CLASS DESCRIPTION FORM

CL952 Aquifer Mechanics

Class Registrar: Prof Robert M Kalin
Taught To (Course): MSc and Level 5

Other Lecturers Involved: British Geological Survey Staff
Credit Weighting: 10
Semester: 2

Assumed Prerequisites: Compulsory/optional/elective class
Academic Level: MSc and Level 5

Class Format and Delivery (hours):

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Tutorial</th>
<th>Laboratory</th>
<th>Project</th>
<th>Assignments</th>
<th>Private Study</th>
<th>Total</th>
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<td>14</td>
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Educational Aim

Successful completion of this module should provide the student with an understanding of:
- Hydrogeology and Subsurface Fluid Flow
- Well Hydraulics and Pumping Tests
- Contaminant Transport in the Subsurface
- Real-world applications of Hydrogeology

Learning Outcomes

On completion of the class the student is expected to be able to

LO1 The student will be able to evaluate and determine groundwater aquifer properties through numerical analysis of well hydraulic data

LO2 The student will be able to interpret real-world controls on the movement of contaminants in the subsurface

Syllabus

The class will teach the following:

Lectures will provide information on Aquifer properties, well hydraulics, and contaminant transport
Laboratories will be used to underpin practical understanding of aquifer properties and contaminant transport
Field-based learning will enhance the uptake of these areas.

Assessment of Learning Outcomes

Criteria

Assessment of learning outcomes will be in the form of group Laboratory reports (LO1 & LO2), a semester report that will demonstrate an ability to evaluate the conceptual understanding of aquifer properties (LO1), and a continually assessed exam that will challenge the learning throughout the semester (LO1 & LO2).

The standards set for each criterion per Class Learning Outcome to achieve a pass grade are indicated on the assessment sheet for all assessment.

12 Principles of Assessment and Feedback

Laboratory and semester reports will have informative evaluation and feedback provided within 2 weeks of submission so that the student's work can be informed by understanding and progress.
## Assessment Method(s) Including Percentage Breakdown and Duration of Exams

<table>
<thead>
<tr>
<th>L/Outcomes</th>
<th>Examinations</th>
<th>Courseworks</th>
<th>Projects</th>
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<tbody>
<tr>
<td></td>
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<td>Duration</td>
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*Indicate which learning outcomes (LO1, LO2 etc) are to be assessed by exam/coursework/project as required.*

### Coursework / Submissions deadlines:
- Laboratory Reports are due 2 weeks from completion of the laboratory
- Semester Report is due on 17th March 2014
- Continually Assessed Exam is due on 14th May 2014

### Resit Assessment Procedures:
All coursework and materials must be submitted

### PLEASE NOTE:
Students need to gain a summative mark of 40% / 50% *(please delete as appropriate)* to pass the class. Students who fail the class at the first attempt will be re-examined during the August diet. This re-examination will consist entirely of exam / coursework / viva *(please delete as appropriate).*

### Recommended Reading
All text books and materials required for the Module are available on MyPlace

### Additional Student Feedback
*(Please specify details of when additional feedback will be provided)*

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<tr>
<th>Date</th>
<th>Time</th>
<th>Room No</th>
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<tr>
<td>3rd March</td>
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Session: Informative 1:1 feedback on module

### Approved:

**Course Director Signature:**

**Date of Last Modifications:**

*(Updated November 2010)*
CLASS TIMETABLE

Class Code: CL952  Class Title: Aquifer Mechanics

Brief Description of Assessment:
Laboratory Reports are due 2 weeks from completion of the laboratory
Semester Report is due on 17th March 2014
Continually Assessed Exam is due on 14th May 2014

Assessment Timing:-
Indicate on the table below the Start/Submission dates for each Assignment/Project and the timing of each Exam/Class Test(s).

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<th>Semester Two</th>
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<th>WK3</th>
<th>WK4</th>
<th>WK5</th>
<th>WK6</th>
<th>WK7</th>
<th>WK8</th>
<th>WK9</th>
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Exam Period: x