

## S15-5007: Research Methods with Statistical Applications

This course overview is being provided by the lead instructor and may be used for reference as you prepare for the Research Methods with Statistical Applications proficiency exam. The exam is designed to measure your knowledge of the course domains and core competencies which are standard across sections of the course. Specific course content may vary by instructor, therefore course syllabi are not provided.

### **COURSE OVERVIEW:**

S15-5007 focuses on evaluation at a variety of levels (individual, groups, organization, and community). Includes problem assessment, specification and monitoring of interventions, validation of measurement methods, and analysis and presentation of data. Covers statistical methods that are necessary to be good consumers of research and that serve as a foundation for other statistics courses.

### **COURSE DOMAIN AND BOUNDARIES:**

This course has three main goals:

1. Students will understand the basics of social work and public health research. Core research concepts are presented including specification, design, data collection, measurement, survey design, bias, qualitative and quantitative research, clinical research (multi-subject and single subject), use of computers in data retrieval, data management and data analysis, research implementation, interpretation, and dissemination.
2. Students will understand how research is used in evidence based practice. This includes the ability to frame empirically answerable questions, locate data relevant to those questions, critically evaluate such data, and apply it to practice situations.
3. Students will develop a deeper understanding of the research process through designing and executing a research project. *“Tell me, I’ll forget. Show me, I’ll remember. Involve me, I’ll understand” – Chinese Proverb*

As core components of the course, values are explored and ethics are taught as they apply to research, and the intertwined nature of diversity, health, social, and economic justice, and research is presented and explored.

### **COURSE PEDAGOGICAL ELEMENTS:**

Pedagogical elements common to all sections of this course include:

1. This course includes in-class demonstrations of computerized information retrieval systems. These are shown at general (e.g. Wikipedia and/or Google), scientific (e.g. Google Scholar, PsychInfo), and specialty (e.g. Cochrane Collaboration, NGO) levels. Students will complete assignments demonstrating mastery of the above kinds of search engines.
2. Instructors will demonstrate critical evaluation of existing research which is relevant to social work practice. Students will complete assignments demonstrating their ability to criticize existing research at a basic level.
3. Students will complete a research project (possibly in groups) demonstrating their ability to formulate a question, choose and execute a design, implement the research, analyze and interpret resultant data, and create a product in a format fit for dissemination (e.g. PowerPoint, poster, paper, agency presentation, etc.)
4. Instructors will demonstrate/model the EBP process, showing how specific field-generated questions can be (1) formulated and operationalized, (2) how best available evidence can be located, and (3) critically evaluated, and applied to practice. Main emphasis will be on steps 1 -3 of the EBP process.

5. Instructors will provide students with examples of critical ethical failures in the history of social work research. Students will demonstrate compliance with ethical standards in their assignments.

**CORE COMPETENCIES:**

Demonstrate Ethical and Professional Behavior	C1
Engage Diversity and Difference in Practice	C2
Advance Human Rights and Social, Economic, and Environmental Justice	C3
Engage in Practice-informed Research and Research-informed Practice	C4
Assess Individuals, Families, Groups, Organizations, and Communities	C7
Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities	C9

**READINGS:**

*Please note, these readings may vary across sections; this is a sample from the lead instructor's syllabus.*

Abell, N., Springer, D. W., & Kamata, A. (2009). [\*Developing and validating rapid assessment instruments\*](#). New York, NY: Oxford University Press.

Bronson, D. E. & Davis, T. S. (2011). [\*Finding and evaluating evidence\*](#). New York, NY: Oxford University Press.

Campbell, D. T., and Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Chicago: Rand McNally.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage.

Delva, J., Allen-Meares, P., & Momper, S. L. (2010). [\*Cross-cultural research\*](#). New York, NY: Oxford University Press.

Denzin, N. K. & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.

Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners* (4<sup>th</sup> edition). Thousand Oaks, CA: Sage Publications.

Rubin A. & Babbie E. (2013). *Essential research method for social work* (4<sup>th</sup> edition) . Belmont, CA: Brooks/Cole.