

Course Outline

Field Studies

Course Title

SC270

Dept. & Course No.

I. COURSE DESCRIPTION

This course covers the application of commonly used ecological surveying techniques. Students will learn the use of commonly used field equipment and proper methods of collecting data and specimens. The data will be collected in the field, analyzed and presented in a report.

II. SEMESTER CREDITS: 3

III. CONTACT HOURS PER WEEK: 2 3 5
Lecture Lab Total

IV. PREREQUISITES: SC110 and SC190

V. PERFORMANCE OBJECTIVES

Upon completion of this course, the student will be able, with a minimum of 65% accuracy, to:

1. Formulate a specific question regarding the organism or system being studied.
2. Develop a hypothesis. Modify the hypothesis as needed.
3. Devise an experimental procedure with steps intended to be used to test the validity of the hypothesis.
4. Collect qualitative and quantitative data and present in a table.
5. Presented data in a bar graph or a histogram, or both.
6. Gather, summarize and analyze data
7. Draw conclusion to support or reject stated hypothesis.
8. Present in a report using the steps of scientific methods.
9. Give an oral presentation on the report.

VI. COURSE CONTENT

A. Thesis & Hypothesis

B. Experimental Design

1. Experimental procedure

C. Results

1. Data collection

2. Data evaluation

D. Conclusion

E. Scientific Report

1. Write a scientific report
2. Symposium

VII. MATERIALS AND EQUIPMENT

- A. Laboratory and related equipments
- B. Standard Classroom Materials
- C. Handouts
- D. Video Tapes
- E. Slides
- F. Slide Projector
- G. Overhead Projector

VIII. TEXT

Textbook: Instructor Made Handouts

IX. METHODS OF INSTRUCTION:

- A. Lecture
- B. Discussion
- C. Demonstration
- D. Audio-Visuals
- E. Laboratory Work
- F. Field Trips

X. METHOD OF EVALUATION

The components with the corresponding weight in percent included in the computation of the final grade are:

Participation	25%
Laboratory Work	25%
Research paper	50%

The conversion of percent rating to letter grade is as follows:

90% to 100%	A
80% to 89%	B
70% to 79%	C
65% to 69%	D
64% and below	F

TASK LISTING SHEET

SC270 Field Studies

Credits: 2 1 48
Lecture Lab Total
Lab Hours

TASK	TIME
1. Conduct library/field research on topic of interest.	6 hrs
2. Propose a hypothesis with statement of interest.	3 hrs
3. Design an experiment. a. Choose a study site and control site b. Detailed surveying techniques c. Data tables	6 hrs
4. Test of hypothesis a. conduct field research	18 hrs
5. Data analysis	6 hrs
6. Writing	6 hrs
7. Presentation	3 hrs

Palau Community College
SC270 Field Studies
Course Learning Outcomes

During the course experience, the *course learning outcomes* (CLOs) will be assessed through the use of signature assignments. A rating scale will be used to determine the students' proficiency level of each CLO using specifically aligned assignments. The numerical ratings of 4, 3, 2 and 1 are not intended to represent the traditional school grading system of A, B, C, D and F. The descriptions associated with each of the numbers focus on the level of student performance for each of the course learning outcomes listed below.

Rating Scale:	5	Excellent
	4	Above Average
	3	Average
	2	Below Average
	1	Unacceptable

CLO 1: Students will be able to develop a hypothesis and devise an experimental procedure with steps intended to be used to test the validity of the hypothesis.

5	Complete the following with 90% accuracy or better: <ul style="list-style-type: none"> • Choose a study site. • Design an experiment.
4	Complete the above with an accuracy of 80-89%.
3	Complete the above with an accuracy of 70-79%.
2	Complete the above with an accuracy of 65-69%.
1	Complete the above with less than 65% accuracy.

CLO 2: Students will be able to conduct field research and collect qualitative and quantitative data.

5	Completes the following with 90% accuracy or better: <ul style="list-style-type: none"> • Conduct field research. • Apply detailed surveying techniques to gather quantitative data.
4	Complete the above with an accuracy of 80-89%.
3	Complete the above with an accuracy of 70-79%.
2	Complete the above with an accuracy of 65-69%.
1	Complete the above with less than 65% accuracy.

CLO 3: Students will be able to gather, summarize and analyze data and present in a report using the steps of scientific methods.

5	Complete the following with 90% accuracy or better: <ul style="list-style-type: none"> • Gather, summarize and analyze data. • Present data in a report using the steps of scientific methods.
4	Complete the above with an accuracy of 80-89%.
3	Complete the above with an accuracy of 70-79%.
2	Complete the above with an accuracy of 65-69%.
1	Complete the above with less than 65% accuracy.