Description: Geographic Information Systems Practice 2

Subject  Cat-nbr  Class  Term  Mode  Units  Campus
GIS       3901    66444  2, 2007  EXT   0.00    Toowoomba

Academic group: FOENS
Academic org: FOES05
Student contribution band: 2
ASCED code: 031199

STAFFING
Examiner: Armando Apan

REQUISITES
Pre-requisite: GIS2901

SYNOPSIS
This course aims at providing students with practical knowledge and skills related to spatial analysis and modeling (vector and raster), web based GIS, and digital image processing. In addition, the practical component of GIS project planning and implementation will be applied in a small GIS project. This course will involve the use of industry standard software packages.

OBJECTIVES
The course objectives define the student learning outcomes for a course. The assessment item(s) that may be used to assess student achievement of an objective are shown in parenthesis. On completion of this course, students should be able to:

1. know and apply major spatial analysis functions and operations (Exercises, Seminar and Report);
2. perform image processing and web based GIS tasks (Exercises, Seminar and Report);
3. understand the various stages and processes involved in establishing a small GIS (Exercises, Seminar and Report);
4. undertake a small GIS project including project design, data analysis, and output of final results (Exercises, Seminar and Report); and
5. present the results of the GIS projects in a professional manner (Seminar and Report).

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>Spatial analysis and modelling (vector data)</td>
<td>20.00</td>
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</tbody>
</table>
2. Spatial analysis and modelling (raster data) 20.00
3. Web based GIS 20.00
4. Digital image processing 20.00
5. GIS project planning and implementation 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).

No text or materials to be purchased for this practice course.

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.

Various external study packages (GIS3405, GIS3406 and GIS4407), USQ Publication, Toowoomba.

STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
</tr>
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<tbody>
<tr>
<td>Lectures</td>
<td>5.00</td>
</tr>
<tr>
<td>Report Writing</td>
<td>10.00</td>
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<tr>
<td>Seminars</td>
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<tr>
<td>Tutorials</td>
<td>33.00</td>
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ASSESSMENT DETAILS

<table>
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<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXERCISES</td>
<td>1.00</td>
<td>70.00</td>
<td>28 Sep 2007</td>
</tr>
<tr>
<td>SEMINAR AND REPORT</td>
<td>1.00</td>
<td>30.00</td>
<td>28 Sep 2007</td>
</tr>
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NOTES

1. Students will be advised of the due date when each assessment item is issued.

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 may be required to provide a copy of assignments submitted for assessment
purposes. Such copies should be dispatched to the USQ within 24 hours of receipt of a
request to do so.

3 In accordance with University Policy, the Examiner 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, 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).