Excavation Support Systems – Syllabus

Instructor: Dimitrios Konstantakos, P.E.

Week 1 01/24/17: Module 01 – Introduction

Week 2 01/31/17: Module 02 – Soil stresses and gravity walls

Week 3 02/07/15: Module 03 – Embedded wall systems

Week 4 02/14/17: Module 04 - Sheet pile walls, cantilever and single supports, deadman systems, corrosion

Week 5 02/21/17: Module 05 – Braced excavation and conventional analysis methods

Week 6 02/28/17: Midterm exam (3hrs)

Week 7 03/07/17: Module 06 – Soil structure interaction for support of excavation systems

Week 8 03/14/17: Module 07 – Design approach methods (ASD, LRFD, ULS)

Week 9 03/21/17: Module 08 – Structural design of earth support systems

Week 10 03/28/17: Module 09 - Cofferdams, marine construction, and special construction methods

Week 11 04/04/17: Module 10 – Slope stability and excavation support systems

Week 12 04/18/17: Module 11 – Computer lab

Week 13 04/25/15: Module 12 – Soil nail walls

Week 14 05/02/15: Module 13 – Monitoring and Review of deep excavation case histories

Week 15 05/16/17: Final exam

Course grading:

Attendance – videos 10%

Video quizzes: 10%

Homework: 20%

Midterm exam: 20%

Final exam: 40%