

## The University of Jordan School of Engineering Industrial Engineering Department 1<sup>st</sup> Semester 2019/2020

| Course name:                                    | Measurements lab   |   |          |               |   |
|---|--|---|----------|---------------|---|
| Course code:                                    | 0906442  |   |          |               |   |
| Credits hours                                   | 1 credit hours   |   |          |               |   |
| Contact hours/room:                             | Section 2: Monday (1:00-4:00)                                      |   |          |               |   |
|   | Section 3: Wednesday (1:00-4:00)                                   |   |          |               |   |
|   | Section 1: Thursday (1:00-4:00)                                    |   |          |               |   |
| Course instructor's name,<br>E-mail, and phone: | Eng. Lamees Al-Durgham   |   |          |               |   |
|   | l.aldurgham@ju.edu.jo  |   |          |               |   |
|   | 22942  |   |          |               |   |
| <b>Course Coordinator:</b>                      |  |   |          |               |   |
| Text book:                                      | Lab manual   |   |          |               |   |
| Other reference(s):                             | None   |   |          |               |   |
| <b>Course Description:</b>                      | Experiments on alignment, angular measurements, diameters, surface |   |          |               |   |
|   | roughness, out of roundness, screw, gears, thermocouples and       |   |          |               |   |
|   | oscilloscope.  |   |          |               |   |
| Providing Department:                           | Industrial Engineering   |   |          |               |   |
| Prerequisite Course:                            | 0906441  |   |          |               |   |
| Course type                                     | Laboratory   |   |          |               |   |
| Assessment Methods:                             | Method   |   | Weight % | Date          |   |
|   | 200/   |   | ***      |               |   |
|   | Reports + quizzes  |   | 30%      | Weekly report |   |
|   | Mid Exam Final Exam  |   | 30%      |               |   |
|   | Final E  |   | 40%      | -             |   |
|   | #  | After successful completion of this course, the student will be able to |          | SO            |   |
| Course Learning Outcomes:                       |  | An ability to function effectively on a                                 |          |               |   |
|   | 1  | team through conducting experiment and                                  |          | 5             |   |
|   |  | writing report.   |          |               |   |
|   | 2  | An ability to conduct experiment  |          |               |   |
|   |  | related to linear and angular   |          |               |   |
|   |  | measurements, strain gauge,   |          | 6             |   |
|   |  | autocollimator, threads, and  |          |               |   |
|   |  | thermometers.   |          |               |   |
|   | 3  | Analyze and interpret results, and draw                                 |          | 6             |   |
|   | proper conclusions.  |   | ons.     |               | 1 |
|   | 1  |   |          |               |   |

|                      | Week #   | Topic  |  |  |  |  |
|----------------------|--|--|--|--|--|--|
| Brief list of topics | 1  | Introduction   |  |  |  |  |
|                      | 2  | Linear measurements  |  |  |  |  |
|                      | 3  | Block gauges   |  |  |  |  |
|                      | 4  | Angular measurements   |  |  |  |  |
|                      | 5  | Thread measurements  |  |  |  |  |
|                      |  | Mid exam   |  |  |  |  |
|                      | 6  | Surface roughness  |  |  |  |  |
|                      | 7  | Autocollimator   |  |  |  |  |
|                      | 8  | Strain gauge   |  |  |  |  |
|                      | 9  | RTD, thermistor, thermocouples.                                  |  |  |  |  |
|                      | • Do no  | <ul> <li>Do not hesitate to ask questions</li> </ul>             |  |  |  |  |
|                      |  | are required to bring a notebook and take notes in classes.      |  |  |  |  |
|                      |  | ents are expected to attend every class session and they are     |  |  |  |  |
|                      | responsible for all material, announcements, schedule changes,   |  |  |  |  |  |
|                      | etc., discussed in class.  |  |  |  |  |  |
|                      | • Discuss the assignments among yourselves   |  |  |  |  |  |
|                      | • Don't Cheat; direct copying of others work will NOT be allowed   |  |  |  |  |  |
|                      |  | or tolerated and will result in a reduction of grade. If you are |  |  |  |  |
|                      | found to be cheating in any way, on an exam or assignment, even signing the roll sheet for another student, you will be given an "F" |  |  |  |  |  |
| Important Notes:     |  | for the course. There will be no exceptions.                     |  |  |  |  |
| F                    | All cases of academic dishonesty will be handled in accordance   |  |  |  |  |  |
|                      | with university policies and regulations. JU policy requires the   |  |  |  |  |  |
|                      | faculty member to assign ZERO grade (F) if a student misses  |  |  |  |  |  |
|                      |  | 15% of the classes that are not excused, and 20% of the classes  |  |  |  |  |
|                      |  | that are excused   |  |  |  |  |
|                      | Studen   | udents are expected to be ready to take a quiz any time they     |  |  |  |  |
|                      |  | e a class. There will be no make-up quizzes or home works.       |  |  |  |  |
|                      |  | students with disabilities who need accommodations in this       |  |  |  |  |
|                      | _  | ourse are encouraged to speak with the instructor as soon as     |  |  |  |  |
|                      | possib   |  |  |  |  |  |
|                      | accom  | nmodations.  |  |  |  |  |