The University of Jordan Faculty of Engineering and Technology Civil Engineering Department

0901522 – **Construction Methods**; 3 credit hours. Jamal Assbeihat – PhD. Monday; Wednesday : 8 – 9.30

Description:

Equipment cost analysis; factors affecting equipment productivity; methods related to heavy construction; types and usage of construction equipment; improvement of construction productivity by proper selection of equipment fleet.

Text:

Construction Planning, Equipment, and Methods. By: Peurifoy and Schexnayder. last possible edition.

Objective:

Making students able to estimate equipment cost and productivity, and introducing them to construction methods and equipment.

Content:

• PART 1: The analysis of equipment costs and factors affecting productivity, and the proper selection of equipment fleet.

• PART 2: The engineering fundamentals, and construction methods and techniques related to heavy construction such as earthmoving, paving, concrete placement, land clearing, asphalt and concrete production, etc.

• PART 3: The general properties, usage and production of construction equipment such as tractors and related equipment, trucks and wagons, scrapers, excavators, compactors and graders, cranes, asphalt and concrete placement equipment, air compressors, pumps, conveyor belts, and piling equipment.

Participations:

- There are some assignments or term papers to be completed and submitted either individually or as a team member.

- Collaboration among the students is encouraged, (i.e., copying and plagiarism will be severely penalized).

- Professional presentation, good organization, and proper documentation are very important components of the assignment grade.

- Student must attend class session and they are responsible for all materials and announcements discussed in the class. The university rules and regulations regarding the attendance will be strictly adhered to.

Breakdown of the final grade:

- Assignments& quizzes 20 %
- Mid Term Exam 30 %
- Final Exam 50 %
- Total: 100 %