© This course outline is the property of NCSSS and the instructor and may be distributed only with written permission.

I.  COURSE PURPOSE

This course is designed to give foundation level graduate social work students a basic understanding of the research process and statistical methods used by social workers and other social scientists. The course content is rooted in the Code of Ethics of the National Association of Social Workers placing emphasis on the appropriate professional ethical conduct in engaging in research including confidentiality, privacy, informed consent, and sensitivity to diversity in all research activities. Particular attention is given to research addressing various diverse groups and populations at risk. Throughout the first half of the course, student critical thinking is fostered as students engage in the development and writing of their own research proposal while increasing their knowledge of the theoretical perspectives guiding their research, hypothesis testing, the application of research methodology, and making inferences about causality. During the second half, student methodological competence is further strengthened by increasing their knowledge of various statistical techniques and engagement in various practice exercises and assignments covering statistics used for describing sampled participants, and for inference, including mean comparisons using t tests and analysis of variance, bivariate relationships using correlation, and frequency associations using chi square. Although some focus is devoted to increasing student competence in understanding the calculation approach for each statistical technique, primary focus is devoted to strengthening student ability in applying and interpreting statistical tests.

II.  EDUCATIONAL OBJECTIVES
Students are expected to be able to
1. Formulate a research problem;
2. Identify a theoretical perspective underpinning the research problem;
3. Formulate a research question and testable hypothesis;
4. Identify independent and dependent variables and levels of measurement;
5. Distinguish between reliability and validity of measures or instruments;
6. Develop probability and non-probability sampling plans;
7. Describe and distinguish between non- and experimental group designs;
8. Identify and critique threats to internal and external validity of designs;
9. Identify and address research issues that should be considered when conducting research with diverse and vulnerable populations including children, pregnant women, incarcerated or mandated clients, persons affected by cognitive disabilities, members of minority groups, and any subjects who may be different from the researcher;
10. Identify ways to protect at-risk populations when conducting research;
11. Identify and address ethical issues arising during conduct of social work research;
12. Select appropriate statistical techniques for specific research questions;
13. Interpret results of various statistical techniques.

III. COURSE REQUIREMENTS

A. Required Texts


B. Other Recommended Resources and Media


C. **Course Assignments**

Students are expected to attend all classes and to participate meaningfully in class discussions. It is also expected that each student will complete the readings indicated in the course outline.

There will be two assignments.

1. Problem Formulation paper: Assignment I (See attached.)
2. Data Analyses – Assignment II a-b: There are two data analysis oriented assignments that are handed out in class during the 2nd half of the course and are to be completed within one week.

**All assignments are to be typed double-spaced.** Full credit will not be given for assignments which are submitted late. **No assignment will be accepted after it has been reviewed in class.**

Throughout the course, the instructor may also utilize a series of un-graded exercises for class practice or homework in order to strengthen student knowledge and skills.

In addition, there are two in-class written examinations, a mid-term and a final.

D. **Grading Policy**

Each assignment (I, II) and examination (mid-term, final) is worth 25% of the total grade. Grades are based on the University grading system as described in the Graduate Announcements.

Please refer to the CUA Announcements or MSW Program Handbook for Academic Requirements that include scholastic and behavioral requirements.

E. **Course and Instructor Evaluation**

NCSSS requires electronic evaluation of this course and the instructor. At the end of the semester, the evaluation form may be accessed at [http://evaluations.cua.edu/evaluations](http://evaluations.cua.edu/evaluations) using your CUA username and password. Additional informal written or verbal feedback to the instructor during the semester is encouraged and attempts will be made to respond to requests.
CLASS EXPECTATIONS

A. **Scholastic Expectations**
   Please refer to NCSSS Announcements, or appropriate Program Handbook for Academic Requirements, including scholastic and behavioral requirements. All written work should reflect the original thinking of the writer, cite references where material is quoted or adapted from existing sources, adhere to the latest APA format, and should be carefully proof read by the student before submission to the instructor for grading. Inappropriate referencing, misspelling, or poor sentence structure are considered in grade formulation.

B. **Academic Honesty**
   Joining the community of scholars at CUA entails accepting the standards, living by those standards, and upholding them. Please refer to University Policy and appropriate Program Handbooks.

C. **Accommodations**
   Students with physical, learning, psychological or other disabilities wishing to request accommodations must identify with the Disability Support Services (DSS) [http://disabilityservices.cua.edu/](http://disabilityservices.cua.edu/) or 202-319-5211, and submit documentation of a disability. If you have documented such a disability to DSS that requires accommodations or an academic adjustment, please arrange a meeting with the instructor as soon as possible to discuss these accommodations.

