***Course Syllabus – Spring 2014***
***CE 3343: SOIL MECHANICS I***
***TR 8:00 – 9:20 AM***
***Room NH 202***

**Instructor:** Laureano R. Hoyos, Ph.D., P.E.

**Office Location:** NH 441

**Telephone Number:** 817 272 3879

**Email Address:** lhoyos@uta.edu

**Office Hours:** TWR (10:00 AM – 12:00 PM)

**Course Objective:** To provide a fundamental understanding of the engineering properties and mechanical behavior of soil materials, including soil classification, compaction, permeability, compressibility (consolidation), and shear strength.

**Prerequisites:** Consent of undergraduate advisor.

**Reference Textbook:** Das, B.M. (2006). Principles of Geotechnical Engineering. Cengage Learning: 6th or 7th Edition. (Class notes will be provided by Instructor.)

**Additional Key References:**
(1) Coduto, D.P. (1999). Geotechnical Engineering: Principles and Practices. Prentice Hall.
(2) Holtz, R.D., and Kovacs, W.D. (1981). An Introduction to Geotechnical Engrg. Prentice Hall.

**Major Assignments and Examinations:** A series of homework assignments, two midterm exams, and one comprehensive final exam. All homework assignments must be turned in at the start of the class period in which they are due. Failure to do so will constitute a grade of zero for the homework assignment in question. One week of advanced notice will be provided in scheduling each midterm exam. The final exam will be given according to the university's published final exams schedule. Unexcused failure to appear for an exam at the scheduled time will constitute a grade of zero in that exam.

**Grading Policy:** Arithmetic average of all assigned homeworks (15%), Midterm exams (25% each), and Final exam (35%). Final Grading Scale: A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: 59 or less.

**Attendance Policy:** Class attendance and punctuality are expected. (No special accommodations will be made for incomplete or missed assignments and/or exams due to unexcused absences.)

**Final Review Week:** A period of five class days prior to the first day of final examinations is designated as Final Review Week. During this week, no new assignments will be given; however, previously assigned work may have a completion date during this week. In addition, no portion of the final examination shall be administered during the Final Review Week. Classes are held as scheduled during this week and the material covered in lectures during this week may be included in the final examination.

**Make-Up Exam Policy:** No make-up exams will be given except for medical or other similar hardships where advanced arrangements are made with the instructor; or in case of non-selective medical emergencies with appropriate physician's note or documentation. Other than circumstances described above, failure to take the exam at the scheduled time will constitute a grade of zero in the exam.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

**Americans With Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112: The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens. As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272 3364.

**Academic Integrity:** Students enrolled in this course are expected to adhere to the UT Arlington Honor Code: "*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of*

*the Honor Code.*" UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

**Grade Grievance Policy:** Grade grievances will be handled according to the policy described in the College of Engineering portion of the Catalog.

**Student Support Services Available:** The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817 272 6107 or visit www.uta.edu/resources for more information.

**Librarian to Contact:** Sylvia George-Williams, Science and Technology Library, sylvia@uta.edu, (817) 272 7519.

**Electronic Communication Policy:** The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. Students are responsible for checking their MavMail regularly. Information about activating and using MavMail is available at http://www.uta.edu/oit/email/. There is no additional charge to students for using this account, and it remains active even after they graduate from UT Arlington. To obtain your NetID or for logon assistance, visit https://webapps.uta.edu/oit/selfservice/. If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at helpdesk@uta.edu.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit (stairwells), which is located next to the elevators. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

**Tested Explicitly (TE) Component:**

The Civil Engineering Department ABET accreditation procedure includes assessing the achievement of various departmental student learning outcomes (http://www.uta.edu/ce/accreditation.php). The procedure includes explicit testing (TE) of the achievement of the departmental student learning outcomes.

CE 3343 Soil Mechanics is designated as a TE course, and will involve explicit testing of ABET outcome "e". This will be achieved through specific problems given to test student knowledge of the outcome, which is reproduced below:

CE Department Outcome "e" – An ability to identify, formulate, and solve engineering problems.

**The second midterm exam will be designated as the explicit assessment tool for student achievement of outcome "e" in this course**. The total grade of this exam will be 100. A minimum grade of 70 will be deemed to signify that a student has satisfactorily achieved the outcome. The TE exam will also be counted towards the final grade for this course. (More details will be discussed later in the course.)

**ABET Student Learning Outcomes:**

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| An ability to apply knowledge of mathematics, science, and engineering | a |
| An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability | c |
| An ability to identify, formulate and solve engineering problems | e |
| An understanding of professional and ethical responsibility | f |
| An ability to communicate effectively | g |
| The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context | h |
| A recognition of the need for, and an ability to engage in life-long learning | i |
| A knowledge of contemporary issues | j |
| An ability to use the techniques, skills and modern engineering tools necessary for engineering practice | k |