



香港城市大學
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Physics meets medicine: new approach of teaching modern physics to biologists

Project Number: 6000627

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Abstract:

Modern physics is among the most difficult subjects to study in college. Nevertheless, it constitutes an important part of the curriculum of medical students not only due to many technological applications but also because of the scientific methodology which greatly influenced the development of biological and medical sciences. In this project, the PI shall develop a new approach to teach modern physics to medical students, creating a learning experience of the course AP2400 “Advanced Physics for Biologists” full of exciting discoveries for the students to enjoy and to learn. Using the research experience and knowledge the PI has in this area, as well as a previous successful project of recrafting AP1203 “General Physics III”, the PI will guide the students to discover rather than to be taught, and to find principles behind various observations, to make predictions and to rectify the understanding, and to link fundamental sciences with everyday life and technological applications. The PI expects that AP2400 “Advanced Physics for Biologists” be delivered in a discovery-oriented way, in the sense that the students can gain the ability to critically think, to inspire each other in discussions, and their thoughts are taken far beyond the classroom and the course material so that they will be ready for their future exploration about life and medicine.