



The University of Southern Queensland

Course Specification

Description: Science Project

Subject	Cat-Nbr	Class	Term	Mode	Units	Campus
SCI	3301	14410	2, 2002	ONC	1.00	TWMBA

Academic Group:	FOSCI
Academic Org:	FOS002
HECS Band:	2
ASCED Code:	019999

STAFFING

Examiner: Ray Marshall

Moderator: Alfio Parisi

OTHER-REQUISITES

Pre-requisite: Completion of 2nd Level.

RATIONALE

The project provides students with an opportunity to carry out an in- depth study of a topic relevant to at least one Major Study area. As a third level course, it must be conducted with the appropriate depth of academic rigour.

SYNOPSIS

This course provides students with an opportunity to carry out research work in a situation which resembles, as closely as possible, that in which they may find themselves when they begin a career in science. Students are required to thoroughly research and plan their project in consultation with an appointed supervisor and submit a detailed report on completion of the project. A large proportion of the project will be laboratory or field oriented.

OBJECTIVES

On successful completion of this course students will be able to:

- demonstrate an awareness of modern information search strategies and techniques, including the use of computer-based literature searching, if applicable;
- demonstrate an ability to evaluate and relate previous research with a new project;
- demonstrate a knowledge of the research methods, theory and techniques relevant to the project undertaken in the course;
- apply a problem solving approach in undertaking a minor research project;
- demonstrate research skills and techniques appropriate to the project undertaken;

- demonstrate competence in writing a report which summarises previous work relevant to the project, explains the method used in the project, and summarises and evaluates the results; of the project.
- present a seminar on the research work completed.

TOPICS

Description	Weighting (%)
1. The following guidelines apply to this course.	0.00
2. THE ROLE OF THE STUDENT Each student will normally select a topic from a range of topics proposed by staff. Alternatively students may propose their own topic and submit it to the course examiner for approval. When a topic has been chosen a Project Description Form must be completed and submitted to the examiner for approval (NO LATER THAN THE END OF WEEK 1) THE EXAMINER WILL HAVE THE RIGHT TO CANCEL THE STUDENT'S PROJECT IF THIS DEADLINE IS NOT MET.) Students should seek assistance from their Project Supervisor when completing this form, and obtain their signature. On receipt of approval the student will complete the project using his own effort, with advice from the project supervisor and other staff. Students must meet the deadlines given in this Course Specification. (NOTE: The project does not formally begin until the Examiner has signed the Project Description Form.)	10.00
3. THE ROLE OF EXAMINER The examiner will be responsible for all activities associated with administering the course. The examiner, in consultation with the Head of Department of the chosen Major Study area, will appoint an appropriate project supervisor. The examiner has final responsibility for the grading of marks.	10.00
4. THE ROLE OF THE PROJECT SUPERVISOR Where appropriate the principal project supervisor should be a staff member of the Department of Physical Sciences. It is the examiner's responsibility to appoint and/or organize Associate or external supervisors. The supervisor will provide advice and guidance to the student. The student and supervisor should by mutual agreement organize a schedule for consultation. The supervisor will be responsible for evaluating the progress report, seminar, workbook and final report. The supervisor may seek advice from other staff members to assist in their evaluation of the student.	10.00
5. PROJECT WORKBOOK Each student must keep chronological records of all activities (results, methods, field trips, etc) associated with the project in an A4 book. The level of record-keeping in the workbook must be such as to allow another student to be able to continue, review or develop the project at a later date. Also, remember that this workbook carries a portion of the marks for the course.	10.00
6. PROGRESS REPORT Half-way through the prescribed time allowed for the project, students are required to submit a progress report on the project	10.00

to their supervisor. This report should contain: (a) The overall structure of the Project (see 7 below) with a clear indication that the relevant literature has been reviewed. Include a bibliography as well as references. (b) Details of methods used to date and an evaluation of these methods. (c) Results obtained and a discussion of future work required to achieve all the aims of the project. At this time, the Supervisor and Student should decide if a revision of the Project Description Form is necessary.

