

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ON**

**COURSE OUTLINE**



**COURSE TITLE: RESEARCH TECHNIQUES**

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**CODE NO.: GER 216 SEMESTER: III**

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**PROGRAM: COMMUNITY GERONTOLOGY**

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**AUTHOR: N. MCCLELLAND**

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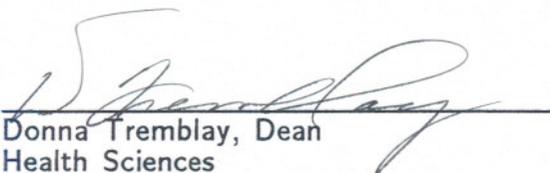
**INSTRUCTOR: DOROTHY O'CONNOR**

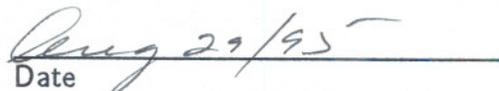
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**DATE: SEPTEMBER 1995 PREVIOUS OUTLINE DATED: MAY 1995**

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**APPROVED:**

  
Donna Tremblay, Dean  
Health Sciences

  
Date

**RESEARCH TECHNIQUES**

**GER 216**

**TOTAL CREDITS: 45**

**PREREQUISITE(S): NONE**

**I. PHILOSOPHY/GOALS**

This course is designed to acquaint students with the elements of research and development in program planning. Topics for discussion include research methodology, designing surveys, and managing and interpreting data/results.

**II. STUDENT PERFORMANCE OBJECTIVES (OUTCOMES)**

1. Identify the concepts basic to survey research and program proposal development.
2. Examine the process of conceptualizing a program and identifying the need based on the input of researched documentation, observing similar programs and dialoguing with the community.
3. Utilize questionnaire design techniques in developing a needs survey questionnaire.
4. Examine variables which contribute to the successful administration of questionnaires.
5. Demonstrate an ability to summarize and analyze survey results for effective support to plan and implement an effective program.
6. Identify the scope of program planning needed in the field of gerontology.
7. Demonstrate an ability to examine needs analysis results, proposals and program data and present it in an organized format for agency and/or government purposes.

**III. TOPICS TO BE COVERED**

**A. Research**

1. Define research, basic terms and concepts
  - dimensions, scope and method
2. List reasons to do research in the field of aging.
3. Explain the procedures of the Scientific Method.
  - specifying goals
  - reviewing the literature
  - formulating and testing hypotheses
  - measuring and recording
  - analyzing the data
  - inviting scrutiny
4. Examine research contributions in gerontological periodicals for example of the scientific method.
5. Identify the parts/stages of Research design.
  - the research question
  - choosing the sample
  - methods of data collection
  - analysis and presentation of data
  - form of publication
6. Describe the differences between Quantitative and Qualitative Research.
  - main characteristics
  - methods
  - advantages and disadvantages
7. How are studies in Gerontology done - qualitatively or quantitatively?

**B. The Research Question**

1. Discuss the ways to ask a question in research.
2. Identify how to do a thorough review of the literature E.R.I.C.
3. Define and describe the term "framing a hypothesis".
4. Give examples of a research hypothesis.
5. List one hypothesis in gerontological research.
6. Identify dependent, independent and control variables.

RESEARCH TECHNIQUES

GER 216

III. TOPICS TO BE COVERED

C. Sampling

1. Identify techniques of Sampling.
  - a) random
  - b) non random sampling
2. Explain the terms used to describe number of samples.
  - a) cross-sectional research
  - b) longitudinal research
3. Discuss the significance of these sampling techniques.

D. Research Methods

1. Explain why the method of data collection in research studies is important and needs serious consideration.
2. Describe observational research and how it is done.
3. Discuss interviewing methods as a means of data collection.
  - how people feel about interviews
  - the notice of structure of the interview
  - encouraging or probing
  - types of questions
4. Review survey research and compare with interviewing.
  - examine types of questions
  - how to prepare the questionnaire
  - modes of administering the survey
5. Define what is meant by Experimental Research.
6. Review examples of experimental research done in our century, in particular to humans.
7. Discuss the ethics of experimental research methods.
8. Identify alternative methods of research.
  - a) explain archival data
  - b) describe case study data collection

E. Experimental Design

1. Discuss the problem in achieving validity and reliability in experimental research.
2. Identify what the term quasi-experiment means.
3. Describe quasi-experimental procedures.
4. Examine how you feel about these research methods (those you would assist with in the field of aging for contributions to Gerontology).

