The new paradigm of higher education requires new teaching strategies to meet the learning objectives of biochemistry courses. Teaching biochemistry in the current state of science and society requires a special motivation for learning, especially for students of degrees other than Biochemistry. The traditional way of teaching, based on the teacher-student relationship, mostly unidirectional, does not fulfill the needs imposed in this era. Considering the current situation universities students require new abilities in their training and the use of computers can constitute a place for discovery and research, enabling the experience of new and diverse situations. The design of teaching material for undergraduate students who take biochemistry courses as complementary subject on their careers should be seen as an opportunity to complement theoretical aspects on the current courses. Three different approaches could be used: (I) a description of the basic concepts, like in a book but using dynamics figures. (II) Modelling proteins highlighting key motifs at the three-dimensional structure and residues where inhibitors can be attached. And (III) elaborating active quizzes where students can be driven on their learning. Building knowledge based on practical experience can improve student competences on basic science and the learning process can be complemented in the use of dynamics models. On the other hand, exploring protein structures from the web could give students a better comprehension of residues interaction and non-covalent forces involved in protein-protein or protein-ligand interaction. The use of dynamic models improves the comprehension of protein structure and their special link to amino acids residues or ligands. This work was supported by Anillo ACT1110 project. Key Words: protein structure, 3D source, learning activities.