



Code	CBF210L	Prerequisites	CBM101
Name	Mechanical Physics Laboratory I	Co-requisites	CBF210

Credits	Contact Hours
01	20
Categorization of credits	
Math and basic science	X
Engineering topic	
Other	

Coordinator's name	Luciano Sbriz Roberto Quiñones
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Text book
Other supplemental materials
Sbriz L. (2013). Física I: prácticas de laboratorio. (2nd edition) Santo Domingo: Instituto Tecnológico de Santo Domingo. Bueche and Hecht (s.f.). Theory and problems of college physics, (9th edition). McGraw-Hill. Gettys, Keller, and Skove (2005). Physics for science and engineering (Second edition, Volume I). Mexico: McGraw-Hill. Giancoli, Douglas (2008). Physics for Science and Engineering (Vol.1). (4th Edition). Mexico: Pearson Education Kleppner and Kolenkow (1973), An introduction to mechanics, McGraw-Hill. Resnick, Halliday, Krane (1993); Physics (4th edition, Vol.1) Mexico: Continental. Serway, Jewett (2015). Physics for science and engineering with modern physics (Vol.1). (9th edition) Mexico: Thomson. Young, Freedman, Sears, Zemansky (2004). University Physics (11th edition, Vol. 1). Mexico: Pearson. https://www.pasco.com/file_downloads/Downloads_Manuals/Xplorer-GLX-User's-Guide-PS-2002.pdf (Xplorer GLX User's Guide). https://www.pasco.com/prodMulti/sparkvue-software/index.cfm (Sparkvue).

Description	
With this subject it is expected that the student will develop the skills and abilities in the management of mechanical physics laboratory equipment, design and develop experiments as well as the acquisition of skills for the analysis and interpretation of data, following the methodologies of production. and the criteria of rigor and quality. The role of laboratories is a relevant educational factor in the science learning process, because through these the teaching of the same not only focuses on concepts and their laws, but also allows students, empirically, know them through experiments through the use of the instruments used.	
Type of course	☒ Required ☐ Elective

Specific goals for the course	
Outcomes of instruction	EG1. Collaborate by participating with other students in obtaining the information sought. EG2. Take care and value the usefulness of the equipment used in the academic preparation of their peers. EG3. Show responsibility and punctuality in the delivery of reports.
Student outcomes	CG1. Develop and conduct appropriate experimentation, analyze and interpret data, and uses engineering criteria to draw conclusions.

Topics
Unit I. Kinematics Unit II. Dynamics Unit III. Conservation of energy and momentum