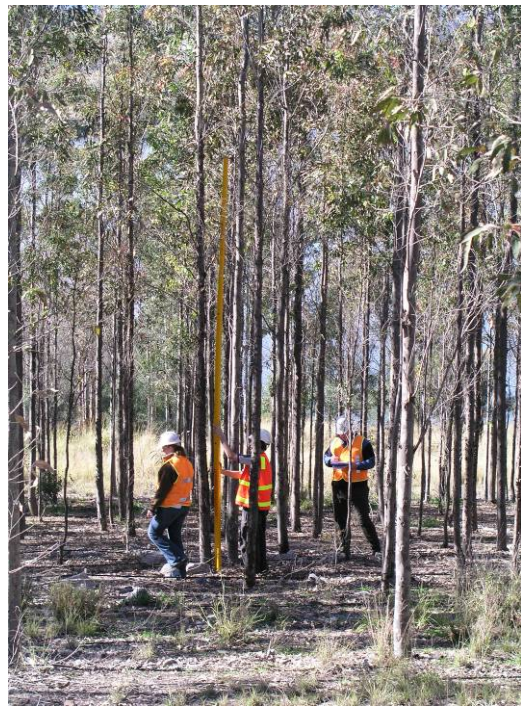
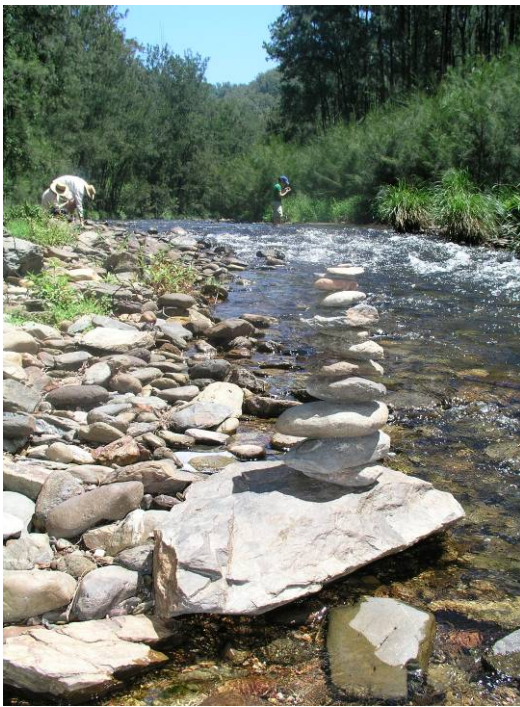


# NR 490 and NRPL405

## Natural Resources Research Project

### Study Guide 2009



**Unit Coordinator**  
**Darren Ryder**  
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**Armidale, NSW, 2351, Australia.**

**UNE**  
UNIVERSITY OF  
NEW ENGLAND

## Introduction

The Project Reports in Natural Resources at UNE provide students with the opportunity to produce work of their own as an alternative to participating in the more formal activities of coursework units. Projects are an important final-year unit because they encourage students to demonstrate their ability, skills and research potential by studying a topic that is of interest to them.

The choice of topics **must** be made in consultation with an academic supervisor and approved by the Unit Coordinator before you enrol. It is the responsibility of the student to identify and confirm an academic willing to supervise their project. The key consideration in topic selection and approval is that topics must deal with an aspect of natural resources and their management.

All students wishing to be considered for the award of Bachelor of Natural Resources (Honours) and Bachelor of Natural Resources/Urban and Regional Planning (Honours) must undertake and complete NR490 or NRPL405 respectively in their final year of candidature. For details on the calculation of honours grades please see details at <http://www.une.edu.au/ers/for-students/>.

## Unit Objective

One important aspect in undertaking a project report in natural resources is for students to become involved in one of the many on-going research programs at UNE. Undertaking research and/or incorporating research results of others into management practices are important aspects of natural resource management.

The objective of the Project Report is to provide students with the opportunity to demonstrate their research, problem-solving, managerial and communication skills by any combination of the following tasks:

- Expertise and increased knowledge in a given field including ability to critically assess scientific work
- Ability to design and undertake a research project
- Collect, analyse and/or synthesise data to substantiate a case or hypothesis,
- Incorporate new understanding into management practice, and
- Communicate findings in a professional report and seminar on the subject of the project.

## Value of the units

NR 490 and NRPL 405 allow students to demonstrate abilities, skills, maturity and research potential developed during the previous years of study at UNE. This unit is also important for determining the eligibility of a candidate for honours and for assessing the class of honours. An honours degree is awarded on the basis of academic performance in the coursework of the second, third and fourth years for NR 490 students and second to fifth years for NRPL 405 students.