## RESEARCH TECHNIQUES

GER 216

### III. TOPICS TO BE COVERED

#### F. Analyzing Data

1. Identify goals for analyzing data collected.
  - a) scrutinizing
  - b) summarizing
  - c) clarifying
2. Describe techniques used to analyze research data.
  - a) assessment and categorizing
  - b) presenting the data
  - c) composite measures
  - d) the use of the computer
    - specific computer software packages used
3. Examine a gerontological research article and discuss techniques used to analyze data.

#### G. Significance of Tests

1. Describe the concept of Descriptive Statistics.
  - a) measures of central tendency
  - b) measures of dispersion
2. Explain the term "Inferential Statistics".
  - testing for significance
3. Define the notion of probability and the logic to be followed in testing a hypothesis.

#### H. Evaluating Research Articles

1. Review the chapter which summarizes the elements of research.
2. Identify what is involved in reporting research results.
3. Review research contributions in Gerontology and evaluate finds and recommendations.
4. Demonstrate an ability to critique gerontological research.

#### I. Ethics in Gerontological Research

1. Examine ethical considerations of research.
2. Identify what an ethical issue is and know when to discuss ethical issues with a client.
3. Demonstrate awareness of personal attitudes towards the ethical considerations discussed in class.

RESEARCH TECHNIQUES

GER 216

III. TOPICS TO BE COVERED

I. Ethics in Gerontological Research (cont.)

4. Identify when ethical issues/ethical research have policy implications.
5. Assess when ethical research should be presented to governing bodies.
6. Demonstrate skill/ability in presenting the issue effectively and professionally.
7. Value and appreciate the older adult's opinions regarding ethical research.

J. Program Proposal

1. Develop and test re: hypothesis for the potential needs of older adults in the area.

IV. **EVALUATION:**

Whether the student has mastery of the outlined objectives of this course will be demonstrated through a combination of assignments, tests and an applied exercise. In order to pass this course, all assignments must be completed.

<u>Assignments</u>	<u>Weight</u>	<u>Due Date</u>
1. E.I.R.C. Search	5%	Sept. 26
2. 2.1 and 2.2	15%	Oct. 10
3. 3.1	10%	Oct. 24
4. Test 1	20%	Nov. 26
5. 8.3	10%	Dec. 4
6. Journal Critique	20%	Dec. 12
7. Test 2	20%	Dec. 18

V. **PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the instructor. Credit for prior learning will be given upon successful completion of the following:

VI. **STUDENT RESOURCES**

Find Out - Conducting and Evaluating Social Research by Jane Audrey Trice, 2nd edition, Nelson Canada

**RESEARCH TECHNIQUES**

**GER 216**

**VII. ADDITIONAL RESOURCE MATERIALS AVAILABLE IN THE COLLEGE LIBRARY:**

The following journals are recommended when conducting your research:

Geriatric Nursing	Sault College
Gerontologist	Lake Superior State University
Family Medicine	Sault College
Nursing and Allied Health Literature	Lake Superior State University
Canadian Journal of Public Health	Algoma University
Canadian Journal of Community Mental Health	Sault College
Canadian Journal on Aging	Sault College
Aging	LSSU and Algoma University
Aging and Human Development	Algoma University

**VIII. SPECIAL NOTES**

Students with special needs (eg. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

All assignments must be handed in by the due date. In the case of a late assignment, marks will be penalized by 5% each day late.

If a student misses a test due to illness, emergency, etc., the student must notify the instructor prior to class. The student must make arrangements with the instructor for a time to write the test, if the instructor agrees. The test must be written prior to the next class.