Strength of Materials
BMEEOTMAS41
2024-25, fall semester, BSc

week	Wednesday 12.15-14.00	topic
1.	04 Sept	01. Repetition of the fundamental equations. The Euler-Navier beam
2.	11 Sept	01. Boundary and continuity conditions of Euler-Navier beams
3.	18 Sept	06. Differential equations of Euler-Navier beams. Solution methods
4.	25 Sept	**Quiz 1.: Fundamental equations and the Euler-Navier beam** 09. Deflection diagrams for frames
5.	02 Oct	**Quiz 2.: Deflection diagrams for frames** 02. The potential energy. Kinematic degrees of freedom
6.	09 Oct	02. The theorem of potential energy. Examples
7.	16 Oct	**Quiz 3.: The theorem of potential energy** 03. The complementary potential energy. Static indeterminacy
8.	23 Oct	----------------- [public holiday]
9.	30 Oct	03. The theorem of complementary potential energy. Examples. 04. Overview of energy theorems
10.	06 Nov	**Quiz 4.: The theorem of complementary potential energy** 07. Energy theorems for Euler-Navier beams under static loads
11.	13 Nov	08. Energy theorems for Euler-Navier beams under kinematic loads
12.	20 Nov	**Quiz 5.: Energy theorems for Euler-Navier beams** 11. Basics of stability analysis
13.	27 Nov	12. Buckling of bars under compression
14.	04 Dec	**Quiz 6.: Stability and buckling** Preparation for the exam

Budapest, 27 August 2024.

Dr. Katalin Bagi   Dr. Flórián Kovács
full professor   associate professor