Project reports produced by students are often used as a means to demonstrate to potential employers that they have the ability to define an issue, develop

procedures to address that issue, undertake research, and produce and communicate a final report.

## **Research at UNE**

UNE has published documents addressing matters pertaining to the undertaking of research at the University. All current documents can be obtained from the UNE web site for Research Services ([www.une.edu.au/research-services](http://www.une.edu.au/research-services)).

The policy dealing with the Code of Conduct for Research at UNE is essential reading for all students undertaking any form of research and includes students enrolled in these units. Students should be familiar with the content of this document, particularly as it relates to their project report. The Code of Conduct for Research at UNE can be obtained from the UNE web site for Research Services.

There are also policies dealing with conducting research with animals and humans (both invasive and non-invasive forms) that may need to be addressed. These matters are discussed in more detail in later sections of this Handbook.

## **Unit Coordinator**

The Unit Coordinator is responsible for approving topics proposed by students and supervisors, assisting in the arrangements for supervision, organising seminars, and submission and collation of grades.

The actual content and research undertaken is the responsibility of the student in consultation with the approved supervisor.

## **Contact details**

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## **Roles and Responsibilities**

More so than in other undergraduate unit, students need to maintain regular and frequent contact with all parties involved in their project. Supervisors and students may find it convenient to schedule regular meetings, particularly in the early developmental stages, and then during data analysis and report preparation. Students should not hesitate in arranging appointments with their supervisor and vice versa.

## **The Student**

Each student must attend to the administration of this unit (deadlines, etc) with the highest priority. This involves the preparation of the literature review, seminars and final report, as well as submitting them to the supervisor in reasonable time for comments to be made in time for submission to the Unit Coordinator by the due dates.

Each student will find it necessary to negotiate with supervisors, technical and other staff to obtain advice, use of laboratories etc. in the performance of these units.

The Unit Coordinator will also arrange group meetings for all students throughout the year to provide advice and information on unit administration, and for students to interact and update each other on progress.

## **The Supervisor**

The signing of the Project Synopsis Form obliges the supervisor to provide appropriate assistance to each student and to ensure that every opportunity is provided for that student to complete the project report by the due date. To this end, the supervisor must be satisfied that the topic is workable, generally self-contained and is likely to produce results without exceeding the guidelines for time commitment for the unit being undertaken.

Students are likely to be inexperienced in many aspects of project initiation, data collection and analysis of results. Consequently, supervisors and students should keep the following points in mind:

- That NR 490 and NRPL 405 correspond to about 25% of the work-load in Fourth Year.
- Assistance in the preparation of application forms for research involving humans or animals,
- Ensure the availability of equipment, resources, technical staff assistance etc. so that each student may use her/his time effectively throughout the year,
- Be available for regular consultations and provide advice, criticism, direction and encouragement to each student,
- Return the draft report accompanying the Progress Reports to each student with appended comments in a timely manner.

The supervisor is required to comment on the literature review, seminars and final report without undue delay for submission by the student to the Unit Coordinator by the due dates.

## **The Unit Coordinator**

The Unit Coordinator for the project reports is responsible for all administrative matters and student affairs. The Coordinator shall approve the topic and

arrangements for supervision but is not responsible for the academic content and work load undertaken by each student.

The Unit Coordinator should be consulted to determine the course of action if a student experiences any problems in relation to administering, issues with supervisors, or completing the unit by the due date.

The responsibilities of the Unit Coordinator are to:

- Enrol each student in the unit, once the selected topic has been certified as acceptable by a supervisor,
- Ensure that each student has been working towards completing the Project Report on time and to ensure that the supervisor is satisfied (Project Synopsis) with the rate of progress,
- Receive 2 bound copies (soft covers) of the final Project Report by the due date,
- Appoint examiners for the Project Report,
- Convey to the Award Coordinator the agreed results of the examiners, and
- Attend to applications for special extension of time and withdrawals.

## Key dates

Assessment Item	Due Dates for 2009
Project Synopsis Form	27 <sup>th</sup> February
Introductory Seminar	Friday 20 <sup>th</sup> March
Literature review	Friday 12 <sup>th</sup> June 4.30 pm
Submission of Project Report	Friday 30 <sup>th</sup> October 4.30 pm
Final Seminar	Friday 6 <sup>th</sup> November

## **Undertaking a Natural Resources project**

The objectives of a Project Report is to provide you with the opportunity to study a topic in depth with emphasis on the completion of an experimental program or extensive data analysis or review, and to effectively communicate the outcome through both a written and a verbal report.

