



The University of Southern Queensland

Course specification

| Description: Science Project | | | | | | |
|-------------------------------------|---------|-------|---------|------|-------|-----------|
| Subject | Cat-nbr | Class | Term | Mode | Units | Campus |
| SCI | 3301 | 51111 | 1, 2006 | EXT | 1.00 | Toowoomba |

| | |
|-----------------------------------|--------|
| Academic group: | FOSCI |
| Academic org: | FOS002 |
| Student contribution band: | 2 |
| ASCED code: | 019999 |

STAFFING

Examiner: Tania van den Ancker

Moderator: Alfio Parisi

REQUISITES

Pre-requisite: Completion of 2nd year (or 2 years full time study in a relevant area)

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 academic supervisor and submit a detailed report on completion of the project. A large proportion of the project will be laboratory or field oriented. Placements in this course depends on availability of a supervisor in the chosen area.

OBJECTIVES

On completion of this course students will be able to:

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

6. 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;
7. present a poster on the research work completed.

TOPICS

| Description | Weighting (%) |
|--|---------------|
| 1. 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. | 100.00 |

TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at <http://bookshop.usq.edu.au> click 'Semester', then enter your 'Course Code' (no spaces).

There is no fixed text book for this course.

Such journals, monographs and other printed materials as are appropriate for the research topic chosen will be available at the library.

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.

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.

Referencing Resources are available at http://www.usq.edu.au/library/infoabout/ref_guides/default.htm

Australian Government Publishing Service 2002, *Style Manual: For Authors, Editors and Printers*, 6th edn, Wiley, Australia.

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

Day, RA 1995, *How to Write & Publish a Scientific Paper*, 4th edn, Cambridge University Press, Cambridge (808.0665 Day).

(808.0665 Day)

Farr, AD 1985, *Science Writing for Beginners*, Blackwell Scientific, Oxford (805.0665021 FAR).

(805.0665021 FAR)

Leaver, RH and Thomas, TR 1974, *Analysis and Presentation of Experimental Results*, MacMillan, London.

STUDENT WORKLOAD REQUIREMENTS

| ACTIVITY | HOURS |
|----------------|--------|
| Project Work | 100.00 |
| Report Writing | 70.00 |

ASSESSMENT DETAILS

| Description | Marks out of | Wtg(%) | Due date |
|--------------------------|--------------|--------|-----------------------------|
| PROGRESS REPORT | 20.00 | 20.00 | 07 Mar 2006 (see note 1) |
| PROJECT REPORT | 65.00 | 65.00 | 07 Mar 2006 (see note 2) |
| POSTER | 15.00 | 15.00 | 07 Mar 2006 (see note 3) |
| PROJECT DESCRIPTION FORM | 1.00 | 0.00 | 07 Mar 2006 |

NOTES

1. Examiner will advise of details for Progress Report
2. Examiner will advise the due date for Project Report.
3. Examiner will advise due date of Poster

IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:
There are no attendance requirements for this course. However, it is the students' responsibility to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.
- 2 Requirements for students to complete each assessment item satisfactorily:
To complete each of the assessment items satisfactorily, students must obtain at least 50% of the marks available for each assessment item.
- 3 Penalties for late submission of required work:
If students submit assignments after the due date without prior approval then a penalty of 10% of the total marks available for the assignment will apply for each working day late.
- 4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade a student must submit all of the summative assessment items and achieve at least 50% of the available weighted marks for those items.
- 5 Method used to combine assessment results to attain final grade:
The final grades for students will be assigned on the basis of the weighted aggregate of the marks obtained for each of the summative assessment items in the course.
- 6 Examination information:
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:
There will be no Deferred or Supplementary examinations in this course.
- 8 University Regulations:

Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10 Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL <http://www.usq.edu.au/corporateservices/calendar/part5.htm> or in the current USQ Handbook.

ASSESSMENT NOTES

- 9 **PROJECT DESCRIPTION FORM** - 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 student's project can be cancelled if this deadline is not met. Students should seek assistance from their proposed 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. (NOTE: The project does not formally begin until the Examiner has signed the Project Description Form).
- 10 **THE ROLE OF EXAMINER** - The examiner will be responsible for all activities associated with administering the course. The examiner will only approve a student's enrolment upon submission of a completed and signed Project Description form. The examiner has final responsibility for the grading of marks.
- 11 **THE ROLE OF THE PROJECT SUPERVISOR** - The principal project supervisor should be a staff member of the Department of Biological & Physical Sciences. It is the principal project supervisor's or student's (with approval from principal project supervisor) responsibility to appoint and/or organise Associate/External Supervisors. The supervisor will provide advice and guidance to the student. The student and supervisor should by mutual agreement organise a schedule for consultation. The supervisor will be responsible for evaluating the progress report, poster and final report. The supervisor may seek advice from other staff members to assist in their evaluation of the student.
- 12 **THE ROLE OF THE ASSOCIATE OR EXTERNAL SUPERVISOR** - The primary role of the Associate/External supervisor is to monitor day-to-day activities and to guide students towards successful submission of assessment items.
- 13 **PROGRESS REPORT** - Half-way through the prescribed time allowed for the project, students are required to submit a progress report on the project to the examiner. This report should contain: (a) The overall structure of the Project (see 15 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 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.
- 14 **POSTER** - A poster paper in science is intended to communicate research results in a succinct form to a wide nonspecialist audience. Typically scientific posters are displayed at conferences, but posters can also form a more permanent display about a research project. the student should gain advice from the supervisor on a suitable format of the poster. Electronic submission of the poster is required. The examiner and/or moderator will grade the poster in addition to the supervisor.
- 15 **PROJECT REPORT** - (a) The project report shall be submitted, preferably electronically, to the examiner on or before the deadline advised by the Examiner. Students are urged to submit a draft report to their supervisor for comments before submitting the final report. 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 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 may be able to show you an example of a project report.

- 16 **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.
- 17 Projects which involve Animals or Human Subject 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).
- 18 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.