

STS 5514 (Index 9067) Fall 1996
Research Designs and Practices for STS

Instructor: Gary Downey Associate Professor, Science and Technology Studies
Office: Lane 332 Hours: M 3:00-4:30, W 3:00-4:00 or by appt. Phone: 231-4761

SYLLABUS

Course Description: This course is organized to help students develop research skills through variable combinations of classes and workshops. It contributes to the recent growth in learner-oriented pedagogy, which builds on the recognition that the transmission of knowledge and practices shapes and presents challenges to the learners involved, who are already theorists of their lives and selves. It is interdisciplinary in the sense that it explores possibilities for collaboration among methodological strategies from distinct fields. Because the course presumes that students desire unique configurations of research skills to fit their research projects, it is actually a population of courses whose size equals the number of students participating in the course. The semester-long questions guiding the course are: How does my research intervene in the field of study? How is the meaning of research changing in the academy today? What does it mean to do interdisciplinary research? Workshop topics include: ethnography, open-ended interviewing, telephone interviewing, archival research, quantitative research, grantsmanship, research online.

Course Requirements:

Students are responsible for working with the instructor to define course requirements appropriate to their status. The course is designed to accommodate at least six different categories of student participant:

1. Fully enrolled, wanting a methods survey, expecting a grade: will likely attend first three classes and some workshops, as well as other tasks.
2. Fully enrolled, wanting only to develop a research skill that may serve to replace the second language requirement, expecting a grade: will likely attend first three classes and build an intensive experience around one workshop, as well as other tasks.
3. Fully enrolled, wanting both a methods survey and to develop a research skill that may serve to replace the second language requirement, expecting a grade: will likely attend first three classes and some workshops, as well as other tasks, and build an intensive additional experience around one workshop (note: the intensive experience around one workshop would have to be in addition to regular course requirements--I am willing to help those students who are willing to do this work.)
4. Fully enrolled, pass-fail grading: attendance/participation will depend upon goals
5. Enrolled as official audit: will likely attend one workshop or do independent study.
6. Guest participant, not enrolled: will likely attend one workshop, etc.

Class Schedule

Aug 29 Wk 1 Anatomy of the Experiment: A working meeting to construct learning plans. For example, an intensive project in open-ended interviewing could include taping and transcribing two interviews; compiling an annotated bibliography on interviewing strategies; using text management software for analyzing interviews; interviewing experienced interviewers about interviewing; analyzing the use of interviews in texts; presenting material on interviewing at a workshop, and so on.

Sep 5 Wk 2 How does my research intervene in the field of study?
Readings: Downey and Dumit, "Locating and Intervening"; Downey and Rogers, "On the Politics of Theorizing in a Postmodern Academy"; Downey and Lucena, "Engineering Selves: Hiring In to a Contested Field of Education"

Sep 12 Wk 3 How is the meaning of research changing? (may be postponed/ changed)
Reading: Michael Gibbons et al, *The New Production of Knowledge*

Sep 19 Wk 4 Locating interdisciplinary research (may be postponed/changed)
Reading: Daryl Chubin et al., *Interdisciplinary Analysis and Research*

Other classes may be scheduled as appropriate.

Schedule of Workshops

Workshop #1 Archives: How to Prepare for Them and What to Expect

Main Instructor: Arnold Schuetz. Others instructors: Eric Ackerman, Dick Burian, Ann Laberge, Moira Rogers, Voula Saridakis. Although depositories of knowledge, archives are substantially less "user friendly" than libraries. Restrictions may apply for their use, and they may be poorly catalogued. Because archival research often requires lengthy, expensive trips, it is important to prepare well. In addition to providing a general introduction and overview, instructors will address other frequently-encountered problems of interpretation and use. Students will help catalogue the papers of the late Robert Marshak, a distinguished physicist active in the Manhattan Project and post-WWII scientists' movement.

Capacity: 20 Time/location: Schultz 109, Tuesdays 2:30-5:00: Oct 8, Oct 15, Nov 12

Workshop #2 Anthropological Approaches to Ethnographic Methods

Main Instructor: Anita Puckett Other instructors: Gary Downey, Jan Nespor

This workshop explores the value of ethnographic methods for research involving human social interaction. Particular emphasis is given to linguistic research methods, including speech pragmatics in data collection and analysis. Instructors will offer guidance on small research projects, exploring how to identify distinct perspectives, make these more visible, and assess the value of such knowledge. Be sure to complete a short selection of readings prior to the workshop.

Capacity: 20 Time/location: Schultz 109, Mondays 1-3:00: Oct 7, Oct 21, Nov 4, Nov 18

Workshop #3 Grantwriting Strategies

Main Instructor: Gary Downey Other instructors: Franz Foltz, Doris Zallen

Writing a grant proposal is like writing an article for the wrong journal--one has to adapt one's argument for a new audience. The sequence one follows in preparing a proposal differs from the sequence of sections in a finished proposal. The methods and procedures section is most important. The finished product should be highly self-referential. Class time will be split between mapping the world of grants and writing and reviewing grant proposals.

Capacity: 20 Time/location: Lane 151, Thursdays 9:30AM-12: Oct 3, Oct 24, Nov 7

Workshop #4 Online Research: Finding Research with Electronic Databases

Main Instructor: John Stemmer

This workshop will present the various types of electronic databases available, the methods for accessing them and the strategies for searching them. It will cover both VT databases and Internet resources and emphasize social science and humanities materials. An optional initial class meeting will provide a basic introduction to the Internet.

Capacity: 20 Time/location: Newman Library computer classroom (see reference desk):
Thursdays 3:30-5:00: Oct 10 (intro), Oct 17, Nov 7, Nov 14.

Workshop #5 Interviewing Face to Face

Main Instructors: Gary Downey and Elizabeth Creamer Other Instructor: Dick Burian, Steve Weiss

How do I approach someone for an interview and then prepare for it? How do I manage an interview once I am in there? How do I get inside someone's "referential frame" and avoid being avoided as an outsider? When and how can I take advantage of an outsider status? What are the differences between ethnographic interviewing, scheduled interviewing, oral history, etc.? How do I go about coding data for emerging themes and categories? Is text management software helpful? How do I interpret people's interpretations of themselves and how do I deal with apparent conflicts in my data? What sorts of ethical issues might I expect to confront and how might I deal with them? Students will find answers to these questions by experiencing the steps themselves.

Capacity: 20 Time/location: Lane 151, Thursdays 9:30AM-12: Oct 10, Oct 31, Nov 14

Workshop #6 Statistics without Numbers: A Metatheoretical Approach to Number Crunching

Main Instructor: William Snizek Other instructors: Carol Bailey, Michael Hughes

Participants will become familiar with the function and application of various statistical measures in the analysis of social science data. We will explore the appropriateness of different forms of statistical analysis given such things as the nature and size of a sample, the level of measurement, and one's purpose in doing the analysis. No computer or computation is required!

Capacity: 20 Time/location: Schultz 109 Mondays 7-9PM Oct 14, Oct 21, Nov 11

Workshop #7 Computer Assisted Telephone Interviewing

Main Instructors: Deborah Collins, Susan Willis, Mike Clark

Taught by personnel from the Virginia Tech Center for Survey Research, this workshop provides an introduction to the procedures used in conducting successful telephone surveys.

Participants will gain experience with interviewing techniques, confidentiality issues, ethics in survey research, as well as with the Computer Assisted Telephone Interviewing system.

Participants will also gain the opportunity to contribute to an ongoing CSR Project.

Capacity: 18 Time/location: Center for Survey Research Initial training Nov 7- 8, 5:30-8:30PM, plus two additional work sessions.