Bossier Parish Community College Master Syllabus

Course Prefix and Number: ENGR 220

Credit Hours: 3-3-0

Course Title: Statics

Course Prerequisite: ENGR 100 AND **Course Corequisite:** MATH 250

Textbook(s) (when applicable): Ferdinand Beer/Russell Johnston/ David Mazurek. <u>Vector</u> <u>Mechanics for Engineers: Statics</u>, 12th edition. McGraw-Hill. ISBN: 9780077402280

Course Description: Resultants and equilibrium of force systems, stress and strain, truss and frame analysis, torsion, bending.

Learning Outcomes:

At the end of this course, the student will:

- A. demonstrate skills in applying math and science to describe static force relationships;
- B. demonstrate skills in formulating solutions of static forces acting on rigid bodies, trusses and other structures; and
- C. demonstrate use of modern engineering tools and skills to apply engineering principles to analyzed and design static engineering systems.

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

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

- 1. apply knowledge of mathematics, science, and engineering to describe and analyze static relationships; (A, B, C)
- 2. identify, formulate, and solve engineering problems involving static forces acting on rigid bodies/structures; (A, B, C) and
- 3. use the techniques, skills, and modern engineering tools necessary for engineering practice. (A, B, C)

Course Requirements:

- 1. Complete assigned homework.
- 2. Complete a minimum of two unit exams and final exam.

Course Grading Scale:

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

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

Course Fees: N/A

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.

COORDINATOR FOR SECTION 504 AND ADA

Angie Cao, Student and Disability Services Specialist Disability Services, F-254 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6511 Email: <u>acao@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.