### **Assessment**

Students enrolled in NR 490 and NRPL 405 are assessed on the basis of 2 graded assessment items. Each student is required to submit for examination

1. a project report not normally exceeding 14,000 words (excluding figures, tables, and appendices) by the due date (80%), and
2. present a final seminar (20%) on their project.

The introductory seminar and project literature review are mandatory for all students, and failure to satisfactorily complete these tasks will result in a 5% penalty of the total unit grade for each item not completed.

### **Project Synopsis Form**

Enrolment in this unit will be accepted only when the student has selected a topic, and gained approval from a supervisor and Unit Coordinator. Enrolment must be completed at the commencement of the semester for which enrolment is intended.

The Project Synopsis requires the student to provide a working title of the project and an outline of what is envisaged for the proposed project. The outline need not be specific at this stage; it is intended to show that the student has devised a project topic and considered both the content and direction of the project. Sufficient information should, however, be provided so that the supervisor can assess the workability of the project, estimate the amount of effort required and the time involved in achieving the objectives.

*Project Synopsis Forms* must be signed by your supervisor(s) and returned to the award coordinator by 27<sup>th</sup> February 2009. The intention of the form is to inform the Unit Coordinator that each student has a project and a supervisor before too late in the semester. Failure to submit a form to the Unit Coordinator by the due date will result in students enrolment not being permitted.

The pro-forma for the project synopsis can be found at the end of this study guide.

### **Introductory Seminar**

The introductory seminar is mandatory for all students as it provides valuable feedback on proposed research projects. Those students enrolled as on-campus will be required to give a 10 minute seminar to an audience of staff and students. This invitation to present is open to off-campus enrolled students, however they

have the option of submitting a powerpoint presentation copy of a seminar to the unit coordinator by the due date. Failure to present a seminar (on-campus students) or submit a CD copy (off-campus students) by the due date will result in a 5% penalty to the unit grade. Each student will be provided feedback using the relevant form at the end of the study guide.

The 10 minute seminar is expected to cover the following topics:

- Brief overview of project context
- Statement of Aims
- Proposed study design and methods
- Project timetable

### **Literature Review**

The literature review is intended to familiarise you with the literature on theoretical and practical aspects of your project. The review should be a critical account of the literature pertinent to your project area, and should satisfy the following criteria:

- Introduction to the topic
- Coverage of literature
- Analysis of current status of the problem and personal critique/perspective on the problem
- Referencing

You are expected to consult primary reference material such as journal articles and conference papers. Limited use of text books is advisable. The literature review is expected to be approximately 20 A4 pages at one and half spacing.

The literature review should be submitted electronically to the unit coordinator and to your Supervisor for feedback. Failure to submit a literature review by the due date will result in a 5% penalty to the unit grade.

### **Project Report Submission and Assessment**

Each student is required to submit two (2) bound copies of the project report to the Unit Coordinator by the due date. They are not to be submitted through the supervisor. The binding can be of the soft cover type and can be done through the UNE printery. A late penalty of 5% per 5 working days applies to all reports as per the Faculty policy.

Two examiners are appointed to assess each project report, usually a supervisor and an academic/manager external to your project but an expert on your topic. Examiners are appointed by the Unit Coordinator in consultation with supervisors. In cases where there is significant disagreement between examiners, both examiners are asked to consult and, if agreement cannot be reached, a third examiner is appointed.

Examiners undertake their assessment in accordance with the guidelines and may comment on the following matters:

- Abstract or summary,
- Adequacy in defining the aim or objectives,
- Value, accuracy and criticism offered in the literature review or background to the study, including failure to cite key research papers,
- Accuracy in using facts and logic,
- Experimental and/or survey design (where applicable),
- Originality of approach and analysis (where applicable),
- Data analysis and presentation of results,
- Discussion of findings and justification of conclusions,
- Adequacy of proof-reading,
- Correctness of reference citations, and/or
- Overall organisation and presentations.

Each project report will pose specific examination issues for the examiner who will usually need to balance the consideration of understanding, competence, achievement and originality (particularly for the grade of High Distinction) to determine the final grade. Project Reports are like any other unit within the degree and will be graded accordingly from HD through to N. A failure may result, not only from poor work, but also from application of a penalty for late submission.

