



Jordan University of Science and Technology
Faculty of Engineering
Industrial Engineering Department

IE346 Work Measurement And Analysis

Summer Semester 2019-2020

Course Catalog

3 Credit Hours. Methods study, Time study and Job evaluation. Techniques of good methods study. Work station design using ergonomic principles. Job description and evaluation. Techniques of scientific time study. Standard basic times and work sampling are presented

Text Book

| | |
|--------------------------|----------------------------------------------------------------------|
| Title | Motion and time study for lean Manufacturing, 3rd ED., Prentice Hall |
| Author(s) | F. Meyers, and J. Stewart (2002) |
| Edition | 3rd Edition |
| Short Name | ref1 |
| Other Information | |

Instructor

| | |
|------------------------|-------------------------|
| Name | Dr. Samir Khrais |
| Office Location | - |
| Office Hours | |
| Email | khrais@just.edu.jo |

Class Schedule & Room

Section 1:
Lecture Time: Sun, Mon, Tue, Wed : 13:00 - 14:30
Room: منصة الكترونية

| Prerequisites | | |
|---------------|-----------------------------------------|----------------------|
| Line Number | Course Name | Prerequisite Type |
| 902030 | MATH203 Ordinary Differential Equations | Prerequisite / Study |

| Tentative List of Topics Covered | | |
|----------------------------------|---------------------------------------------------|------------|
| Weeks | Topic | References |
| Weeks 1, 2 | Introduction and History of Motion and time Study | From ref1 |
| Weeks 3, 4 | Importance and use of MTS | |
| Weeks 5, 6 | Macromotion Study | |
| Weeks 7, 8 | Micromotion Study | From ref1 |
| Week 9 | Motion Economy | From ref1 |
| Weeks 9, 10, 11 | Predetermined Time Standard | From ref1 |
| Weeks 12, 13 | Stopwatch time study | From ref1 |
| Weeks 13, 14 | Standard data and Line balancing | From ref1 |
| Weeks 15, 16 | Work sampling | From ref1 |

| Mapping of Course Outcomes to Program Student Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|
| An ability to Understand the role of Industrial Engineer in the organization and using systematic approaches for analyzing, modeling and solving production related problems [1SLO4] | 25% | |
| An ability to Demonstrate ability to seek further knowledge and specialized skills in Lean Methodology [1SLO4] | 25% | |
| Ability to use systematic approaches for analyzing, modeling and solving production related problems [1SLO4] | 25% | |
| Ability to work station design using ergonomic principles and utilize knowledge and techniques attained for scientific time study and good method study [1SLO4] | 25% | |

| Relationship to Program Student Outcomes (Out of 100%) | | | | | | |
|--------------------------------------------------------|------|------|------|------|------|------|
| SLO1 | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 | SLO7 |
| | | | 100 | | | |

| Evaluation | |
|-----------------|--------|
| Assessment Tool | Weight |
| First Exam | 30% |

| | |
|-------------|-----|
| Second Exam | 30% |
| Final Exam | 40% |

Date Printed: 2020-09-24