Description: Project Surveying

Subject  | Cat-nbr | Class | Term | Mode | Units | Campus
---|---|---|---|---|---|---
SVY | 4307 | 44929 | 2, 2005 | EXT | 1.00 | Toowoomba

Academic group: FOENS
Academic org: FOES05
Student contribution band: 2
ASCED code: 031101

STAFFING
Examiner: Peter Gibbings
Moderator: Glenn Campbell

REQUISITES
Pre-requisite: SVY3304 and SVY3107

RATIONALE
Surveyors are required to plan and undertake surveys for large projects, often in remote areas. To do this they must have a sound knowledge of all the modern technology and techniques for undertaking professional surveys.

SYNOPSIS
The course will draw together many areas of surveying in order to simulate the operations of large survey projects. A number of surveying case studies will be discussed including the project planning and the technical operations.

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

1. manage operations, coordinate activities and resources, and develop contractual arrangements on a project;
2. possess the necessary skills and knowledge to assess the economic feasibility and cost benefit of a project;
3. effectively plan, organise and control the delivery of knowledge based services;
4. prepare estimates of costs and estimates of times on projects;
5. prepare a cost benefit analysis on a project to assist clients in their decision making;
6. prepare a specific project quality plan;
7. utilise the COGO functions on a CADD package to output AMG or MGA coordinates on a project basis;
8. determine AMG or MGA meridian on a project to the required accuracy;
9. apply knowledge of GPS technology to surveying projects;
10. Identify circumstances when GPS might provide cost effective alternatives to traditional surveying methods on projects;
11. Transform existing AMG84 coordinates to the new MGA94 and vice versa; and

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>1. Job Initialization</td>
<td>10.00</td>
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<tr>
<td>2. Cost Management</td>
<td>7.00</td>
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<td>3. Time and Resource Management</td>
<td>8.00</td>
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<td>4. Project Control</td>
<td>10.00</td>
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<td>5. Quality Management</td>
<td>10.00</td>
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<td>6. Survey Control Traverses</td>
<td>7.00</td>
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<td>7. A Case Study</td>
<td>8.00</td>
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<tr>
<td>8. Satellite Positioning Systems</td>
<td>10.00</td>
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<tr>
<td>9. Coordinate, Heights and Transformations</td>
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<tr>
<td>10. Summary of GPS Measurement Techniques</td>
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<td>11. Practical Aspects, Specifications and Standards</td>
<td>10.00</td>
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<tr>
<td>12. Future Trends</td>
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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.

Access to MS Excel will greatly assist with completion of Assignment 2.
Access to the Internet is required as several URL’s are noted throughout the study materials.
STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Assessment</td>
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<tr>
<td>Directed Study</td>
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<tr>
<td>Examinations</td>
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<tr>
<td>Private Study</td>
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ASSESSMENT DETAILS

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
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<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>150.00</td>
<td>15.00</td>
<td>22 Aug 2005</td>
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<tr>
<td>ASSIGNMENT 2</td>
<td>150.00</td>
<td>15.00</td>
<td>19 Sep 2005</td>
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<tr>
<td>3 HOUR CLOSED EXAMINATION</td>
<td>700.00</td>
<td>70.00</td>
<td>END S2 (see note 1)</td>
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NOTES
1. Student Administration will advise students of the dates of their examinations during the semester.

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 (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 a student must achieve at least 50% in each of the summative assessments and at least 50% of the available weighted marks for the summative assessment 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 (or grades) 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 be held during the examination period at the end of the semester of the next offering of 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

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 one of the temporary grades: IM (Incomplete - Make up), IS (Incomplete - Supplementary Examination) or ISM (Incomplete -Supplementary Examination and Make up). A temporary 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).