



The University of Southern Queensland

## Course Specification

### Description: GIS Practice 1

| Subject | Cat-Nbr | Class | Term    | Mode | Units | Campus |
|---------|---------|-------|---------|------|-------|--------|
| GIS     | 2901    | 10639 | 1, 2002 | ONC  | 0.00  | TWMBBA |

|                        |        |
|------------------------|--------|
| <b>Academic Group:</b> | FOENS  |
| <b>Academic Org:</b>   | FOES05 |
| <b>HECS Band:</b>      | 2      |
| <b>ASCED Code:</b>     | 031199 |

### STAFFING

Examiner: Yan Liu

Moderator: Frank Young

### PRE-REQUISITES

Pre-requisite: SVY 1901 and GIS 1402 Co-requisite: SVY 3202

### 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, editing digitising errors, coordinate and projection transformation, clipping, and raster-vector-raster conversions). This course will involve the use of equipment (e.g. stereoscope, digitiser, GPS unit) and an industry standard GIS software package.

### OBJECTIVES

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

- Use photogrammetric equipment to enable interpretation of and measurement from aerial photographs;
- Interpret and apply satellite imagery;
- Understand how GPS can be used for asset mapping and GIS maintenance;
- Build and manage attribute database; and
- Perform relevant GIS 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 Manual Digitising | 20.00         |
| 5. Pre-processing Operations       | 20.00         |

## 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.

*GIS1402 Geographic Information Systems, External Study Materials*, USQ Publication,  
*SVY3202 Photogrammetry and Remote Sensing, External Study Materials*, USQ Publication,

## STUDENT WORKLOAD REQUIREMENTS

| ACTIVITY                        | HOURS |
|---------------------------------|-------|
| Laboratory or Practical Classes | 12    |
| Lectures                        | 5     |
| Tutorial                        | 33    |

## ASSESSMENT DETAILS

| Description | Marks Out of | Wtg(%) | Required | Due Date                    |
|-------------|--------------|--------|----------|-----------------------------|
| EXERCISES   | 999.00       | 100.00 | Y        | 04 Mar 2002<br>(see note 1) |

### NOTES:

1. Further details about the due dates are detailed in the assessment section of the Course Specifications.

## OTHER REQUIREMENTS

- 1 Attendance at a minimum of 80% of practical and/or residential school sessions is compulsory for a passing grade to be awarded in this course.
- 2 The only final grades awarded in this course are Pass (P) or Fail (F) grades.
- 3 To receive a passing grade in this course a student must normally achieve at least 45% in each of the assessments and at least 50% of the available marks for the course.

- 4 A minimum standard of communication skills must be demonstrated in order for a passing grade to be achieved.
- 5 The due date for an assignment is the date by which a student must submit the assignment to the USQ. The onus is on the student to provide proof of the submit date, if requested by the Examiner.
- 6 Students must retain a copy of each item submitted for assessment. This must be produced within five days if required by the Examiner.
- 7 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.
- 8 If students submit assignments after the due date without prior approval then a penalty of up to 20% of the total marks for the assignment will apply for each working day late.
- 9 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.
- 10 The Faculty of Engineering and Surveying will NOT accept submission of hand written or typed assignments by facsimile, e- mail or computer diskette. Students in remote locations who do not have regular access to postal services may be given special consideration.
- 11 The final grades for students will be assigned on the basis of the aggregate of the marks obtained for each of the assessments in the course.
- 12 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.
- 13 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; IDSM (Incomplete Deferred Examination and Make-up).
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