

Research Methods for Texts and Technology

ENG 6812

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Hours: Tues. 11-2 and Wed. 12-2
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Course Description

The Texts and Technology program, as a doctoral program, is primarily concerned with research, that is, developing new knowledge and insights. Students research the connection between textuality and various technologies, particularly digital technologies. The term and concept “texts” encompasses words, of course, but also visual discourse, multimedia, hypertext, and interactivity. Existing and emerging technologies offer new possibilities, and remediated versions of existing forms, for creating and crafting meaning for many different purposes. We face a vista of new opportunities for narration, persuasion, creativity, aesthetic experience, entertainment, communication, learning, and enrichment. It is the purpose of the program to research these possibilities by applying and testing existing theories and developing new theories, principles, practices, and knowledge. We do this through the synergy of bringing together the textual studies of English and digital technologies.

The objectives of the course are to provide a brief introduction to the following topics essential for doctoral research:

- Philosophy of empirical research
- Quantitative research methods
- Qualitative research methods
- Basic descriptive and inferential statistics
- Research design
- Reporting research
- Research topics relevant to Texts and Technology
- Critical appraisal of published research.

Because our Texts and Technology program represents an emerging field which is in the process of defining itself and because it is intrinsically interdisciplinary, we will draw from many different fields in this seminar. We will draw from English studies, of course, including literature and discourse studies, as well as from computer science, digital media, education studies, instructional technology, technical communication, graphics, and cognitive psychology. Through your work and that of others, you will be defining the field.

A doctoral program yields graduates prepared for and committed to producing published original research as a significant contribution to the field. Among your first such contributions will be your doctoral dissertation. In most cases in the Texts and

Technology program, this will be a research study that yields information or insights that can be confirmed and can stand up to critical scrutiny. This course prepares you to begin this dissertation research process.

We will be learning by doing and by studying what others have done. In the first half of the semester, we will be discussing theory and principles together with specific applications or instances. Theories will be compared to each other and their strengths and limitations discussed. Potential applications of theories will be discussed and actual applications as represented in published research will be discussed and critically appraised.

In the second half of the semester, you will be working on a single, detailed proposal for research relating to Texts and Technology. This proposal will be complete and rigorous enough to stand up to critical scrutiny and be viable as an actual proposal for research funding (though you are not necessarily committing yourself to this topic for your actual dissertation). Crafting this proposal will involve a good deal of work whether in the classroom, the laboratory, or online, and include feedback from me.

Among the activities involved in this group project are the following:

- Brainstorming research areas
- Achieving focus on a research area and problem
- Articulating the research problem
- Researching potential funding sources, including deadlines, formats, examples
- Bibliographic research, primary and secondary sources and literature review
- Choosing the research methodology
- Explaining how human subjects issues will be dealt with
- Defining concepts and measuring instruments
- Defining population, sample, context, purpose
- Critical review of concepts and methodology
- Drafting a complete research proposal

You will need to keep up with the readings and prepare for class discussions by thinking about the strengths and limitations of the principles you have read about and how these principles can be applied in practice. Active participation in seminar discussion is a course requirement and an important factor in grading.

The course is intended for doctoral students in the Texts and Technology program. It assumes, therefore, that you are already familiar with bibliographic research techniques from earlier graduate courses and the general structure of theses and dissertations.

UCF made the move from dissertations in paper to an all-electronic format several years ago. As you move toward completing your dissertation, you will have to familiarize yourself with the format and rules for UCF electronic theses and dissertations. If you are conducting research in any way involving a human subject, you will also need to familiarize yourself with the rules and expectations of UCF's Institutional Review

Board (IRB) and complete an online tutorial on the ethics of research with human subjects.

Texts

- Urdan, Timothy C. *Statistics in Plain English, 4th edition*. Routledge: New York, 2017 (sic).
- MacNealy, Mary Sue. *Strategies for Empirical Research in Writing*. Boston: Allyn and Bacon, 1999.
- Vogt, Paul W., Dianne C. Gardner, Lunne M. Haefele. *When to Use What Research Design*, New York: Guilford Press, 2012.
- Additional readings as handouts, or as Word or Acrobat files from me, the course website, other websites, and from UCF Library electronic resources.

Graded Productions and Weightings

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|---|------------|
| • Quiz, critique of article | 15% |
| • Review, written & oral report, two articles (10% ea.) | 20% |
| • Literature review for proposal | 10% |
| • Statistics quiz | 15% |
| • Class preparation and participation | 20% |
| • Research Proposal | <u>20%</u> |
| | 100% |

Grading

Grading in a course in the humanities is a complex activity. In assigning grades, I am rendering my informed, experienced professional judgment on the basis of content, clarity, form, and conventional expectations for doctoral studies in the fields related to Texts and Technology. Please feel free to discuss with me after class or during office hours any concerns you might have about particular grades. Attendance and participation in class discussions and in group activities are course requirements and are factors in your course grade.

Calendar of Assignments

This is only a rough overview of topics we will explore this semester. The general pattern will be to discuss theory and principles from the readings, then discuss applications. (This schedule is only tentative--expect changes! The assignments made in class will of course override this schedule.)

- 8/25 Introduction to the course**
Introduction of selves
Purposes:

Review, analyze, critique, design, and propose research
Prepare for dissertation
Contribute to the field as a peer.

9/1 Basics of empirical research, scientific method, indicators, hypotheses

Articles:

- * Charney, "Empiricism is Not a Four-Letter Word"
- * Dombrowski, "Language and Empiricism"
- * Dombrowski, "Lessons of the Challenger Investigations" as Discourse Analysis.

