INSC 504 Research Methods in Information Sciences

Spring 2018

Instructor:	Peiling Wang, Ph.D.
Classes:	Tuesdays and Thursdays 4:45 pm - 6:00 pm at https://tennessee.zoom.us/j/283359333
Specifics:	https://utk.instructure.com/
Office:	443 Communications Building; voice mail: (865) 974-3700
Hours:	Posted in course site; also available by appointment
Email:	peilingw@utk.edu

Catalog Description

Research methods in a variety of information environments; primary and secondary research; research project design; research results interpretation; analysis of published research; techniques supporting research process.

Goals/Objectives

This course is required for SIS students choosing the thesis option and is an elective for non-thesis students. It introduces basic knowledge about conducting research in information science and provides opportunities to design research projects using appropriate methods. Upon satisfactory completion of the course, the student will:

- understand the basic process of empirical research and research design
- understand the various research methods used in information science research
- understand the relationships between research questions and research methods
- understand the various techniques for data collection and data analysis
- be able to describe and compare various methods and techniques
- be able to produce research plans and research proposals (required for thesis students)
- be able to evaluate and critique research designs (serve the role as a peer or referee)

Methods of Delivery

Interactive teaching, active learning, and creative and critical thinking are vital to the success of this course. The design of the course incorporates these components into the processes of teaching and learning. Besides lectures, you will do hands-on exercises, labs, and present your own work. As a part of the course design, you will participate in a research project to gain experience as a participant. Students will learn data analytical tools that require computing skills.

This course is delivered using Zoom for the Web-based virtual classroom; you may attend classes from anywhere in the world. For more information or tutorials, visit

https://oit.utk.edu/instructional/tools/liveonline/

The course schedule, materials, assignments, and communication are managed using Canvas courseware, which you may access on the course site using your UT NetID and Password at https://utk.instructure.com/ or http://online.utk.edu/

Required Textbook:

Punch, Keith F. (2014) *Introduction To Social Research: Quantitative And Qualitative Approaches*. 3rd Ed. Thousand Oaks, CA: Sage.

Readings:

Papers or chapters will be accessible in Canvas course site with links from the schedule.

Online References:

Lowry, Richard (2015) *Concepts & Applications of Inferential Statistics*. free acfblackcess provided by the author Professor of Psychology Emeritus, Vassar College at http://vassarstats.net/textbook/(use browser FireFox, Safari or Chrome)

Illowsky, Barbara & Dean, Susan (2013) *Introductory Statistics* (free online, pdf download, or iBooks; https://openstax.org/details/introductory-statistics)

Trochim, William M. The Research Methods Knowledge Base, 2nd Edition. Internet WWW page, at URL: http://www.socialresearchmethods.net/kb/contents.php (version current as of October 20, 2006).

Human Subjects in Research http://cics.cci.utk.edu/irb-information

Optional Textbooks:

If you pursue thesis research, these textbooks will be helpful:

Punch, Keith F. (2006) *Developing Effective Research Proposals*. 2nd ed. Sage Publications.

Wildemuth, Barbara M. (2016) *Applications of social research methods to questions in information and library science*. 2nd edition. Westport, CT: Libraries Unlimited.

Creswell, John W. (2013) *Research design: Qualitative, quantitative, and mixed approaches*. 4nd. ed. Thousand Oaks: Sage.

Vaughan, Liwen (2001) *Statistical methods for the information professional: A practical, painless, approach to understanding, using, and interpreting statistics*. Medford, NJ: Information Today, Inc.; 2001.

Ronald R. Powell and Lynn Silipigni Connaway. (2010). *Basic Research Methods for Librarians*. 5th ed. Westport, NY: Libraries Unlimited.

Assignments and Evaluation Criteria

Assignments are posted to and accessible from Canvas course page. The University of Tennessee grading

system for graduate level courses

A: superior performance	A-: intermediate grade performance
B+: very good performance	B: good performance
B-: intermediate grade performance	C+: less than satisfactory
C: well below the standard expected of graduate students	D or F cannot be used to satisfy degree requirements

Attendance & Participation (20%)

Prepared attendance and participation in course activities are important to success in this course. If you have to miss a class for whatever reasons, you are still responsible for the material covered. Class sessions are recorded for replay. If you miss in-class activities, contact me to arrange a make-up/catch-up session.

As part of the course design, I will be conducting an ethnographic research project on learning in this course. I thus play a duel role of teacher and researcher. You will participate in this research project as a participant. Thus, your role is triple as a learner, participant, and observer.

Conference: Each student must hold a *conference* with the instructor. See Assignment folder for details.

IRB Training: Each student must pass the Collaborative Institutional Training Initiative (CITI) training for research interacting with human subjects.

Knowledge Surveys: Several knowledge surveys will be conducted during class to gauge learning outcomes. This is conducted anonymously as research participation.

Reflective Learning (10%)

Taking a learner-centered approach, you will write journal entries to reflect on your learning: critical incidents, *aha* moments, self-evaluation of progresses to identify milestones and gaps for improvement, and to share strategies and techniques. During the semester, you will use conceptual mapping as a tool to organize and represent your knowledge structure of research methods. The free tool is accessible at https://bubbl.us/ which allows three free maps with limited functions. Your free account will allow you to generate three cognitive maps during the semester (you can delete one and add a new one as well).

Assignments (50%)

1. Identify research areas and topics
2. Set up research goals and questions
3. Design data collection (sampling, instrument, & procedure)
4. Conduct peer review
5. Strengthen analytical skills (quantitative)
6. Strengthen analytical skills (qualitative)

Research project (20%)

Thesis students complete a research proposal. Non-thesis students may choose alternative projects such as

critical literature review, pilot data collection, data analysis, ... Details are in the assignment description. Discuss with the instructor.

Academic Integrity

"Study, preparation, and presentation should involve at all times the student's own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that the student present their own work in all academic projects, including tests, papers, homework, and class presentation. When incorporating the work of other scholars and writers into a project, the student must accurately cite the source of that work. For additional information see the applicable catalog or the UT Libraries site. See also *Honor Statement*." (at http://hilltopics.utk.edu/academics/)

Cheating, plagiarism, providing unauthorized help and other acts of dishonesty violate the rule of academic honesty; the offender will be subject to penalties as set forth in *Hilltopics*.

Disability Statement

Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services (ODS) at 865-974-6087 or visit the office at 100 Dunford Hall to document his or her eligibility for services. ODS will work with students and faculty to coordinate reasonable accommodations for students with documented disabilities. (Retrieved from http://ods.utk.edu/frequently-asked-questions/)

Diversity Statement

The College of Communication and Information "recognizes and values diversity. Exposing students to diverse people, ideas, and cultures increases opportunities for intellectual inquiry, encourages critical thinking, and enhances communication and information competence. When all viewpoints are heard, thoughtfully considered, and respectfully responded to, everyone benefits. Diversity and fairness unite us with the wider professional and global community." (Retrieved from http://www.cci.utk.edu/diversity-statement)

Policy on Inclement Weather

If the UT Knoxville campus is officially closed, all classes will be canceled. You will be informed by the school's listserv. You may check the UT Knoxville campus number 865-974-1000 or Website for information. https://safety.utk.edu/emergency-management/inclement-weather-policy/

IT Problems

SIS Help line: 865-974-7913 or 1-888-378-9338 (toll free). Zoom Help: (865) 974-3117 or 1-877-974-3117 (toll free). OIT helpdesk: 865-974-9900 or online at http://help.utk.edu.

Schedule

In Canvas course