At the completion of the examination of the project report, students may request copies of the examiner's reports.

## **Final Seminar**

All enrolled students in NR490 and NRPL405 **MUST** present a final project seminar on campus at UNE as part of the unit assessment. This includes **ALL on-campus and off-campus students**. The date for the seminars is Friday November 6<sup>th</sup> 2009, and all students should plan well in advance to attend the university on this date. The seminar is assessable and will count for 20% of the final grade.

The seminars will be presented 1 week after the due date for submission of the final project report. The seminar will address the context, aims and major outcomes of the project.

Each presentation will be 15 minutes maximum with 4-5 minutes for questions from academic staff and the student group attending. The style and duration of the seminar presentation is similar to that used at most conferences and students are encouraged to adopt a professional approach to their presentation through consultation with their supervisor.

A pro-forma used to assess the seminar can be found at the end of this study guide.

## Withdrawal from the Unit

Students are permitted to withdraw from their unit without failure, provided they do so prior to the date published in the UNE Handbook and with the concurrent approval of the Award Coordinator for SE&RS. Withdrawal is, however, more likely to affect the student's eligibility for honours unless it can be clearly demonstrated that the need for this action was beyond the control of the student (e.g., prolonged ill-health, equipment failure and long delays in repair or replacement, fieldwork disasters).

## Special Extension of Time

Each application for a special extension of time lodged with the student centre must be supported by appropriate documentation (e.g. medical certificates, statements from supervisors confirming *circumstances beyond the student's control* only) and will be viewed on its own merit without precedent or prejudice and after consultation with the supervisor and the supervisor's Head of Discipline. Assignment submissions and the rate of progress made between assignments will also be taken into consideration. Eligibility for honours is not affected by the granting of a SET.

## Residential Requirements for External Students

It is a requirement of the unit that ALL students attend UNE to present their final seminar on November 6<sup>th</sup> 2009.

There are no formal residential schools held for Project Reports but experience has shown that the greater the degree of contact between academic staff and students the better the overall project becomes. The frequency of visits will depend to a large degree on the nature of the project itself. Students may consider on-campus visits at other key times during the unit. Critical periods might be:

- Just before data collection begins (to verify proposed procedures are appropriate),
- During data analysis (particularly if you are uncertain as to the appropriate techniques or are considering using UNE laboratory or computer facilities), and
- During report preparation (to discuss results and seek advice on the most appropriate ways for presenting the results and the report as a whole).

## Project Abstract Submission - electronic copy

All candidates are required to submit an electronic copy of their abstract to the Unit Coordinator on the day of the final report submission. The abstract will be stored on a database of all projects undertaken by Natural Resources students. The electronic file sent to the Unit Coordinator must be in word or pdf file format

- The first line must provide the following information in the following order
  - name and initials of candidate (in bold),
  - year of submission (in brackets and in bold)

- title of project report
- award for which the Project Report was submitted, and
- total page length.
- The next line must be titled **Abstract** with the text of the abstract following on the next line.
- The abstract must be the same as that presented in the Project Report. It should follow the guidelines presented in the format section of the information provided
- The Abstract should be about 350 words and must not exceed 500 words.

## **Format for Project Reports**

### **Number of Copies**

Two bound copies must be submitted by each student. These copies are used for examination purposes. They are not returned to the student. They are kept by the University and placed in the Natural Resources Library. An additional copy may be provided to the supervisor but this needs to be arranged between the student and supervisor.

### **Word Limit**

The word limit for the project report is 14 000 words, excluding tables, figures, appendices and the reference list. There is a 5% penalty for each 2000 words that exceed the word limit.

### **Page Layout**

Project Reports can be printed as one-sided, or double-sided on A4 paper. A3-sized maps etc. are permissible as fold-outs within the body of the report. Larger sized maps etc. may be included in a pocket at the end of the report or on a CD.

The margin on the left-hand side must be 25 mm for binding purposes. All other margins must be 20 mm.

Line spacing in the body of the text must be 1.5 line spacing. The reference list may be single spacing. Line spacing in tables may be varied so that large tables can be placed on one page. The paper must be of acceptable quality and weight (min 80 gsm ( $\text{g/m}^2$ )).

### **Page Numbering**

All pages (not including the title page) shall be numbered consecutively; in lower case Roman for the preliminary pages, in Arabic for the main text (i.e. from the Abstract to the end of the Reference List). Tables are traditionally numbered and labelled with the caption above the table, while figures are labelled with the caption below the figure. Appendices are often labelled with upper case letters to distinguish them from pages; pages, tables, figures etc. are numbered separately in each appendix.

