

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 MATH 251

Textbook(s) (when applicable): Ferdinand Beer/Russell Johnston/ David Mazurek. Vector Mechanics for Engineers: Statics, 12th edition. McGraw-Hill. ISBN: 9781259977268

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:

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://www.bpcc.edu/catalog/current/academicpolicies.html>

Course Fees: N/A

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