For Part 3 Evaluation in higher education you have to perform three exercises. Please complete them.

Important dates: December 14 (for completion of the exercises)

10 and 13 December.

Virtual work (6h). Evaluation in higher education

For questions, please contact: druiz@ugr.es

When required, the groups of teachers can have tutorial sessions with Diego Pablo Ruiz

https://meet.google.com/xmw-ppor-qrz

EXERCISE 1. WRITE YOUR COURSE LEARNING OUTCOMES (CLOs)

Description: for your course, write your course learning outcomes (7-10 learning outcomes for your course). Remember to use the Bloom's Levels and the verb according to this level (according to the seminar).

Bloom's Levels	Learning Outcomes	
Remember (K1)		
Understand (K2)		
Apply (K3)	Apply Knowledge	Engineering Knowledge: *Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems*
Analyze (K4)	Problem Analysis	Problem Analysis: *Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences*
Evaluate (K5)	Design/Development of Solutions	Design/Development of Solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

EXERCISE 2. TASK AND PRODUCTS TO BE EVALUATED

Description: Choose one of your learning outcomes (one of the described in Exercise 1 before). For this learning outcome, specify several evaluation tasks and the product for these tasks. Fill in this table to evaluate your chosen learning outcome:

TASKS	PRODUCTS/ACTIONS	Person in charge	Tool for evaluation
	(for example Written exam (problems, Exam script, ppt slides)		RUBRIC

EXERCISE 3. RUBRIC TO BE USED FOR ONE OF THE PRODUCT

Description: Choose one of the product (one of the described before in the table of exercise 2). For this product design a basic rubric to assess it. Here are one example, but choose one of them for your product and modify it according to your own experience. Fill in this rubric and change it according to your criteria:

TITLE: Rubric for assessment exam problem.　　　　　PRODUCT: Problem 1. Exam

DIMENSIONS OR CRITERIA	BELOW AVERAGE < 1	AVERAGE 2	ABOVE AVERAGE >3	WEIGHT	SCORE
QUOTE THE PHYSICAL LAWS THAT MODEL THE PROBLEM	Do not quote them or do it incorrectly.	Cite some, and forget any relevant	Cite all the physical laws involved correctly	20	
USE THE RIGHT FORMULAS TO SOLVE THE PROBLEM	Use wrong formulas or do not use them	Use expressions that are consistent with the initial model, although they are not correct	Use correct expressions	15	
USE THE RIGHT UNITS IN THE RESULTS	Does not use units or they are incorrect in key expressions	Does not adequately generate all possible conclusions from theoretical and empirical approaches	Adequately generates all possible conclusions from theoretical and empirical approaches	15	
MAKE THE APPROPRIATE DEVELOPMENTS TO REACH THE SOLUTION	Does not develop or is inconsistent	Performs preliminary development but does not reach the final expression	Do a full development	30	
GET THE APPROPRIATE NUMERICAL RESULT	Numeric result is wrong due to base errors	Make a mistake when calculating due to manual errors	The result is correct	10	
COMMENT ON THE LOGIC OF THE NUMERICAL RESULT.	Does not realize or does not value the difference of the result	Although he/she comments on the result, it does not value it in context or it is insufficient	Assess the consistency of the numerical result	10	