School of Civil and Environmental Engineering

Term 2, 2020

# CVEN9521 SLOPE STABILITY AND STABILISATION

| COURSE DETAILS | |
|---|---|
| **Units of Credit** | **6** |
| **Contact hours** | 6 hours per week for four weeks and 3 hours per week for five weeks |
| **Classes and workshops** | Monday, 11:00–14:00 (wks 1, 3-5)<br>Wednesday, 18:00–21:00 (wks 1-5, 7-10) |

the course.

(An example of the approaches to learning are)

| | |
|---|---|
| **Private Study** | ¶ Review lecture material<br>¶ Do set problems and assignments<br>¶ Reflect on class problems and assignments<br>¶ Download materials from Moodle<br>¶ Keep up with notices and find out marks via Moodle |
| **Lectures** | ¶ Find out what you must learn<br>¶ Follow worked examples<br>¶ Hear announcements on course changes |

| | | |
|---|---|---|
| 22/06/2020 and 24/06/2020 (Week 4) | Limit equilibrium methods of stability analyses<br><br>Introduction to unsaturated soil mechanics | Lecture and workshop and SlopeW software demonstration |
| 29/06/2020 and 01/07/2020 (Week 5) | Analysis of slopes involving unsaturated soils<br><br>Laboratory testing, selection of parameters | Lecture and workshop |
| 06/07/2020 (Week 6) | ***No teaching*** | ***Flexibility week for all courses (non-teaching)*** |
| 15/07/2020 (Week 7) | Stabilisation techniques | Lecture and workshop |
| 22/07/2020 (Week 8) | Mechanics of rapid failure and estimation of travel distance | Lecture and workshop |
| 29/07/2020 (Week 9) | Quantitative Risk Assessment (QRA), principles and system framework | Lecture and demonstrations |
| 03/08/2020 (Week 10) | Revision, case studies and example problems | Workshop and demonstrations |

**ASSESSMENT**

- Assignment 1, due beginning of Week 4 (9am 22nd June) value: 10%
- Assignment 2, due beginning of Week 7 (9am 13th July) value: 10%
- Assignment 3, due in Week 10 (5pm 5th August) value: 40%
- Two hour open-book take-home final exam, held in the formal exam period (commencing 14th August) value: 40%

Details of each assessment component, the marks assigned to it, thet c0 G**[**()8(W)8(ks )28(a)6(ssi28(a)6(ssi28((e)6( )28(m)8(a

**ASSESSMENT OVERVIEW**

| Item | Length | Weighting | Learning outcomes assessed | Assessment Criteria | Due date | Deadline for absolute fail | Marks returned |
|---|---|---|---|---|---|---|---|
| 1. Assignment 1 | *~2 days* | *10%* | *1.1, 1.5, 2.1. 2.2. 2.3. 2.4. 3.1 3.2, 3.4, 3.5* | *Detailed on assignment question, located on Moodle* | *9am 22nd June* | *none* | *26th June* |
| 2. Assignment 2 | *~2 days* | *10%* | *1.1, 1.3, 1.4, 2.1. 2.2. 2.3. 3.2, 3.3, 3.4* | *Detailed on assignment question, located on Moodle* | *9am 13th July* | *2 weeks after due date unless an extension is granted* | *~2 weeks after submission* |
| 3. Assignment 3 | *~4 weeks* | *40%* | *1.1, 1.3, 1.4, 2.1. 2.2. 2.3. 3.2, 3.3, 3.4* | *Detailed on assignment question, located on Moodle* | *5pm 5th* | | |