

Considering the document “AlAebook-Linee-guida-per-una-corretta-progettazione-acustica-di-ambienti-scolastici”, design a rectangular classroom for 30 students.

- 1) Define the ratio between the n° students and the volume (the factor K in the document)
- 2) Define the dimensions of the room
- 3) Define the absorption coefficients of the different surfaces to obtain a reverberation time for the empty room  $0.6 < T < 0.8$  sec.
- 4) Distribute the absorption materials properly to optimize the sound field as suggested in the document.