---

CLASS SCHEDULE

<table>
<thead>
<tr>
<th>Class</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Introduction to Research in Social Work Practice</strong></td>
</tr>
<tr>
<td></td>
<td>1. Sources of knowledge</td>
</tr>
<tr>
<td></td>
<td>2. Reasons for social work research</td>
</tr>
<tr>
<td></td>
<td>3. Quantitative and qualitative approach</td>
</tr>
<tr>
<td></td>
<td>4. Research roles</td>
</tr>
<tr>
<td></td>
<td>5. Ethical issues and professional responsibility</td>
</tr>
</tbody>
</table>

**Required Readings**
Engel & Schutt (2005): Chapter 1, Science, Society, and Social Work Research; Appendix G: Code of Ethics of the National Association of Social Workers

**Recommended Readings:**

| 2     | **Exploration of Research Approaches** |

11/15/2007
1. Literature review
2. Quantitative and qualitative approaches
3. Sensitivity to gender, and ethnic/cultural issues in research
4. Formulation of research questions and hypotheses
5. Identification of variables

**Required Reading**
Appendix D, Finding Information
Appendix F, Annotated list of web sites

**Recommended Readings:**

### 3 Measurement
1. Functions of measurement
2. Conceptualization and operationalization of variables
3. Levels of variable measurement
4. Validity and reliability of measures and instruments
5. Standardized measurement instruments

**Required Reading**
Engel & Schutt (2005): Chapter 3, Conceptualization and Measurement

**Recommended Readings:**

### 4 Sampling
1. Sampling strategy
2. Probability samples
3. Non-probability samples

**Required Reading**
Engel & Schutt (2005): Chapter 4, Sampling

**Recommended Readings:**

### 5 Causality and Research Designs
1. Criteria for causal explanation
2. Group experimental designs
3. Ideal Experiment
4. Internal and external validity of designs

**Required Reading**
Engel & Schutt (2005): Chapter 5, Causation and Research Designs; Chapter 6, Experimental Designs

**Recommended Readings:**

6 **Data Collection**
   1. Understanding surveys
   2. Other methods of data collection

**Required Reading**
Engel & Schutt (2005): Chapter 8, Survey Research

**Recommended Readings:**

**DUE ASSIGNMENT I – Problem Statement and Hypothesis Formulation paper**

7 **MID-TERM EXAMINATION**

8 **Descriptive Statistics**
   1. Descriptive vs inferential statistics
   2. Frequency distributions and percentages
   3. Graphs

**Required Reading**
Weinbach & Grinnell (2007): Chapter 1, Introduction to statistical analysis
   Chapter 2, Frequency distributions and graphs

**Recommended Readings:**

9 **Descriptive Statistics, continued**
   1. Measures of central tendency
   2. Measures of dispersion

11/15/2007
3. The normal distribution
4. z-scores and percentiles

**Required Reading**
Weinbach & Grinnell (2007): Chapter 3, Central tendency and variability
Chapter 4, Normal distributions

**Recommended Readings:**

10 **Hypothesis Testing**
1. Formulating hypotheses
2. The logic of probability
3. Significance level
4. Substantive vs statistical significance

**Required Reading**
Weinbach & Grinnell (2007): Chapter 5, The basics of hypothesis testing
Chapter 6, Sampling distributions and testing of the null hypothesis

**Recommended Readings:**

**ASSIGNMENT IIa – hard copy handed out by the instructor**

11 **Testing for Linear Relationships**
1. Logic of bivariate correlational research
2. Pearson r correlation coefficient
3. Strength of the correlational relationship
4. Basic understanding of multiple regression results

**Required Reading**
Weinbach & Grinnell (2007): Chapter 8, Correlation
Chapter 9, Regression analysis

**Recommended Readings:**

**DUE – Assignment IIa**

12 **Testing for Difference of Means**
1. The logic of mean comparisons
2. t-test for one sample, and independent and dependent samples
3. One-way analysis of variance

**Required Reading**
Weinbach & Grinnell (2007): Chapter 11, t tests and Analysis of variance

**Recommended Readings:**

13 Testing for Associations
1. The logic of chi-square test
2. Expected vs. observed frequencies

**Required Reading**
Weinbach & Grinnell (2007): Chapter 10, Cross-tabulation

**Recommended Readings:**

** ASSIGNMENT IIb – hard copy handed out by the instructor **

14 Last Class
1. Bring an extra copy of your assignment IIb to class for review
2. Preparation for the final examination

**FINAL EXAMINATION – date will be announced by the instructor**
SSS 590 - Social Work Research

Assignment I - Problem Statement and Hypothesis Formulation

*Social workers should take responsibility and credit, including authorship credit, only for work they have actually performed…NASW Code of Ethics (1996), Section 4.08(3)*

Students are expected to complete this assignment on their own, without assistance from or consultation with classmates, other students, or anyone else.

This assignment should be a brief, *scholarly paper*, which presents the beginning stages of a research proposal. The content should

1. Identify a specific issue/problem area related to social work research in which you would propose to do further research. Indicate relevance to social work.
2. Present information or literature regarding the severity and/or extent of the problem.
3. Conduct literature review and summarize the findings. Indicate how your proposed research would expand the current knowledge of the issue.
4. Formulate a specific research question related to the issue. This question should flow from the literature review.
5. Formulate a testable hypothesis relating two or more variables. This, too, should flow from the literature review.
6. Identify the unit of analysis.
7. Identify whether the variables are independent, dependent, or control (intervening).
8. Indicate how you would conceptually define each variable.
9. Indicate how you would operationalize or measure each variable.
10. Discuss any ethical issue that pertains to the proposed research investigation.

- The scholarly paper should be APA 5th edition style, 7-10 pages in length, excluding the title page and reference pages. Abstract page is not necessary.
- The literature review is expected to include at least 10 pertinent and scholarly references. These should be drawn from social work and/or other disciplines.
- The content, organization, and style are included in the grade.