



The University of Southern Queensland

Course specification

The current and official versions of the course specifications are available on the web at <http://www.usq.edu.au/coursespecification/current>.
Please consult the web for updates that may occur during the year.

Description: Plant Diversity

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
BIO	2204	90177	2, 2009	ONC	1.00	Toowoomba

Academic group:	FOSCI
Academic org:	FOS002
Student contribution band:	6
ASCED code:	010903

STAFFING

Examiner: John Dearnaley
Moderator: Andrew Le Brocque

RATIONALE

This course provides students with a broad background to the diversity of organisms in the plant kingdom and an overview of the evolution and current distribution of Australia's unique flora. This course also provides students with the skills necessary for accurate plant identification. An understanding of the evolutionary relationships of plants, their form and adaptations to the environment and practical skills in identifying them is valuable to many professionals, especially plant biologists, ecologists, environmental scientists and teachers.

SYNOPSIS

This course is designed to provide students with a grounding in diversity of green plants and their habitats, with particular reference to Australian flowering plants, and to provide them with skills of identification. The evolution of the Australian flora from pre-Gondwana to the present-day is also explored. Practical work both in the laboratory and field is an important component of this program. The assignments are designed to encourage students to extend their field experience in their own time and to increase their awareness of the local flora.

OBJECTIVES

On completion of this course students will be able to:

1. demonstrate knowledge and understanding of the diversity of organisms classified in Kingdom Plantae (Practical Test, Plant Collection, End-semester Exam);
2. demonstrate an understanding of the adaptations of many plants to their habitats (Practical Test, End-semester Exam);
3. demonstrate an understanding of the history of the Australian continent and the evolution of Australia's unique terrestrial flora (Mid-semester Test);
4. demonstrate an understanding of the biogeography of the Australian flora in relation to historical and present day factors (Mid-semester Test);

5. demonstrate skills of identification both of flowering and non-flowering plants (Practical Test, Plant Collection);
6. demonstrate a familiarity with herbarium and collecting procedures (Plant Collection).

TOPICS

Description	Weighting (%)
1. Australian vegetation - Biogeography of Australian flora; climatic, edaphic and historical factors shaping Australia's flora; classification of Australia's vegetation; patterns in Australian vegetation.	17.00
2. Plant Taxonomy - principles of nomenclature; history of classification	8.00
3. Non-Flowering Plants - Bryophytes; Fern Allies; Ferns; Cycads; Conifers	42.00
4. Flowering Plants - Features of Angiosperms; Family Myrtaceae; Family Proteaceae; Family Fabaceae; Family Mimosaceae; Family Casuarinaceae; Family Asteraceae; Family Lamiaceae; Family Epacridaceae; Family Dilleniaceae; Family Cyperaceae; Family Poaceae; Family Orchidaceae; Family Liliaceae	33.00

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).

Clarke, I & Lee, H 2003, *Name that flower*, 2nd edn, University Press, Melbourne.

Dearnaley, JDW & Le Brocq, AF 2009, *Plant diversity, study notes and practical guide*, USQ Publication, Toowoomba.

Raven, PH, Evert, RF & Eichhorn, SE 2005, *Biology of plants*, 7th edn, W H Freeman and Company, New York.

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.

A comprehensive list of references for identification of Queensland plant species is provided in the Practical Guide.

Beadle, NCW 1981, *The vegetation of Australia*, Cambridge University Press, Cambridge.

Bell, Peter R 1992, *Green plants: their origin and diversity*, Cambridge University Press, Cambridge.

Cronin, L 1997, *Australian flora*, William Heinemann, Kew.

Gifford, EM & Foster, AS 1989, *Morphology and evolution of vascular plants*, 3rd edn, Freeman and Co, New York.

Groves, RH 1994, *Australian vegetation*, 2nd edn, Cambridge University Press, Cambridge.

Heywood, VH, Brummit, RK, Culham, A & Seeber, O 2007, *Flowering plant families of the world*, Firefly Books, Richmond Hill, Ont.

(Rev & updated edn)

Stanley, TD & Ross, EM 1983, *Flora of South-Eastern Queensland*, Queensland Department of Primary Industries, Brisbane, Vol 1-3.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Examinations	3.50
Field Trips or Excursions	8.00
Laboratory or Practical Classes	20.00
Lectures	26.00
Private Study	51.00
Project Work	58.00

ASSESSMENT DETAILS

Description	Marks out of	Wtg (%)	Due date
1 HOUR PRACTICAL TEST	60.00	20.00	20 Jul 2009 (see note 1)
1 HOUR MID SEMESTER TEST	60.00	15.00	20 Jul 2009 (see note 2)
PLANT COLLECTION	212.00	30.00	30 Oct 2009
1.5 HOUR END SEM CLOSED EXAM	90.00	35.00	END S2 (see note 3)

NOTES

1. Test date will be available during the Semester.
2. Test date will be available during the Semester.
3. Examination dates will be available during the Semester. Please refer to the examination timetable when published.

IMPORTANT ASSESSMENT INFORMATION

1 Attendance requirements:

It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and 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. Students must attend the excursion for this course to be able to satisfy the requirements of Objectives 2 and 5.
- 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 of the examiner then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded. No assignments will be accepted after model answers have been posted.
 - 4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available for the course.
 - 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:
In a Closed Examination, candidates are allowed to bring only writing and drawing instruments into the examination.
 - 7 Examination period when Deferred/Supplementary examinations will be held:
Any Deferred or Supplementary examinations for this course will normally be held during the examination period of Semester 3 of the current academic year.
 - 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 In order to attend laboratory classes, students must provide and wear appropriate personal protective equipment. This shall include a laboratory coat, closed in shoes, and safety glasses. Such equipment must be approved by supervising staff. Failure to provide and wear the appropriate safety equipment will result in students being excluded from classes.
- 10 Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally prescribed time may be awarded the temporary grade: IM (Incomplete-Make-up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non directed personal study. Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded IDS (Incomplete-Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).
- 11 Students must retain a copy of each item submitted for assessment. If requested by the Examiner, students will be required to provide a copy of assignments submitted for assessment purposes. Such copies should be despatched to USQ within 24 hours of receipt

of a request being made. The examiner of a course may grant an extension of the due date of an assignment in extenuating circumstances.