

CEEN 2602L - Strength of Materials Lab

Fall 2026 Syllabus, Section 02, CRN 41543,

Credit hours: 1

Instructor

Muhammad Ahmed

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Public Instructor Information

Instructor Title: M. Adeel Ahmed

Instructor Professional Qualifications: B.S. Civil Eng. (NED UET); M.S. Civil Eng. In-Progress (Youngstown State University).

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Course Description

2602L. Strength of Materials Lab. Experimental verification of strength of materials; testing: tension, torsion, non-destructive tests of steel; concrete compression and Poisson ration, wood tests. Coreq.: CEEN 2602. 1 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Manual for Strength of Materials	Dr. Anwarul Islam	

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	No readings	Introductions; Overview & Lab Report Guidelines	No assignment
8/31	Virtual Lab handout	Virtual Lab (Bitumen)	Obtain Lab manual and safety glasses
9/7	Lab #1 Direct Shear	Virtual Lab handou	Quiz #1
9/14	Lab #2 Tension Test	Tension Test (Metals)	Quiz #2 & Lab Report #1
9/21	Lab #3 Hardness	Hardness Test (Metals)	Quiz #3 & Lab Report #2
9/28	Lab #4 Charpy Impact	Charpy Impact Test (Metals)	Quiz #4 & Lab Report #3
10/5	Lab #5 Torsion	Torsion Test	Quiz #5 & Lab Report #4
10/12	Lab #6 Riveted Boiler Joint	Riveted Boiler Joint Test	Quiz #6 & Lab Report #5
10/19	Lab #7 Concrete Mixture Design	Concrete Mixture Design	Quiz #7 & Lab Report #6
10/26	Lab #8 Concrete Batching	Concrete Batching (Concrete)	Quiz #8 & Mixture Design
11/2	Lab #9 Tension/Compression	Tension and Compression (Wood)	Quiz #9
11/9	Lab #10 Flexure	Flexure (Wood)	Quiz #10 & Lab Report #7
11/16	Lab #11 Poisson's Ration	Poisson's Ration (Aluminum)	Quiz #11 & Lab Report #8
11/23	Lab #12 Compression/Elastic Modulus	Compression (Concrete)	Quiz #12 & Lab Report #9
11/30	No readings	Final Project Presentations	Project report and presentation
12/7	No readings	No Class – Finals Wee	No assignment

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.