



# STARK STATE COLLEGE

## GENERAL SYLLABUS

### Course Information

**Course Name:** Industrial Crane Rigging and Signaling

**Course Number:** PIP175

### Required Materials

**Textbook(s):** Custom - Signaling Manual, Industrial Rigging Manual

**Required Readings:** None

**Additional Materials:** None

### Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Chapter/Topic/Lab
1	Course Introduction and Fundamentals
2	Communication and Crane Signaling Basics
3	Rigging Equipment Overview Ch 1 -3
4	Sling Use and Inspection
5	Load Weight Estimation and Center of Gravity Ch 4-6
6	Rigging Math and Capacity Planning
7	Cranes: Types, Components and Operations Ch 7-9
8	Crane Setup and Pre-Lift Planning
9	Advanced Rigging and Practices Ch 9-11
10	Critical and Complex Lifts
11	Hoists, Winches, and Mechanical Advantage Ch 12-13
12	Advanced Signaling and Communication Systems Ch 14-15
13	Practical Field Scenarios
14	Final Rigging Review and Skill Practice
15	Final Signaling Practice and Safety Review
16	Final Written and Practical Test