



The University of Southern Queensland

## Course specification

### Description: Geographic Information Systems Practice 1

Subject	Cat-nbr	Class	Term	Mode	Units	Campus
GIS	2901	38214	3, 2004	EXT	0.00	TWMBA

<b>Academic group:</b>	FOENS
<b>Academic org:</b>	FOES05
<b>Student contribution band:</b>	2
<b>ASCED code:</b>	031199

### STAFFING

Examiner: Yan Liu

Moderator: Frank Young

### REQUISITES

Pre-requisite: SVY1901 and GIS1402

### OTHER-REQUISITES

Recommended prior or concurrent study: SVY3202

### SYNOPSIS

This course aims at providing students with practical knowledge and skills related to geospatial data capture and acquisition, attribute database management, and GIS pre-processing operations. It covers the practical aspects of photogrammetry, satellite remote sensing, and global positioning systems (GPS). The knowledge and practical skills gained from these data capture technologies will be extended by hands-on exercises on attribute database management (creating, editing and expanding attribute tables) and pre-processing operations (data import and export, digitising and data editing, coordinate and projection transformation, and raster-vector-raster conversions). This course will involve the use of equipment (e.g. stereoscope, digital photogrammetric software, digitiser, GPS unit) and an industry standard GIS software package.

### OBJECTIVES

On completion of this course, students should be able to:

1. use photogrammetric equipment to enable interpretation of and measurement from aerial photographs;
2. interpret and apply satellite imagery;

3. understand how GPS can be used for asset mapping and GIS maintenance;
4. build and manage spatial and attribute data;
5. perform relevant GIS data pre-processing operations.

## TOPICS

	Description	Weighting (%)
1.	Photogrammetry	20.00
2.	Remote Sensing	20.00
3.	Global Positioning System (GPS)	20.00
4.	Geocoding and Heads-up Digitising	20.00
5.	Data Pre-processing	20.00

### **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).**

### **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.

*GIS1402 Geographic Information Systems, External Study Materials*, USQ Publication, Toowoomba.

*SVY3202 Photogrammetry and Remote Sensing, External Study Materials*, USQ Publication, Toowoomba.

### **STUDENT WORKLOAD REQUIREMENTS:**

ACTIVITY	HOURS
Laboratory or Practical Classes	12.00
Lectures	5.00
Tutorial	33.00

## ASSESSMENT DETAILS

Description	Marks out of	Wtg(%)	Due date
EXERCISES COMPLETION	1.00	100.00	21 Feb 2005

## IMPORTANT ASSESSMENT INFORMATION

- 1 Attendance requirements:  
This course requires attendance at a residential school. 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.
- 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 (or at least a grade of C-) 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 20% 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 students must complete at least 80% of the practical and other activities at a satisfactory standard at the Residential School for the course, as stated in 2 above.
- 5 Method used to combine assessment results to attain final grade:  
As P is the only passing grade available for this course, all students who are qualified for a passing grade, under the requirements in 4 above, will be given a grade of P. Other students will be given either a Failing grade or an Incomplete grade.
- 6 Examination information:  
There is no examination in this course.
- 7 Examination period when Deferred/Supplementary examinations will be held:  
Not applicable.
- 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

- 1 The due date for an assignment is the date by which a student must despatch the assignment to the USQ. The onus is on the student to provide proof of the despatch date, if requested by the Examiner.
- 2 Students must retain a copy of each item submitted for assessment. This must be despatched to USQ within 24 hours if required by the Examiner.
- 3 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.
- 4 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.
- 5 The Faculty will NOT accept submission of assignments by facsimile.
- 6 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.
- 7 In the event that a due date for an assignment falls on a local public holiday in their area, such as a Show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the Examiner's convenience.
- 8 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.
- 9 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).