Bossier Parish Community College Master Syllabus

Course Prefix and Number: TEED 151

Credit Hours: 4-3-3

Course Title: Power Transmission Technology

Course Co-requisite: Math 102

Textbook(s): None

Course Description: A course designed for industrial skilled trades apprentices. Content includes machinery and equipment maintenance, trouble shooting, belt drives, gear drives, and chain drives, couplings, packs and seals, bearings, mechanical fasteners, axles, shafting, and gaskets

Learning Outcomes:

At the end of the course, the student will:

- A. Understand the operation and objectives of a planned maintenance system;
- B. identify, maintain, and repair various power transmission systems;
- C. interpret and explain drawings and sketches to describe physical arrangement and functionality of mechanical devices and equipment;
- D. accurately measure physical parameters such as threads per inch, dimensions, alignment, gearing and the like to support analysis and troubleshooting of mechanical systems;
- E. properly interpret job instructions (function, materials, and schedule) and make reasonable estimates of material and labor associated with practical work situations.

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

(The letter designations at the end of each statement refer to the learning outcome(s).)

- 1. perform maintenance operations within a planned maintenance system;(A,E)
- 2. identify, maintain, and troubleshoot belt, gear, and chain drive systems;(B,E)
- 3. identify, maintain, and troubleshoot bearings and couplings in transmission systems;(B,E)
- 4. interpret and explain drawings and sketches to describe physical arrangement and functionality of mechanical devices and equipment;(C)
- 5. accurately measure physical parameters such as threads per inch, dimensions, alignment, gearing and the like to support analysis and troubleshooting of mechanical systems;(D)

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

Course Grading Scale:

 $\begin{array}{ll} 90-100 &= A \\ 80-89 &= B \\ 70-79 &= C \\ 60-69 &= D \\ 0 &-59 &= F \end{array}$

Attendance Policy: The college attendance policy is available at <u>http://www.bpcc.edu/catalog/current/academicpolicies.html</u>

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams, and/or clinical fees.

Nondiscrimination Statement: Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

Title VI, Section 504, and ADA Coordinator Sarah Culpepper, Coordinator Disability Services, D-110 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6539 Email: <u>sculpepper@bpcc.edu</u> Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator Teri Bashara, Director of Human Resources Human Resources Office, A-105 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6056 Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.