

**SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY  
SAULT STE MARIE, ON**



**COURSE OUTLINE**

**Course Titles** introduction to Research Methods: A Social Science  
Perspective

**Code No.s** SSC101      **Semesten** Winter

**Programs** General Arts and Science

**Authors** Gerry Page

**Dates** January 1998      **Previous Outline Dateds** winter 1997

**Approvals** Uf^jUo^AAxAY/Q      y».yv ^<P  
Dean

**Total Credits** 3      **Prerequisite(s)** None  
**Total Credit Hours** 48

Copyright © 1997 The Sault College of Applied Arts & Technology  
*Reproduction of this document by any means, in whole or in part, without the prior  
written permission of The Sault College of Applied Arts & Technology is prohibited.*  
For additional information, please contact Judith Morns, School of Literal Studies, Creative Arts and  
Access, (705) 759-2554, Ext.516

ID,      W  
Lri      mm n-  
AUG 05 199S

SAULT COLLEGE LIBRARY  
SAULT STE. MARIE

## **Introduction to Research Methods: A Social Science Perspective**

**Course Code: SSC 101**

### **Course Description:**

Students who are interested in Social Science disciplines will find this course beneficial in understanding how and why research is conducted. This introductory course will assist students in identifying the major components of the scientific method. In addition, students will be exposed to four broad categories of behavioral research: descriptive, correlational, experimental, and quasi-experimental. Students will learn how to view, utilize, and interpret research data in a critical manner. Ethical issues will be evaluated throughout the course.

### **Learning Outcomes:**

After completing this course the student will be able to :

#### **1. Recognize the importance of research in contemporary society.**

##### **Indicators:**

- a. define what research is and what it is not.
- b. recognize what a model of scientific inquiry is and how it guides research activities.
- c. determine what characteristics make up "good" research.
- d. review different types of research methods and identify examples of each.

#### **2. List and describe the steps required in the research process.**

##### **Indicators:**

- a. list in order the major steps in the research process, where each step sets the stage for the next.
- b. define and comprehend the language of research, i.e., types of hypothesis, theory, independent variable, dependent variable, samples and populations, statistical significance, informed consent, coercion, deception, etc..
- c. discuss and evaluate ethical issues related to research and its methods.

#### **3. Discover how social scientist select topics or problems for research.**

##### **Indicators:**

- a. review various methods researchers use in selecting an idea for research.
- b. review the steps in reviewing the literature.
- c. differentiate between primary and secondary resources.
- d. experience and locate research material utilizing computers in literature searches.

**4. Recognize the importance of sampling and generalizability.**

**Indicators:**

- a. determine the difference between a sample and a population
- b. discuss, describe and recognize various sampling techniques.
- c. define probability and non-probability and how they differ.
- d. explain what a sampling error is and review strategies for reducing sampling errors.

**5. Review various methods for measuring behaviour.**

**Indicators:**

- a. examine the different methods of measuring behaviour and collecting data.
- b. compare and contrast various scales of measurement.
- c. differentiate between descriptive and inferential statistics.
- d. calculate mean, mode, median, variance, standard deviation, t-test.
- e. compute the mean, median, mode, standard deviation and determine their use in research,
- f. determine what a normal curve is and its importance in the research process.

**6. Identify non-experimental research methods.**

**Indicators:**

- a. List the advantages and disadvantages of historical, descriptive, i.e., case study, survey methods.
- b. discuss longitudinal and cross-sectional methods.
- c. discuss and analyze the importance of correlational research.
- d. compute and analyze various data utilizing Pearson Correlation Coefficient.

**7. Review and discuss various experimental methods.**

**Indicators:**

- a. discuss the role of experimental designs and the role of chance.
- b. review the concept of internal and external validity and the roles they play in experiments.
- c. describe methods used to control extraneous sources of variability.
- d. explain the use of single subject-designs in experiments.

**8. Determine what is meant by quasi-experimental research.**

**Indicators:**

- a. state the differences between experimental and causal-comparative designs.
- b. determine the differences between quasi-experimental designs from one another.
- c. review how single-subject designs are used in experiments.
- d. discuss how single-subject designs are evaluated.



page 4...

