# New Jersey Institute of Technology

# Syllabus – CE 711

# Improvement in Productivity in Construction

## Spring 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
ISBN: 978-0-7844-1346-3

**Perquisite:** CE 610

**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/ Jan. 17** | Introduction to Productivity | 1 |
| **2/ Jan. 23** | A Look at the Construction Industry | 3 |
| **3/ Jan. 30** | Analysis of Improvement Programs | 2 |

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|---|---|---|
| **4/ Feb. 6** | Human Impact and Safety | 4 |
| **5/ Feb. 13** | Improvement Studies | 5 |
| **6/ Feb. 20** | Data Analysis Methods | 6 |
| **7/ Feb. 27** | Case Studies | 7 |
| **8/ Mar. 6** | **Midterm** | |
| **Mar. 12 – Mar.19** | Semester Break | |
| **9/ Mar. 20** | Eng. and Const. Improvement | 8 |
| **10/ Mar.27** | Computer Applications | 9 |
| **11/ Apr. 3** | Computer Models | 10 |
| **12/ Apr. 10** | Global Issues | 11 |
| **13/ Apr. 17** | Sustainability in Engineering | 12 |
| **14/ Apr.24** | Sustainable Construction Materials | 13 |
| **15/ May 1** | Stone-Panel Curtain-Wall | Appendix A |
| **May ??** | **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.

# Preliminary