**Northeastern University**

**Department of Civil and Environmental Engineering**

Instructor’s Assessment

CIVE 2340 Soil Mechanics

**Semester / Year:** Spring / 2013 **Instructor: Akram Alshawabkeh Date:** 05/02/2013

Expectations regarding this course assessment:

1. Before the start of the course, review the most recent instructor assessment for recommendations on how to improve the course.
2. Up to three exams may be used to assess student learning.
3. *Questions to be asked on the in-class evaluation:*  Listed in item 3 below.
4. This assessment form is based on the set of topics and learning outcomes listed in the course syllabus. Do not change this part of the syllabus without action from the discipline group. If there is a change, notify the Undergraduate Studies Committee so that this form can be modified.
5. Complete the form and save it as a Word document with filename like this: IAssess\_2340 \_2013\_Fall

**1. What course improvements did you make? How successful were they? Relate them to recommendations made in previous course assessments.** *Expand the table as necessary.*

|  |  |
| --- | --- |
| 1. | Nothing specific this time. I followed my previous teaching process. |
| 2. |  |
| 3. |  |

**2. Your response to student comments and/or TRACE evaluation:** *Respond to serious criticisms and suggestions. Expand table as necessary.*

|  |  |  |
| --- | --- | --- |
|  | **Student Comment** | **Your Comment(s)** |
| 1. | Need to cover more examples in class | This is always a major issue raised by the students. I did include more examples. However, I will need to go back and assess the examples numbers/distribution between topics hoping that will improve the process |
| 2. | Suggest having prepared examples – not ones in the book. Complete the solution of examples | I used examples from the book since it is a new book. However, I will plan on covering pre-prepared examples from other sources. I usually do not finish the complete calculations, but show all steps. Apparently I may need to completely solve the examples with all calculations. I will re-assess this process. |
| 3. | Improve organization of note | Will do that – mainly make sure that the order of the material is consistent with the organization of the new version of the textbook. I did not change the power point into a packet yet. That will be on my to do list.  |

**3. Student questionnaire summary**

*Does not apply. Do not have the outcome yet.*

**4. Grade Summary**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exam 1 question #** | **Topic** | **Average score** (0 to 100) | **% students with adequate achievement** | **Comment on any item with poor achievement** |
| M1.1 | Phase Relation | 79 | 90% |  |
| M1.2 | Phase Relation | 97 | 98% |  |
| M1.3 | Classification | 85 | 93% |  |
| M1.4 | Compaction | 95 | 96% |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Exam 2 question #** | **Topic** | **Average score** (0 to 100) | **% students with adequate achievement** | **Comment on any item with poor achievement** |
| M2.1 | Stress Distribution | 88 | 96 |  |
| M2.2 | 1D flow  | 83 | 91 |  |
| M2.3 | Seepage force | 68 | 82 |  |
| M2.4 | Flownet | 74 | 89 |  |
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Final exam 3 question #** | **Topic** | **Average score** (0 to 100) | **% students with adequate achievement** | **Comment on any item with poor achievement** |
| F1. | Consolidation Settlement | 75 | 91 |  |
| F2. | Consolidation Rate | 84 | 93 |  |
| F3. | Consolidation Rate | 70 | 78 |  |
| F4. | Shear Strength (Tri-axial) | 83 | 91 |  |
|  | Mohr Circle | 70 | 78 |  |
|  |  |  |  |  |

**5. Here are the topics listed on your syllabus.** Based on your grade summaries, report the fraction of students that showed ability to apply knowledge and to identify, formulate, and solve problems. In the column “Basis for assessment” report the particular item(s) in the grade summary that support this assessment; or if the topic is not covered in the grade summary, state the basis of your assessment.

|  |  |  |  |
| --- | --- | --- | --- |
| **Topic**  | **Percentage of students showing ability to apply knowledge and solve problems** | **Basis for assessment** | **Comments** |
| 1. *Soil phase relations and soil classification*
 | 90 |  |  |
| 1. *Soil structure, mineralogy and compaction*
 | 90 |  |  |
| 1. *Water in soils and soil stresses*
 | 90 |  |  |
| 1. *Flow is soil, seepage*
 | 80 |  |  |
| 1. *Consolidation settlement and theory*
 | 85 |  |  |
| 1. *Shear strength, stress-strain behavior and testing methods*
 | 85 |  |  |

**6. Assessment of Program-Level Outcomes not Covered in Topic Assessment**

What percentage of students achieved the following learning outcomes?

|  |  |  |  |
| --- | --- | --- | --- |
| **Learning Outcome** | **Rating** | **Basis for this rating**  | **Comments?** |
| j. Knowledge of historical and contemporary issues  | could not assess |  |  |

**7. Recommendations for improving this course.** Expand the table as needed.

|  |  |
| --- | --- |
| 1. |  |
| 2. |  |
| 3. |  |