### **Binding**

The Project Report is to be stapled (or stitched) between plain coloured 250 gsm ( $\text{g/m}^2$ ) cards and strip-bound with a cloth spine. This is a soft cover binding and is all that is required for submission of your project report. You may also wish to get hard cover binding of your own personal copy. Both forms of binding can be done for you through the UNE Printery.

## Reference Citations in the Text and Reference List

Citations and references must be in accordance with the *UNE Style Guide*.

## General Format for Project Report

The project report must be presented in chapters with each chapter starting on a new page. The format outlined below is suggested as the most appropriate for the majority of projects undertaken in these units. Reports dealing with management plans or composed entirely of a literature review need not necessarily follow this format. Consult your supervisor for the most appropriate format for your topic.

The body of the text should be presented in chapter form with sections within each chapter identified by appropriate sub-headings. This procedure will aid you to achieve a logical presentation of your material. Chapters and sections should be numbered in sequence, preferably using a decimal system.

## Preliminary Pages of the Project Report

### Title Page

The title page is the first page after the cover. It is not numbered.

The title page must show the following information:

- Title of the project
- Full name of the student
- Month and year of submission
- The award statement

A **(insert unit code)** project report submitted in partial fulfilment of the requirements for the **(insert award title in full)** at the University of New England.

## Declaration Page

The next page after the title page is the declaration page. It is not numbered.

I certify that the substance of this project report has not already been submitted for any degree or diploma and is not being currently submitted for any other degree or diploma.

I certify that, to the best of my knowledge, any help received in preparing this project report, and all sources used, have been acknowledged in this report.

I certify that this project report does not exceed **(insert word limit for the unit)** for the text, excluding tables, figures, appendices and reference list.

---

(Signed and dated)

## Plagiarism Declaration Form

The next page after the declaration page is the Plagiarism Declaration Form. It is not numbered. The Form must be signed and dated. A copy of the form can be found at the end of this study guide.

## Acknowledgements

The Acknowledgments is numbered as a preliminary page and commences with page i.

You may wish to acknowledge those people and organisations that have assisted you in your project report and work associated with your studies. The style and format is flexible and is at the discretion of each student.

## Table of Contents

The Table of Contents commences on page ii.  
Single line spacing may be used for the Table of Contents.

### Chapter 1            Chapter Heading

- 1.2            Section headings called subheadings
- 1.2.3           Lesser titles called sub-subheadings

The last chapter is the Literature Cited

Appendices follow the Literature Cited

The Table of Contents need not show items below sub-subheading level.

Include the following lists (if relevant) at the end of the Table of Contents

- Appendices
- List of Tables
- List of Figures

## Abstract

In about 350 words (certainly not more than 500) summarise the whole report.  
That is, say:

**why** the study was undertaken (i.e. the problems and issues being addressed, placing them in the wider context or "setting the scene for the study **and** ending with a brief statement of the purpose of the study);

**how** it was undertaken (i.e. a brief statement about the methods used in the study);  
what were the **main findings** (i.e. the results); and  
the **significance** of those findings (i.e. the conclusions).

An abstract needs to be concisely informative and encourage the reader of the abstract to continue. You should avoid expressions such as "is discussed" and "is described" because they do not provide the reader with the sufficient detail

The abstract should be restricted to about one page in length.

## The Project Report

Project reports may take the form of a scientific report, a management plan or a literature review. The most appropriate format is a matter between the student and the supervisor. The format of a **literature review** will depend on the topic selected and students will need to seek the guidance of their supervisor. Remember a literature review must not be a simple reproduction of the ideas of others but it must be reviewed and compared. The material from sources may be examined in relation to good points and strengths; bad points and weaknesses; omissions; obscurities and ambiguities; and biases due to viewpoint.

## Tables Graphs, Maps and Photographs

Data and results may be presented in either tabular or graphical form but the same results must not be presented as both tables and graphs as this represents duplication. It is often preferable to present data as figures rather than tables as the former usually allow the examiner/reader to obtain a quicker understanding of the results. Graphs must be drawn clearly with axes labelled with the name of the variable, its unit and magnitude. If you are in doubt as to the most appropriate form for data presentation, consult your supervisor. Try to avoid presenting masses of numbers in large tables as they often take a great deal of time to comprehend. Several small tables may provide a more appropriate format.