9/8 Feminism and/or Empiricism

Vogt *et al.*, Preface, General Introduction, and Intro. to Part I, the Research Process

Articles:

- * MacNealy, Chp. 12
- * Fox Keller, "The Gender?Science System: or, Is Sex to Gender as Nature is to Science?"
- * Brasseur, "Contesting the Objectivist Paradigm: Gender Issues in the Technical and Professional Communication Curriculum"
- * Ganbois, Patterson, Jarvis, and Cunningham, "Qualitative Methodology: Two Examples in Feminist Research"
- * The entry on "Feminist Epistemology and Philosophy of Science" on the online [Stanford Encyclopedia of Philosophy](http://plato.stanford.edu/entries/feminism-epistemology/) at <http://plato.stanford.edu/entries/feminism-epistemology/> (For another introduction and review, I suggest my chapter "Feminist Critiques of Science and Gender Issues" in my book *Humanistic Aspects of Technical Communication*, Baywood, 1994.).

9/15 Foundations of Empirical Research

MacNealy, Chps. 1 and 2 [displayed as 1.2]

Vogt, Chp. 5

Articles:

- * Krull, "What Practitioners Need to Know to Evaluate Research"
- * Grove, "Bringing Communication Science to Technical Communication"
- * Fonstad, "Kansas is Flatter Than a Pancake" (parody of research)

9/22 Empirical and Quantitative, Literature Review

Discuss possible research topics

MacNealy, Chps. 3 and 4

Articles:

- * Trumbo, "Research Methods in Mass Communication Research: A Census of Eight Journals"
- * Dillon, "Literature Review"

- * Mehlenbacher, “Active and Interactive Learning Online: A Comparison of Web-Based and Conventional Classes”
- * Sherry, “Effects of Violent Video Games: A Meta-Analysis”

9/29 Ethics

Vogt, Introduction to Part III

Articles:

- * Anderson, “Simple Gifts: Ethical Issues in the Conduct of Person-Centered Composition Research”
- * Williams, “Intel’s Pentium Chip Crisis: Ethical Analysis”
- * UCF Institutional Review Board
- * ACHRE: Human Radiation Experiments (Clinton’s Speech)
- * Dragga, “Is This Ethical?”
- * Dombrowski, “Can Ethics Be Technologized?”

10/06 Surveys, Interviewing, Focus Groups

MacNealy, Chps. 8 and 9

Vogt, Chp. 6

Hypothesis, Research Design, Objective Indicators

Articles:

- * Wood, “Dead and Alive: Beliefs in Contradictory Theories”
- * DeJong, “Reliability and Validity”
- * Kreth, “Survey of Co-op Writing”
- * Morgan, “Survey of Graduate Study”

10/13 Qualitative Study

Vogt, Chp. 3

Articles:

- * Kincaid, “Traditional vs. Web-Based Instruction for Health Care”
- * Spyridakis, “Credibility of Online Health Information”
- * Te’eni, “Organizational Communication: Qualitative Field Study”
- * Gerber, “From Mario to FIFA: Qualitative Research”
- * Silker, “Technical Communication in Cyberspace: A Qualitative Study”
- * Hussain, “The Attitudes, Feelings, and Experiences of Online Gamers: A Qualitative Analysis”

10/20 Experimental Research

MacNealy, Chp. 5

Vogt, Chp. 4

Urdan, Chps. 1-3

Articles:

- * Isakson, “Semantics and Syntax”
- * Worley, “Color and Cognitive Styles”

- * Aydemir *et al.*, "The Effect of Reading from Screen on the 5th Grade Elementary Students' Level of Reading Comprehension on Informative and Narrative Type of Texts"

10/27 Report to Class on Initial Work on Proposal

Ethnography, Case Study

MacNealy, Chps. 10 and 11

Urdu, Chps. 4-5

Articles:

- * Poole, "Discussion-Oriented Online Course: Case Study"
- * Kastman, "Privacy and Ownership in Research"
- * El-Nasr, "Game Analytics for Games User Research, Part 1"
- * Leggitt, "Emotions and Irony" Problems with Complex Concepts
- * Rosenbaum, "Measuring Success of Visual Communication"
- * Payne, "Speaking Ebonics: Ethos, Credibility, Perceived Sociability"

11/3 Literature Review Due

Discourses/Text Analysis and Combined Methods

MacNealy Chps. 6 and 7

Articles:

- * Costanza, "Mic Check! Media Cultures and the Occupy Movement"
- * Skogerson, "Cyber robots and emotions"
- * Lam, "Linguistic Politeness in Student-Team E-mails: Its Impact on Trust Between Leaders and Members"
- * Wright, "Implicature, Pragmatics, and Documentation: A Comparative Study"

11/10 Quiz: Critique of an Article (via Web)

Discuss Quiz

Articles:

- * Coppola, "Science vs. Bricolage: Alternative Models of Research"
- * Fuller, *et al.*, "An Examination of Deception in Virtual Teams: Effects of Deception on Task Performance, Mutuality, and Trust"
- * Skierkowski *et al.*, "To Text or not to Text? The Importance of Text Messaging Among College-Aged Youth"

11/17 Discuss Progress on Proposal in Class

Urdu, 6-7

Articles:

- * Lentz *et al.*, "Towards Evidence-Based Writing Decisions: The Knowledge Base Comprehensible Text"

11/21 Individual/Group Work on Proposal
Quiz on Statistics
Individual/Group Conferences on Proposal

11/24 Thanksgiving Break 11/24-26

12/1 Findings, Qualitative and Quantitative
Urdu, Chps. 8 and 12

12/6-12 Finals Period
Complete Proposal Due
Self-Reflection Report Due