

Code	CBF211	Prerequisites	CBF210
Name	Mechanical Physics II	Co-requisites	CBF211L

Credits	Contact Hours		
04	40		
Categorization of credits			
Math and basic science	Х		
Engineering topic			
Other			

Coordinator's name	Luciano Sbriz

Text book		
Other supplemental materials		
Giancoli, D. (2008); Física para Ciencias e Ingenierías (Vol.1). (4th edition). México:		
Pearson Education		
Sbriz L. (2013), Física I: prácticas de laboratorio. (2. Ed). Santo Domingo: Instituto		
Tecnológico de Santo Domingo.		
Serway, R., Jeweet, J. (2015) Physics for science and engineering with modern		
physics (Vol.1). (9th edition) Mexico: Thomson.		
Young, H.D., Ford, A.L., Freedman, R.A. (2009) University Physics (Vol. 1). (12th		
edition) Mexico: Pearson.		
Bueche & Hecht, (s.f.) Theory and problems of college physics (9th edition).		
McGraw-Hill		
Kleppner & Kolenkow (1973), An introduction to mechanics, McGraw-Hill.		
Resnick, Halliday, Krane (1993); Physics (Vol.1), Continental, Mexico, 4th edition		
onwards.		
Gettys, Keller and Skove (2005), Physics for Science and Engineering (Volume I),		
(Second Edition). Mexico: McGraw-Hill.		
http://www.monografias.com/trabajos78/cuerpo-rigido/cuerpo-rigido.shtml		
http://www.monografias.com/trabajos30/movimiento-armonico-simple/movimiento-		
armonico-simple.shtml		
http://www.monografias.com/trabajos106/movimiento-ondulatorio/movimiento-		
ondulatorio.shtml		
http://www.monografias.com/trabajos104/los-fluidos/los-fluidos.shtml		
http://www.monografias.com/trabajos/termodinamica/termodinamica.shtml		

Description

With this subject, it is expected to continue strengthening in the student their ability to understand the new fundamental concepts of physics and their connection with

those already acquired previously and the ability to present them in mathematical models used as a tool. Quantitatively evaluate and analyze experimental results and be able to develop a clear perception of situations that are physically different, but show analogies, allowing the use of known solutions to new problems.

Type of course	🖾 Required
Type of course	□ Elective

Specific goals for the course				
Outcomes of	EG1 Recognize the importance of physics in the development of			
instruction	technology and the quality of life of societies.			
	EG2 Value the advantages of working in cooperation with others, respecting criticism and valuing the opinions of others as a means to achieve continuous improvement.			
	activities.			
	EG4 Relate the concepts that are being treated and applies them correctly to the facts of nature and to the technologies in common use in daily life to compare the physical models treated with reality.			
Student outcomes	CG1. Identify, formulate, and solve complex engineering problems by applying the principles of engineering, science, and mathematics.			

Topics	
Unit I. Equilibrium of rigid bodies	
Unit II. Oscillations and waves	
Unit III. Fluid mechanics	
Unit IV. heat and temperature	