. This is a course that covers the scientific method of research.

There are usually about 15 sessions in this course, one per week, lasting for up to three hours (with a short break in the middle).
Learning materials will be print based, apart from material the student may find online to augment the print.

On a weekly basis, I will set readings from the text:, the readings will be based on the discussions we have been having that day (and so the readings will consolidate learning); or they will be to ensure that students grasp a point that I will not be addressing directly. Additionally, if I wish students to have some advance understanding of a topic on which I will be speaking, then in advance I will set appropriate reading material. Be warned - I will be asking students to read and absorb quite a lot of 'Campbell and Stanley' (every Research Methods student's favorite!).

Throughout the course, students will be in touch with me via email, via telephone, via chatting before, during, or after class. I hold an 'office' hour during the hour prior to class.

**Lecture Schedule** (subject to refinement as semester progresses)

Aug 24: General Introduction and Expectations
Aug 31: Research: What is it? Why do it?
Sep 7: Labor Day (no class)
Sep 14: The Research Process
Sep 21: Fundamental Research concepts
Sep 28: Designs & Errors
Oct 5: Designs & Errors (cont.)
Oct 12: Basic & Applied Research
Oct 19: Introduction to statistics
Oct 26: Introduction to statistics (cont.)
Nov 2: Qualitative Research
Nov 9: Qualitative (again)
Nov 16: Survey Research
Nov 23: Research & Decision Making
Nov 30: Review
Dec 7: In class Exam

**COURSE OBJECTIVES:**

By the end of the course students should be able to
• identify and implement research strategies appropriate for addressing problems in their own working environment.
• identify well executed, reliable, and valid research
• identify research results which can be applied to their own library or information centre.

Aims of the course
To provide an understanding of the nature, role and value of scientific research.
To demonstrate the importance of, and need for, scientific research.
To familiarize students with a variety of research methods and designs
To enable students to interpret and evaluate research.
REQUIRED COURSE MATERIALS:

Note that the books listed below are readily available either from the publisher or via sources such as Amazon. Please acquire them prior to class. (I grant that this is short notice...but the last thing any student needs to do is worry. It will all come together nicely.)

Required Text:


Required Reading:

Campbell, D & Stanley, J. (1963). Experimental and Quasi-Experimental Designs for Research. Reprinted from Handbook of Research on Teaching. Chicago, IL: Rand McNally College Publishing Company. (Note: this is a classic work and is readily available from a variety of sources)

Required Reading:


Optional but informative reading:

Any issues of the publication Skeptical Inquirer: The magazine for science and reason. Published by the Committee for Skeptical Inquiry

The class emphasis will be on demonstrating absolute and complete knowledge of the assigned texts and of Campbell & Stanley. To this end, to demonstrat your grasp of the material covered in the text and in class, students will be reading and providing weekly written reviews of assigned chapters.

Johnson's book is an easy and terrifically interesting read, and an inexpensive one. There will be an assignment on this work. Feel free to read it before class begins.

COURSE REQUIREMENTS:

Participation (Worth 5%)

I expect input, and few students have failed to meet this expectation. The course is designed to encourage participation.

Paper 1

Please choose either a) or b), below: Due in class September 28th (Worth 15%)

Length: five double spaced pages, excluding references; 12 point font. Use the APA style. (Writing more, or substantially less, than 5 pages will incur penalties); Please write your name on the back of your assignment.
a) Evaluation Mechanisms:
Suppose you are on the board of an agency that is giving a grant to your University library. Please outline the (research) mechanisms by which you would like the outcomes of the grant to be evaluated. Consider the types of evaluations that would be required both during and at the end of the 'project' being funded. Consider also - How would the evaluations be conducted? Who would do them? How valid (in research terms) is each evaluation mechanism? Be as detailed as you can. (If you feel the need to describe the project being funded then please do so - but do it briefly.)

b) Value of Research:
Please compare and contrast the value to society of Library and Information Science research with the value to society of research in another field of your choosing (astronomy? medicine? veterinary science?). (By this I mean research done by academics, practitioners and students who are in their respective fields.) Please find research articles that illustrate and support your statements, and discuss how these articles support your views. Also present a brief critique of the methods used in the research articles you have selected.


