

Prerequisite: PSY 102 or SOC 120

I. 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 behavioural 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.

II. 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.

9. Complete small group and individual research assignments utilizing APA format

Indicators among group and individual assignments:

- a. Work with and be committed to selecting a problem (topic).
- b. Develop a research question related to the problem and develop a null hypothesis.
- c. Conduct a literature search on the topic.
- d. Write up your research paper using the format provided to you by your professor.
- f. Ensure all sections of your research paper are completed satisfactorily.
- g. Work effectively and efficiently in a group forum when asked to do so.

***TO BE DISCUSSED FURTHER in added HAND-OUTS**

III. REQUIRED RESOURCES/TEXTS/MATERIALS:

"Exploring Research" 5th edition, (2003) by Neil J. Salkind
Prentice Hall Publishing Company

A CALCULATOR FOR SOME BASIC STATISTICS INVOLVING ADDITION, SUBTRACTION, MULTIPLICATION AND DIVISION WILL BE REQUIRED.

IV. METHODOLOGY:

The instructor will attempt his/her best to make this course as "user friendly" as possible. A variety of teaching techniques will be used including traditional lecture, in class exercises, short assignments, and tests. Multiple examples of research both past and present will be used in conjunction with the above teaching methods.

| SYLLABUS: | TOPICS | ASSIGNED READINGS |
|------------------|---|-----------------------------------|
| WEEK 1: | Introduction to the course and Expectations What and who are social scientists? What do they do and why? Some basic research terminology. Introduction to research types. | September 8 CHAPTER 1 |
| | WEEK 2: More terminology turbulence. Samples and populations anyone? Significance "The Concept" what does it mean? | CHAPTER 2 September 15 |

| SYLLABUS: | TOPICS | ASSIGNED READINGS |
|------------------|--|--|
| WEEK 3: | Selecting a problem, do you have one? Questions, questions to research hypothesis Reviewing the literature, some rules and issues. An introduction to ethics, what are the issues? | CHAPTER 3 September. 22 |
| WEEK 4: | TEST #1 Chapters 1, 2, & 3 Sampling and generalizability Populations and samples? Types or categories. Probability vs. Non-probability Reducing sampling errors. | Sept 29 (Test 1.5 hours-last 1/2) CHAPTER 4 |
| WEEK 5: | CHAPTER 4 cont'd if necessary Measurement, why and how. Introduce you to the types of measurement Reliability and validity? Why are they important? Increasing reliability and validity. | CHAPTER 5 October 6 |
| WEEK 6: | How to gather data and measure behaviour. What's a test and are there many? Questions, questions, and designs. Observational techniques. | CHAPTER 6 October 13 |
| WEEK 7: | Data collection and Descriptive Statistics Measures of Central Tendency/Variability Z-scores | CHAPTER 7 October 20 |
| WEEK 8: | Review first-TEST #2 Chapters 4,5,6, 7 | October 27(Test 2 Test 1.5 hours-last 1/2) |
| | &9: Inferential Statistics Statistical Significance Tests of Significance | CHAPTER 8 November 3 |
| WEEK 10: | Non Experimental Research: Descriptive Developmental research Correlational Research | CHAPTER 9 November 10 |

WEEK 11: Non Experimental research: Qualitative Methods

CHAPTER 10
November 17

WEEK 12: **Test#3 Chapters 8, 9, 10**
Pre and True Experimental Design

Nov. 24 (Test 3)
Test 1.5 hours-last
1/2)

Why experiments are important?
Internal vs. External Validity
Basic designs

CHAPTER 11

WEEK 13: Quasi-Experimental Research
How does it differ from experimental?
Single Subject designs

CHAPTER 12
December 1

WEEK 14: Writing a Research Proposal
Writing a Research Manuscript

December 8
CHAPTER 13 & 14

WEEK 15: **FINAL TEST 4 Chapters 11, 12, 13 & 14**
December 15, 2005 at 9: 30 am

*All tests will be written in the class with the 2 hour block.

V. EVALUATION PROCESS/GRADING SYSTEM:

| | | |
|----|---------------------------|------------|
| 1. | 4 Tests X 15% = | 60% |
| 2. | 1 Group Assignment = | 20% |
| 3. | 1 Individual Assignment = | <u>20%</u> |
| | Total | 100% |

NO CELL PHONES, CD PLAYERS, MP3 PLAYERS, CASSETTE PLAYERS ETC.. ARE ALLOWED IN THE CLASS DURING EXAMS OR TESTS. CELL PHONES AND OTHER ELECTRONIC DEVICES MUST BE TURNED OFF AT ALL OTHER TIMES.

The individual assignment will be discussed within the first week of classes. The second assignment-group assignment will be discussed mid way through the course.

** It is ***extremely important not to miss classes*** as research indicates there is a high correlation between performance in this class and attendance. Attendance will be taken and may be attributed to final mark.

TEST/EVALUATION POLICY:

FINAL NOTE RE: TESTS/EXAMS: if a student is unable to write 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.

Upon returning to the college, i.e. (first day back) the student will **immediately** contact the instructor to make arrangements for testing. Failure to do so will result in a zero grade.

NOTIFICATION POLICY IN BRIEF

MUTUAL RESPECT, COURTESY AND ACCOUNTABILITY!

The following semester grades will be assigned to students in post-secondary courses:

| <u>Grade</u> | <u>Definition</u> | <u>Grade Point Equivalent</u> |
|--------------|--|-------------------------------|
| A+ | 90 – 100% | |
| A | 80 – 89% | 4.00 |
| B | 70 - 79% | 3.00 |
| C | 60 - 69% | 2.00 |
| D | 50 – 59% | 1.00 |
| F (Fail) | 49% and below | 0.00 |
| CR (Credit) | Credit for diploma requirements has been awarded. | |
| S | Satisfactory achievement in field /clinical placement or non-graded subject area. | |
| U | Unsatisfactory achievement in field/clinical placement or non-graded subject area. | |
| X | A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. | |
| NR | Grade not reported to Registrar's office. | |
| W | Student has withdrawn from the course without academic penalty. | |

Note: For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

VI. SPECIAL NOTES:

Contact1: angela.marcello@saultc.on.ca

Contact2: coryandange@shaw.ca

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office so that support services can be arranged for you.

Retention of course outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources. **Schedule is subject to change during the course.**

Substitute course information is available in the Registrar's office.

VII. 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:

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.