



The case study of biomaterials and biominerals

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The teaching of biomaterials as case study by on-line platform, susceptible to develop both individually and in groups, got different objectives proposed by the European Higher Education System, among which include: participate actively in the teaching-learning process by students, interpreting situations, adapt processes and solutions. It also improves oral and written communication, analytical skills and synthesis and also the ability to think critically.

Biomaterials have their origin in biominerals. These are solid inorganic compounds of defined structure, consisting of molecular control mechanisms that operate in biological systems. Its main functions are: structural support, a reservoir of essential elements, sensors, mechanical protection and storage of toxic elements.

Following the demand of materials compatible with certain functional systems of our body, developed biomaterials. Always meet the condition of biocompatibility. Should be tolerated by the body and do not provoke rejection. This involves a comprehensive study of physiological conditions and the anatomy of the body where a biomaterial has to be implemented.

The possibility of generating new materials from biominerals has a major impact in medicine and other fields could reach as geology, construction, crystallography, etc. While the study of these issues is in its infancy today, can be viewed as an impact on the art and future technology.

Planning case study that students would prepare its report for discussion in subgroups. Occurs then the pooling of individual analysis, joint case discussion and adoption by the subgroup of a consensual solution to the problem. The teacher as facilitator and coordinator of the final case analysis, sharing leads to group-wide class and said the unanimous decision reached by the students and gives his opinion on the resolution of the case.

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