7. SEMINAR You should allocate around 20 minutes for presentation and 5 minutes for question and answer time. Discuss with your supervisor your proposed seminar BEFORE the actual presentation. 10.00

8. PROJECT REPORT (a) Two copies of the project report shall be submitted on or before the deadline stated in this Course Specification. (One becomes the Student's Copy, the other the Supervisor's copy). Students are urged to submit a draft report to their supervisor for comments before submitting the final report. The final report will be evaluated and therefore cannot be amended. (b) The copy shall be one and a half-spaced typescript (except for references), on one side of A4 size paper. (c) Each page must be numbered consecutively (initial pages in roman numerals, appendix pages A1, A2...) and have margins of suitable dimensions for the chosen binding process. (d) The general layout or format of the report must be similar to that found in a scientific journal. (The library services unit have a number of guides to help you in writing your report. See the recommended reference material section) If you are uncertain regarding the required format seek advice from your supervisor before starting the report. Your supervisor will be able to show you an example of a project report. In general, the report should contain the following main sections: the first sheet must contain the title, author's name, qualification for which the student is studying and the date of submission. Abstract (200 words or less), acknowledgements, table of contents, a list of figures and tables, introduction, materials and methods (including descriptions of field locations), results, discussion and conclusions, references, appendices. (e) The copy shall be bound in a manner consistent with the volume of material contained in the report. The minimum requirement is a temporary or spiral binding, available through the USQ Printery or Student Association. 10.00

9. INCOMPLETE GRADES A final project report that is graded Incomplete (Make- Up) may be re-submitted for grading only once at the discretion of the supervisor (a copy of the requirements, possible final mark and completion date must be supplied to both the student and the examiner!) Students should therefore heed the supervisors suggestions for improvement or the final grade shall be a "fail". It will be necessary for students re-enrolling in the course to undertake a new topic for their project. 10.00

10. OWNERSHIP OF ASSESSMENT ITEMS (a) All assessment items whether in the library or not are USQ's property. (b) If an external body is involved, agreement should be reached, via a written contract, about the 10.00

ownership of the DATA before the student begins the project! (c) Further clarification of intellectual property should be made via the Associate Dean.

11. Projects which involve Animals or Human Subjects will need to be considered by either the Animal Ethics Committee or the Ethics Committee for Research involving Human Subjects. (Reference: University Calendar 3.3.7-2 and 3.3.7-3). 10.00

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Guide to Finding Journal Articles, (Library Guide No.4/87),

Guide to Footnotes and Referencing, (Library Guide No.11/87) (The Harvard System),

Other texts or reading materials specific to the topic may be recommended by the examiner and/or supervisor when the project topic has been finalised.

Australian Government Publishing Service 1994, *Style Manual: For Authors, Editors and Printers*, 5th edition, AGPS, Canberra.

Barrass, R. 1978, *Scientists Must Write*, Chapman & Hall, London.

Day, R.A. 1995, *How to Write & Publish a Scientific Paper*, 3rd edition, Cambridge University Press, Cambridge.

Farr, A.D. 1985, *Science Writing for Beginners*, Blackwell Scientific, Oxford.

Leaver, R. H. and Thomas, T. R. 1974, *Analysis and Presentation of Experimental Results*, Macmillan, London.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Project Work	100
Report Writing	70

ASSESSMENT DETAILS

Description	Marks Out of	Wtg(%)	Required	Due Date
PROGRESS REPORT	999.00	10.00	Y	22 Jul 2002 (see note 1)
WORKBOOK	999.00	10.00	Y	01 Nov 2002
PROJECT REPORT	999.00	65.00	Y	01 Nov 2002
SEMINAR	999.00	15.00	Y	22 Jul 2002 (see note 4)

NOTES:

1. Examiner will advise of due date for Progress Report
4. Examiner will advise date of Seminar

OTHER REQUIREMENTS

- 1 In accordance with the University's Policy on Assignments (Regulation 5.6.1), the Examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances. This policy may be found in the USQ Handbook, the Distance Education Student Guide and the Faculty of Sciences' Orientation Handbook for new on-campus students. All students are advised to study and follow the guidelines associated with this policy.
 - 2 To obtain a passing grade in this course, students must perform satisfactorily in all aspects of assessment that is, gain at least 50% of the marks available for each assessment item.
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