CE286 Foundation Design
Fall 2017
Lectures – MWF 10:50-11:40AM Perkins 300

Course Instructor:  John Lens, P.E., jelens@uvm.edu
Office: Votey 233A  Office Phone 802-656-8156  Cell: 802-272-2796
Fall Office Hours:   Monday and Wednesday 12-2PM and 3:30-4:30PM
                   Friday 9:30-10:30AM and 12-1PM

These hours are for drop-in or appointments. Prior scheduled appointments, faculty meetings, or unanticipated circumstances may alter my availability to meet with you during these hours, so please make an appointment by phone or email if it is critical to meet. I will do my best to accommodate all reasonable meeting requests at these hours or other times, as needed.

SCHEDULE
Class meetings: Monday, Wednesday, and Friday,
Last class   December 8, 2017
Final Exam   December 15, 2017  10:30AM-1:15PM  Perkins 300 (Confirm with instructor)

COURSE DESCRIPTION
This 3-credit course covers subsurface explorations; geotechnical analysis, design, construction, preservation, remediation, and monitoring aspects of shallow and deep foundations applicable to all structures including bridges, buildings, piers and wharves, towers, marine foundation, and construction cranes. Prerequisite: CE 180.

COURSE OBJECTIVES
To aid students in learning the principles of:

• Site characterization for foundation design.
• Selecting appropriate foundation types and configurations.
• Shallow foundation design for bearing capacity and settlement control.
• Deep foundation design for horizontal and vertical capacity and deformation control.
• Risk and reliability factors in foundation design and construction.
• Preparing foundation construction documents (plans and specifications).
• Construction considerations for these foundations.
• Quality control and quality assurance during construction.

Course Goal: Each student understands:

• the overall approach needed to assure a successful foundation
• the fundamental engineering principles which apply to achieving a successful foundation
• their level of proficiency in understanding the standards of practice for foundation engineering and what they need to do to achieve mastery in foundation engineering, construction, and maintenance/preservation skills
COURSE POLICIES

ACCESS: In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students to create reasonable and appropriate accommodations via an accommodation letter to their professors as early as possible each semester. Contact ACCESS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; or www.uvm.edu/access.

ATTENDANCE AND PARTICIPATION: Every class counts. Prompt attendance is expected and counts in your grade. If you cannot make a class or will be late, notify me by email sufficiently before the class. Absences will only be excused for appropriate circumstances.

RELIGIOUS HOLIDAYS: Students have the right to practice the religion of their choice. You should submit in writing to me by the end of the second full week of classes your documented religious holiday schedule for the semester so we can develop a plan to accommodate that schedule.

WRITTEN ASSIGNMENTS: Submit all assignments per the instructions. In general and unless otherwise specified, submittals are due in hard copy form at the start of class. Late submittals are not acceptable and will not be graded.

GRADING: All course assignments must be satisfactorily completed for a passing grade to be achieved. Late submittals will not count unless there are special circumstances accepted by the instructor, in advance of the due date.

BLACKBOARD: Please check Blackboard for important correspondence and course updates. Blackboard will generally be used to notify you of class messages regarding assignment changes or notices. Also, check your e-mail regularly for similar information. In the event of inclement weather, please check your Blackboard e-mail for any notice of cancellation or delay of class and/or activities.

SYLLABUS: This syllabus is subject to change with verbal and electronic notice.

ACADEMIC HONESTY: The University of Vermont and the College Engineering & Mathematical Sciences are learning communities. Consistent with the University’s mission and purpose, and the values the College seeks to foster within its community, we expect that academic honesty and integrity guide the actions of all its members. It is the responsibility of every person in the academic community to ensure that dishonesty is NOT tolerated. Academic dishonesty (cheating and/or plagiarism) violates the Academic Integrity Policy and may result in an “F” on the work involved or in the course. Cheating not only violates the Academic Integrity Policy, but also may be grounds for probation, suspension, and/or expulsion.

http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf

TEXTBOOK: There is no required textbook.
REFERENCES: I will identify during the course reference materials including publications, manuals, and design and construction guidance which are required reading or are particularly pertinent secondary references. These are all in the public domain.

GRADING: The course grade will be based on the following:

- Class Involvement and Participation: 15%
- Homework: 25%
- Quizzes: 10%
- Exams: 40%
- Final Exam: 10%

===== 100%