

New Jersey Institute of Technology
Syllabus – CE 711
Improvement in Productivity in Construction
Fall 2017

Professor Alan Slaughter, P.E., P.P.

Course Administration and Email: moodle2.njit.edu

Text: “Productivity Improvement for Construction and Engineering”

Author: J.K. Yates, Ph.D.; Publisher: ASCE Press

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Prerequisite: CE 610 Construction Management

Course Description: Improved methods in construction; various techniques of work sampling and productivity measurement; and current innovations in the construction industry for increasing efficiency.

Course Outline

Week/Date	Topic	Chapter
1/ Sept. 5	Introduction to Productivity	1
2/ Sept.11	A Look at the Construction Industry	3
3/ Sept. 18	Analysis of Improvement Programs	2

4/ Sept. 25	Human Impact and Safety	4
5/ Oct. 2	Improvement Studies	5
6/ Oct. 9	Data Analysis Methods	6
7/ Oct. 16	Case Studies	7
8/ Oct. 20	Midterm	
9/ Oct. 23	Eng. and Const. Improvement	8
10/ Oct. 30	Computer Applications	9
11/ Nov. 6	Computer Models	10
12/ Nov. 13	Global Issues	11
Nov. 20	Thanksgiving Week	
13/ Nov.27	Sustainability in Engineering	12
14/ Dec. 4	Sustainable Construction Materials	13
15/Dec. 11	Stone-Panel Curtain-Wall	Appendix A
Dec. 16	Final	

Term Projects

A list of suggested topics will be provided. Students must select a project either from a list provided or some other source. On Week 4 or before, students will submit a one paragraph topic description on Moodle.

The project report will be **10** pages, including text, photos, drawings and the like. The report will be prepared in an organized and professional manner. (***Neatness counts***)

Important Notes:

1. The NJIT Honor Code will be upheld in this course. Any violations will be brought to the immediate attention of the Dean of Students.
2. Any modifications or deviations to the syllabus throughout the semester will be made through consultation and agreement with the class.

Grades

Homework	15%
Midterm	25%
Term Paper	30%
Final	<u>30%</u>
Total	100%

Home works are due the Monday following the week it was assigned. I reserve the right to reduce a grade if the assignment is late.