Due in class October 19th (Worth 15%)

Length: five double spaced pages, excluding references; 12 point font. Use the APA style. (Writing more, or less, than 5 pages will incur penalties); Please write your name on the back of the assignment.

Write a five page essay outlining in detail the research methods used by Snow and by Whitehead. Critique the methods, do not merely describe them. What were the strengths of their methods? The weaknesses? What does the book - their research - tell us about how progress is made in society? What can we say about the reactions to their findings?

Paper 3 Research Proposal

Due in class on November 23rd (Worth 45%)

Length 10 double spaced pages, excluding references, 12 point font. APA. (Writing more, or less, than 10 pages will incur penalties). Please write your name on the back of your work.

Writing a research proposal will provide you with the opportunity to give in depth thought to your topic of concern. The research proposal will be in report format, containing an introduction, background to the problem, a broad statement on the nature of the problem, a literature review, a theoretical framework in which the problem is placed, a statement of the hypotheses, and a methods section which includes such design details as the variables in the research, how the hypotheses could be tested / measured, which statistical tests are appropriate, and to whom the research results could be generalized. Note that I am not expecting a tremendously detailed proposal - just one that contains all the necessary elements of one. Examples of proposals can be found on line and also in many text books.

Examination In class. December 7th (Worth 20%)

COURSE, SCHOOL, AND UNIVERSITY POLICIES:

Academic Code of Integrity

Students are expected to abide by The University of Arizona Code of Academic Integrity. 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. 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

Assignments will be handed in to me personally in class, on the specified date. If you cannot be in class on that particular day then please make arrangements with me to receive your work in another way - perhaps by email, for example. I do not accept late assignments, except by rare and special arrangement, and only if special circumstances pertain (medical reasons, for example).

Assignments will be returned to you personally, with myriad comments on them. Please note my earlier instructions about placing your name on the back of each assignment. Please also note my instructions about using APA style, and about font size. Advice about APA can be found online.

- Incompletes

The 1997-8 University of Arizona General Academic Manual, p.23 reads

The grade of I may be awarded only at the end of a semester, when all but a minor portion of the course work has been satisfactorily completed. The grade of I is not to be awarded when the student is expected to repeat the course; in such a case the grade of E must be assigned. Students should make arrangements with the instructor to receive an incomplete grade before the end of the semester. If the incomplete is not removed by the instructor within one year the I grade will revert to a failing grade.

GRADING:

A: 100 - 90
B: 89 - 80
C: 79 - 70
Less than a C = 'fail'

Grades will be written on each paper.

INSTRUCTOR NAME AND CONTACT ADDRESSES:

Instructor: Margaret Higgins, PhD
Tel: 520 623 4590 (work)
Tel: 520 406 7813 (cell)
MargaretaHiggins@yahoo.com (preferred email address)
Higgins@email.arizona.edu

Office Hours: 5.30 - 6.30pm i.e. the hour before class

Class Location for Fall 2009: Psych 205

Class meeting times: 6.30 - 9.00

Navigation

- Browse Site
- For Authors

Courses

- Syllabi
  - Fall 11
    - Summer 2011
    - Spring 11
    - Fall 10
    - Summer 10
    - Winter 10-11
    - Spring 10
    - Winter 09 10
  - Fall 09
    - IRLS506-001 Research Methods (On Campus Higgins)
    - IRLS506-010 Research Methods (Virtual Atkinson)
    - IRLS506-011 Research Methods (Virtual Seavey)
    - IRLS515-001 Organization of Information (On Campus Frické)
    - IRLS515-010 Organization of Information (Virtual Cui)
    - IRLS515-011 Organization of Information (Virtual Frické)
    - IRLS520-001 Ethics for Library and Information Professionals (On Campus Mathiesen)
    - IRLS520-010 Ethics for Library and Information Professionals (Virtual Fallis)
    - IRLS524 Information Resources and Services
    - IRLS522-001 Online Searching
    - IRLS553 Issues in Culture & Information Technology
    - IRLS561 Academic Libraries Practice and Administration
    - IRLS570 Database Development and Management
    - IRLS571-010 Introduction to Information Technology
    - IRLS571-011 Introduction to Information Technology (Smith)
    - IRLS572-010 Government Information
    - IRLS574 Digital Libraries
    - IRLS575 User Interface and Web Site Design
    - IRLS588-011 History of the Book