



UNIVERSIDAD JUÁREZ DEL ESTADO DE DURANGO  
FACULTY OF FORESTRY SCIENCES  
Forestry Sciences Engineering



*Learning Unit Modules*  
*Focused in Integral Professional Competences*

**I. GENERAL LEARNING UNIT**

1. Identification	2. Code	3. Semester	4. Training area
Fundamentals of Physics	BFU11	Second	Basic

5. Mode					
Compulsory	X	Elective			
Classroom	X	Non-Attendance		Mixed	
Laboratory		Field practices	X	Guided tours	

6. Class shedule (hours per week)				
Theory	Practice	Independent study	Total hours	Credits
2	3	0	5	5

7. Person responsible for the subject.
Brenda Xiomara Ochoa Salazar

**II. DATA SPECIFIC LEARNING UNIT**

8. Obectives
Providing students a solid foundation of fundamentals of physics, acquiring the ability to think, understand, and retain in rational terms, to obtain the ability to solve problems of forest engineering and capacity for reflection and critical reasoning , that it will help the student successfully completed his professional career.

9. Presentation.
Fundamentals of Physics is a unit of learning which belongs to the group of core subjects in engineering careers and program in the second half. The student will be trained to interpret the general principles of physics in the implementation of the forest area. These skills are essential for the student to acquire the various powers set forth in the engineering program in forest sciences.



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10. Professional competencies to develop in students.			
Knowledge	Skills	Attitudes	Values
Trees and bushes constitute structures and applying an efficient use of their parts for human benefit.	Knowing and handling the constitutive structures of trees and bushes, and promoting an efficient use of their parts for human benefit.	Interest in preserving nature.  Collaboration and participation in team works Interest in self learning and continuous learning. Availability for learning from errors.	Respect  Honesty  Responsibility  Commitment  Ethics  Unity

11. Course topics
Unit I: Introduction Unit II: Vectors Unit III: System of forces Unit IV: Equilibrium Unit V: Centroids turns the display and centers of gravity.

12. Evaluation criteria
Formative evaluation Evaluation. Self assessment Co-evaluation Hetero-Evaluation

13. Information sources
Basic
1. Tippens, P. physics concepts and their applications, 7th edition, Mc Graw Hill, Mexico, 2003. 2. Bueche, F. Fundamentals of Physics, 5th edition, Mc Graw Hill, Mexico, 1998. 3. Zitzewitz, P. W. Neff, R. and Davis, M. Physical. Principles and problems, Mc Graw Hill, Mexico, 2002.
Complementary
1. Kramer, C. Physical Practices, Mc Graw Hill, Mexico, 1994. 2. Robinson, P. , and Hewitt, P. G. Conceptual physics. Laboratory Manual, Pearson Education, Mexico, 1998. 3. Other resources: popular science magazines, videos, software and web pages.