

LMECA2355: Mechanical design in biomedical engineering 2020-2021, Q1, 5 ECTS (30h+30h)

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Evaluation of the quality of the solution by the group and the client

This grid must be filled out twice:

- By the group alone and uploaded on Moodle before presenting the solution and the demonstrator to the client;
- By the client with the group during the presentation of the solution to the client only, and uploaded on Moodle before the final presentation.

The confrontation of the two versions of the grid should then be used by the group to discuss their solution and, if needed, to rephrase the initial problem and propose further improvements to the solution.

Criteria	Grade	Comments
Quality of the solution		
The quality of the demonstrator is sufficient to present the main functions of the solution	А	The prototype will be made in real size and will have the components designated for the final solution. This way, it's possible to observe its real behavior and test it.
The solution is original and innovative	В	The solution is composed of a simple lever mechanism designed to fit within the constraints of the problem and it meets the required functionalities.
The solution integrates well into the clinical/surgical/industrial workflow	А	The manufacturing of the solution is easy, it can be done at scale to meet all the cages present in the laboratory, and it integrates easily into the system
VERIFICATION: The solution fulfills the requirements	А	The solution transmit the displacement of the lever, capture the lever presses and it is ajustable. It also can be integrated to the system and adjustments
VALIDATION: The client's needs that were identified at the start of the design process are consolidated after first loop	А	The solution presents a lever that doesn't lose its force over time, can be adjusted, and integrated into the system currently used in the laboratory.

Grades:

A: criteria are fully respected

B: criteria are generally respected

C: criteria are roughly respected

D: criteria are not always respected, shortcomings remain

E: criteria are not respected, fundamental shortcomings appear

NA: not applicable