Course Code: SSC 101

- WEEK 3:** Selecting a problem, do you have one? **BETTER READ CHAP. 3**  
ARE WE KEEPING UP TIME?  
Questions, questions to research hypothesis  
Reviewing the literature, some rules and issues.  
The computer search. Can you find one?  
The APA Format (in brief)
- WEEK 4:** **YEAH! IT'S TEST TIME ! GOOD LUCK!**  
Sampling and generalizability **THANK GOODNESS**  
Populations and samples? **THAT'S OVER!**  
Types or categories. Probability vs Non-probability **AHH! READ CHAP. 4**  
Reducing sampling errors. (We will try)
- WEEK 5:** Measurement, why and how. **LOOK AT THIS!**  
& 6 Introduce you to the types of measurement **CHAP. 5 ALREADY!**  
Reliability and validity? Why are they important?  
Increasing reliability and validity.
- Putting it all together (THE RESEARCH PAPER) V.L.P. Read Chapter 12**
- WEEK 7:** How to gather data and measure behaviour. **SLEEPY CHAPTER?**  
What's a test and are there many? **CHAP. 6**  
Questions, questions, and designs.  
Observational techniques.
- WEEK 8:** **TEST TIME (YEAH) NO. 2**  
&9 Data collection and descriptive statistics. **HANDS ON STUFF**  
How to collect data. **NEED TO READ**  
Differences between descriptive and inferential. **CHAP. 7**
- WEEK 10:** Measures of central tendency (easy stuff). **CALCULATOR TIME**  
Introduction to basic statistical concepts.  
Standard Deviation (an easy way)
- WEEK 11:** Let me introduce you to inferential statistics. **MORE HANDS ON STUFF**  
Chance and statistical significance. **CHAP. 8**  
How to do a test of statistical significance.

page 5...

Course Code: SSC 101

<b>WEEK 12:</b>	<b>TEST NO. 3 (We're doing well)</b> Nonexperimental research methods. Historical research and its problems. Case studies, surveys and methods. What do you mean longitudinal/cross-sectional? Correlational research (the scattergram). What does it mean?	TffIS CHAPTER IS EASY CHAP. 9
<b>WEEK 13:</b>	Experimental research designs Why experimental designs are important? The basic designs. Internal vs external validity. My favourite (single subject design).	READ CHAP. 10
<b>WEEK 14:</b>	Quasi-experimental research How does it differ from experimental? More on single subject designs.	GOOD STUFF CHAP. 11 AWAITS YOU
<b>WEEK 15:</b>	Carry over material & Review	
<b>WEEK 16:</b>	<b>(FINAL QUIZ)</b>	

### EVALUATION;

1.	4 Tests X 15%=	60%	A+=	90 - 100%
2.	1 Group Assignment =	30%	A =	80 - 89%
3.	Individual Assignments(2) =	<u>10%</u>	B =	70 - 79%
	Total	100%	C =	60 - 69%
			R =	less than 60 %

The group assignment and individual assignments will be discussed within the first two (2) weeks of classes. Students will be required to use observational skills in collecting data and will do a research search as part of the above assignments. It is extremely important not to miss classes as research indicates there is a high correlation between performance in this class and attendance.

page 6...

Course Code: SSC 101

**TEST/EVALUATION POLICY:**

FINAL NOTE: if a student is unable to make a test due to a serious illness or incident, s/he is obligated to **contact the instructor in person or in writing or by phone "prior"** to the test time. The instructor may make a determination as to *whether the student can write the test* at a later time. If the student cannot contact the instructor in person, s/he is to call (touch-tone phone) call 759-2554, ext. \_555\_\_\_. If the instructor is unavailable/>/eflse *leave a message with your name and phone number* on the voice mail answering machine. The voice mail will automatically indicate when the call was made. Failure to provide the instructor with notification will result in a "0" grade on that test.

Upon returning to the college, i.e. (first day back) the student will **liflttttdiat^** contact the instructor to make arrangements for testing (call me, or come to my office, or leave a note under my door with a telephone number where I can reach you.) Failure to do so will result in a zero grade.

**NOTIFICATION POLICY IN BRIEF**

**MUTUAL RESPECT, COURTESY AND ACCOUNTABILITY!**

Students with an identified learning disability are encouraged to discuss their situation with the instructor confidentially.