Revised May 10, 2024

Bossier Parish Community College
Master Syllabus

Course Prefix and Number: ENGR 201 **Credit Hours:** 3-3-0

Course Title: Mechanics of Materials

Course Prerequisite: ENGR 100 and ENGR 220

Textbook: Hibbeler, Russell C. Mechanics of Materials, 11th edition. Pearson.
ISBN-13: 978-0-13-760561-3

Course Description: A study of the basic principles which include the stress-strain properties of engineering materials, analysis and design of mechanical members subject to axial loading, torsion, bending, shear and combined loading, pressure vessels, Mohr's circle, and deflection in beams.

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

A. demonstrate skills in solving problems involving engineering materials;
B. demonstrate skills in designing building components using material properties; and
C. demonstrate ability to make judgments about safety factors and potential for overloading material components.

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. identify, formulate, and solve engineering problems involving materials; (A, B, C)
2. design structural components to meet desired needs of strength within limits of deflection, elongation and other realistic constraints such as economics, environment, health, and safety; (A, B, C) and
3. understand professional and ethical responsibilities in the selection and use of materials. (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://catalog.bpcc.edu/content.php?catoid=5&navoid=369

Revised May 10, 2024

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.

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: acao@bpcc.edu
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.

Revised May 10, 2024

Revised: 4/20/2022