Bossier Parish Community College
Master Syllabus

**Course Prefix and Number:** TEED 146 **Credit Hours:** 3-3-0

**Course Title:** Industrial Mechanical Theory II

**Course Prerequisite:** TEED 145

**Textbook(s):** None

**Course Description:** A continuation of TEED 145, including screw threads, wood fastenings, rigging, pumps, and air compressors.

**Learning Outcomes:**
At the end of the course, the student will:

A. interpret job instructions for troubleshooting, maintenance, repair and operation of mechanical equipment;
B. accurately measure physical parameters such as threads per inch, dimensions, alignment, gearing, pressures, temperatures and the like to support analysis and troubleshooting of mechanical systems;
C. convert measurements of physical data into properly scaled graphs to support analysis and troubleshooting;
D. interpret and apply technical information contained in construction drawings or schematic diagrams in performance of work as a mechanical or instrument craftsman; and
E. properly interpret job instructions (function, materials, and schedule) and make reasonable estimates of associated materials and labor.

To achieve the learning outcomes, the student will or will be able to:

1. list six different types of pipe valves and their functions; (A, B, C, D)
2. describe the use of carpentry tools and board measure tables; (A, B, C, D)
3. identify different methods of sharpening saws; (A, B, C, D)
4. list five different wood fastenings and their advantages; (A, B, C, D)
5. describe different methods of joining sheet-metal work; (A, B, C, D)
6. list six different blacksmithing tools and their function; (A, B, C, D)
7. identify different types of rigging tools; (A, B, C, D)
8. define electricity and magnetism; (A, B, C, D)
9. identify different types of welding used in industry; (A, B, C, D)
10. describe six different types of pumps and list their uses; (A, B, C, D)
11. identify different air compressors and their uses; (A, B, C, D)
12. describe different hydraulics an pneumatic cylinders and controls; (A, B, C, D)
13. list ten different types of portable power tools and their uses; (A, B, C, D)
14. use calculations to determine areas, volumes, horsepower, and torque; (A, B, C, D) and
15. estimate materials and labor for jobs. (E)

**Course Requirements:** Complete all homework assignments, lecture tests and final exam.

**Course Grading Scale:**

90 – 100 = A
80 – 89 = B
70 – 79 = C
60 – 69 = D
0 – 59 = F

**Attendance Policy**: The college attendance policy is available at http://catalog.bpcc.edu/content.php?catoid=5&navoid=369

**Course Fees:** N/A

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