EOSC 529, Slope Engineering COURSE OUTLINE

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January 14, 2016 WATCH FOR UPDATES

Purpose:

To cover selected topics related to slope stability and management of landslide hazards. The topics will be chosen in consultation with the class.

Time:

Thursday 12:00-14:00, Room EOS-M 121

Laboratory:

In place of laboratories, the course will use 1) Independent study and oral presentations (teams of two), 2) Exercises with use of computer software, 3) A laboratory project or field trip in March.

Text:

Regular readings will be assigned

Marking:

There will be a quiz in February, to test knowledge of material covered in lectures. The final mark will be based on: Quiz (5%), Oral Presentation (5%), Participation in class and exercises (10%), Final exam (80%).

Tentative outline:

Jan. 7

Introduction

Jan. 14

Classification of landslides

Reading assignment: Hungr, Picarelli and Leroueil, 2014

Jan. 21

Classification: continued Reading assignment: -

Jan. 28

Slope Stabilization

Reading assignment: Ch. 15 from Cornforth, 2005

Feb 4

Slope Stabilization

Reading assignment: Mt. Polley Report

Feb. 11

Landslide dynamics and runout analysis Reading assignment: Mt. Polley Report

Feb. 18

Reading weak

Feb. 25

TBA

Mar. 3

Landslide dynamics and runout analysis Reading assignment: Mt. Polley Report

Mar. 10

Landslide Hazard and Risk Analysis

Midterm Quiz, 20 minutes

Reading assignment: Mt. Polley Report

Mar. 17

Landslide Hazard and Risk Analysis

Reading assignment: TBA

Mar. 24

Rock fall hazard assessment and mitigation

Reading assignment: TBA

Mar. 31

Selected topics

Apr. 7

Selected topics