Each figure or table must be accompanied by a caption that must be reasonably self-explanatory without having to refer to the text; the usual convention is to have the caption at the top for tables and at the bottom for figures.

Tables, figures, photographs etc. should be inserted in the report as they occur. The convention adopted is to have tables and figures on separate pages immediately following the first mention in the text and not within the body of the text itself. Large maps, diagrams etc. should be included in a pocket at the end of the report.

## Project Synopsis Form

UNIT ENROLMENT (please indicate your enrolment details)							
BNatRes	NR 490	Year long		Semester 1 start		Semester 2 completion	
BNatRes/BURP	NRPL 405	Year long		Semester 1 start		Semester 2 completion	
CANDIDATE and SUPERVISION DETAILS							
Name				Student Number			
E-mail			Phone			Fax	
Supervisor				Discipline			
E-mail			Phone			Fax	
WORKING TITLE							
PROJECT SYNOPSIS							
CANDIDATE'S SIGNATURE							
Signature					Date		
<b>SUPERVISOR</b> Is this project linked to on-going research programs within the School?					Yes		No
Please provide information on the level of support to be provided to the candidate.							
Will the Supervisor be available for consultation throughout the whole year?					Yes		No
If not, what arrangements will be made?							
Supervisor's Signature					Date		
Convenor's Signature					Date		
APPROVAL by the UNIT COORDINATOR							
Signature					Date		

**NR 490 and NRPL 405: PROJECT REPORT****FINAL SEMINAR PRESENTATION ASSESSMENT****SPEAKER:****DATE:****TITLE:**

Assessors should take the view that the presentation being assessed is similar to a short paper given at a conference. Two important components need to be considered in presenting such material: the first deals with the **subject matter and content**, and the second deals with the **style and quality of the presentation**. The value given to each component takes into account that the project report addresses the content in detail.

<b>COMPONENT</b>	<b>CRITERIA FOR CONSIDERATION</b>	<b>H</b>	<b>D</b>	<b>C</b>	<b>P</b>	<b>N</b>
<b>1. Content</b>  (value is 40%)	Introduction - sets the scene and identifies key issues - relevance of introduction and literature review to the topic					
	Clear statement of aims					
	Description and clarity of methods					
	Results and discussion - clarity and understanding					
	Quality of conclusion - clearly and concisely identified - lack of repetition					
	Explicit statements on relevance of aims and outcomes to natural resources management					
	Content of presentation is clearly known and understood Knowledge of general subject area					
<b>2. Presentation</b>  (value is 60%)	Organisation - evidence of practice - flow and transition of ideas					
	Timing - balanced presentation (no section rushed) - completed on time					
	Quality of visual aids - Powerpoint display not cluttered - animations not overused - relevance to presentation - each slide is clear and well labelled					
	Voice quality (audibility, speed, pitch)					
	Retention of interest					
	Professionalism and mannerism – read or spoke to the paper - deportment and attire					
	Response to questions and discussion – explanations were clear and concise and well reasoned					

SPEAKER: .....

UNIT: .....

ASSESSOR:

DATE:

GRADE:

%

## NR 490 and NRPL 405: PROJECT REPORT

### INTRODUCTORY SEMINAR PRESENTATION ASSESSMENT – EXTERNAL STUDENTS

**SPEAKER:**

**UNIT:**

**DATE:**

**TITLE:**

**NOTE:** Assessors should take the view that the presentation being assessed is similar to a short paper given at a conference. Two important components need to be consider in presenting such material: the first deals with the **subject matter and content**, and the second deals with the **style and quality of the presentation**. The value given to each component takes into account that the project report addresses the content in detail.

COMPONENT	CRITERIA FOR CONSIDERATION	H D	D	C	P	F
<b>1. Content</b>  (value is 70%)	Introduction - sets the scene and identifies key issues - relevance of introduction and literature review to the topic					
	Clear statement of aims					
	Description and clarity of methods					
	Results and discussion - clarity and understanding					
	Quality of conclusion - clearly and concisely identified - lack of repetition					
	Explicit statements on relevance of aims and outcomes to natural resources management					
	Content of presentation is clearly known and understood Knowledge of general subject area					
<b>2. Presentation</b>  (value is 30%)	Organisation - evidence of practice - flow and transition of ideas					
	Quality of visual aids - Powerpoint display not cluttered - animations not overused - relevance to presentation - each slide is clear and well labelled					
	Retention of interest					

.....  
**SPEAKER:**

**UNIT:**

**ASSESSOR:**

**DATE:**

**GRADE:**