

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



**SAULT
COLLEGE**

COURSE OUTLINE

COURSE TITLE: Research Methods: A Social Science Perspective
CODE NO. : SSC101 **SEMESTER:** 2 or 4
PROGRAM: General Arts and Science, Liberal Studies
AUTHOR: Social Science Department
DATE: Jan. 2010 **PREVIOUS OUTLINE DATED:** Sept. 2009
APPROVED: "Angelique Lemay" Dec. 09

CHAIR

DATE

TOTAL CREDITS: 3
PREREQUISITE(S): PSY102 or SOC120
HOURS/WEEK: 3

Copyright ©2010 the Sault College of Applied Arts & Technology
*Reproduction of this document by any means, in whole or in part, without prior
Written permission of Sault College of Applied Arts & Technology is prohibited.*
*For additional information, please contact the Chair, Community Services
School of Health and Community Services
(705) 759-2554, Ext. 2603*

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 various sections of a research paper using the format provided to you by your professor.
- e. Work effectively and efficiently in a group forum when asked to do so.

III. REQUIRED RESOURCES/TEXTS/MATERIALS:

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

A SCIENTIFIC CALCULATOR FOR SOME BASIC STATISTICS 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. 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.
More terminology turbulence.
Samples and populations anyone?
Significance "The Concept" what does it mean?

CHAPTERS 1 & 2
January 11

| SYLLABUS: | TOPICS | ASSIGNED READINGS |
|---|---|--|
| WEEK 2: | 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 January 18 |
| WEEK 3: & WEEK 4: | Sampling and generalizability Populations and samples? Types or categories. Probability vs. Non-probability Reducing sampling errors | CHAPTER 4 January 25 February 1 |
| TEST #1 Chapters 1, 2, 3 & 4 | | Week of February 1 |
| WEEK 5: | Measurement, why and how Introduce you to the types of measurement Reliability and validity? Why are they important? Increasing reliability and validity | CHAPTER 5 February 8 |
| WEEK 6: & WEEK 7: | How to gather data and measure behaviour. What's a test and are there many? Questions, questions, and designs. Observational techniques | CHAPTER 6 February 22 March 1 |
| TEST #2 Chapters 5, 6 | | Week of March 1 |
| WEEK 8: & WEEK 9: | Data collection and Descriptive Statistics Measures of Central Tendency/Variability Z-scores | CHAPTER 7 March 8 March 15 |
| WEEK 10: | Inferential Statistics Statistical Significance Tests of Significance | CHAPTER 8 March 22 |
| TEST #3 Chapters 7, 8 | | Week of March 22 |
| WEEK 11: | Non Experimental Research: Descriptive Developmental research Correlation Research | CHAPTER 9 March 29 |
| WEEK 12: | Non Experimental research: Qualitative Methods | CHAPTER 10 April 5 |
| WEEK 13: | Pre and True Experimental Design | CHAPTER 19 |

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

6

SSC 101-3

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

April 12

WEEK 14: Quasi-Experimental Research
How does it differ from experimental?
Single Subject designs

**CHAPTER 12
April 19**

=

TEST # 4 Chapters 9, 10, 11, & 12 Week of April 26

V. EVALUATION PROCESS/GRADING SYSTEM:

| | | |
|----|---|------------|
| 1. | 4 Tests X 15% = | 60% |
| 2. | Group Activities and Individual Assignments = | <u>40%</u> |
| | Total | 100% |

**The use of electronic devices must not interfere with class activities.
The use of some electronic devices may be restricted during tests.**

** 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:

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 will make a determination as to whether the student can write the test at a later time.

Upon returning to the college, the student will **immediately** contact the instructor to make arrangements for testing. Failure to do so will result in a zero grade.

The following semester grades will be assigned to students:

| <u>Grade</u> | <u>Definition</u> | <u>Grade Point Equivalent</u> |
|--------------|--|-------------------------------|
| A+ | 90 – 100% | 4.00 |
| A | 80 – 89% | |
| 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.

NOTE: Mid Term grades are provided in theory classes and clinical/field placement experiences. Students are notified that the midterm grade is an interim grade and is subject to change.

VI. SPECIAL NOTES:

Course Outline Amendments:

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.

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.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

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

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to <https://my.saultcollege.ca>.

Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may:

- (i) issue a verbal reprimand,
- (ii) make an assignment of a lower grade with explanation,
- (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade “C”,
- (iv) make an automatic assignment of a failing grade,
- (v) recommend to the Chair dismissal from the course with the assignment of a failing grade.

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.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.