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
Natural Risk Management	8507	6°	Disciplinary Area

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

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

7. Person responsible for the subject.
M.A. Miguel Ángel Godoy Lizardo

II. DATA SPECIFIC LEARNING UNIT

8. Objectives

- General Objective: That the student knows, analyzes and understands different methodologies for the evaluation of different types of environmental risk of natural and anthropogenic origin, in the natural and artificial environment, to avoid, correct, mitigate and, if applicable, evaluate their damages.

9. Presentation.

With this unit of learning it is intended that the student deepens in those subjects of the environmental sciences environmental risk to that possibility of damage or catastrophe due to natural phenomenon or by the activity of man, the management of environmental risk whether in the natural or artificial environment, represents a field within the broadest risks that can be

managed, evaluated and prevented, for this within this unit of learning will be deepened on key concepts such as: danger, risk, vulnerability, risk criterion, etc.

Examples of these risks are those associated with internal geological phenomena, such as volcanic eruptions and earthquakes, or falling meteorites. Floods, though due to natural climatic causes, are often risks depending on the presence and quality of infrastructures such as dams that regulate the flow, or roads that act as dams, which can aggravate the consequences of anthropogenic hazards, which are produced by human activities, although the natural circumstances can condition its gravity.

On the other hand, the importance of the Precautionary Principle, which is a fundamental part of Agenda 21, will be studied scientific value when it comes to launching a new technology or chemical and that in some cases, even knowing the causes are not taken measures to prevent damage.

10. Professional competences to develop in students.			
Knowledge	Skills	Attitudes	Values
Understanding the Environment Environment and analysis of environmental benefits and economic provides society in general. Interaction between society and the different ecosystems. Ability to know, understand and use	Understand how the the social needs, economic, political and cultural aspects of society. Encourage interaction between society and natural resources for	Interest in preserving the nature. Collaboration and participation in works of equipment. Interest in the car learning and learning continuous. Open to criticism and willingness to accept them. Provision for	Respect Honesty. Responsibility. Solidarity.

the principles of risk natural.	propose solutions viable benefits in society and prevent damage to the ecosystems. Develop diagnoses, plan and evaluate programs and projects for risk management natural.	learn from mistakes. Willingness to collaborate in the tasks of the profession. Be objective in handling of the information. Participate in teams multidisciplinary scientific character or technology-oriented solving problems that afflict the environment environment in general.	

11. Course topics
• Introduction and basic concepts. • Complex systems of nature. • Assessment of specific natural hazards. • Human dimension and global change.

12. Evaluation criteria
Formative evaluation: 30% Summative evaluation: 50 % Self evaluation: 10% Co-evaluation: 10% Hetero-evaluation: 0%

13. Information sources
Basic
* ALFIEMIRIAM (1995). Looking for Sustainable Development Within NAFTA. Ecology and T.L.C. Magazine Daily. * BERNARD, J.N, RICHARDT.W.- (1999) Environmental Sciences. Ecology and Sustainable Development.

* Bifani, P. (1984). Development and Environment. MOPU. Madrid.
* BURTON (1968), The Quality of Environment Review. Geographical Review.
* CAFFERATTA, N. A. 2003. The precautionary principle. Journal of Civil Liability and
* Insurance. Editorial La Law, year V, No. VI. November December.
* CAMPBELL, B. (1975). Human Ecology. The Position of Man in Nature.
* * Salvat.Barcelona. CAPRA, F. (1994). "NewParadigmaEcológico" NewConcienciaNo.22
* * WORLD ENVIRONMENTAL AND ENVIRONMENTAL COMMISSION (1972)
* .DeclarationofNations United on the Human Environment: Proclamations and Principles. Stockholm.
* MINISTRY OF ENVIRONMENT.
* (1995) MedioAmbienteenAndalucía.Informe1994.JuntadeSevilla.Andalucía.
EDWARDS,B (2005). Basic guide* of Sustainability to the. Gustavo Gili Barcelona.
* ENKERLIN, E.C, GARZR.A; VOGEL, E. (1997) .Environmental and SustainableDevelopment. ThompsonEditors. Mexico
* FRIEDRICH EBERT, STIFUNG. Development and Environment in Mexico. Diagnosis 1990. Foundation Universe / FriedrichEbert, Number9Mexico1990.
* GALANO, C. (2005). The Environmental Crisis, Crisis of Humanity. Culture
* * and Sciences: ScienceErgoSum: Vol.12
* * Num.003.UniversidadAutónomadel EstadioMéxic
* * HERRERA, C. Introduction to the Study of the Environment. Basic text for the subject
* of Education Environmental Basic Area of UJED.

Complementary

- http://thompsonlearning.com.mx
- - http://aguamarket.com/dictionary/terms.asp
- - .http: // contamination.
- - http: // environmental pollution.
- - blogspot.com/http://copepodo.filea.w
- - ordpress.com.http: //directemar.cl.
- - http://enciclopedia.us.
- - http://gawater.usgs.gov/edu/graphics/watercyclespanishing.
- - http://harvey.harker.org/u/harker/amirn/assignments/ozone.
- - http://www.bosquedeniebla.com.
- - http://www.club.telepolis.com.
- - Video: The story of things by Annie.