

ABET course syllabus

0941352 Properties of Concrete Lab.

1. Course number and name

0941352 Properties of Concrete Lab.

2. Credits and contact hours

1 Credit hours

3. Course Instructor's name

Coordinator's name

4. Text book, title, author, and year

"Concrete Technology" A. M. Neville, and J.J Brook. Revised Edition-2001
Standards Update, Prentice Hall.

a. other supplemental materials

5. Specific course information

a. brief description of the content of the course

This laboratory includes tests for a number of construction materials, especially concrete, concrete materials, aggregates in general, hollow blocks, bricks, asbestos, tiles, in addition to concrete mixes and casting concrete

b. prerequisites or co-requisites

Pre/corequisite: Propertise of Concrete 0941351

c. indicate whether a required, elective, or selected elective course in the program

Required

6. Specific goals for the course

Familiar with properties, types of cement, and properties of aggregates.

Understanding for properties and testing of fresh and hardened concrete

Conduct tests for cement, aggregates, fresh concrete mixes, and hardened concrete

b. Course addresses ABET Student Outcome(s):

6

7. Brief list of topics to be covered

1. Consistency and setting time of cement
2. Compressive, and tensile strength of cement mortar
3. Bulk density, specific gravity and water absorption of fine and coarse aggregates
4. Los Angeles abrasion test
5. Sieve analysis
6. Slump test
7. Compaction factor test
8. V.B test
9. Casting concrete samples, cubes, cylinders and beams
10. Compressive strength, splitting and flexural tests
11. Core drilling test – Schmidt Hammer test