



Learning Unit: Environment and Sustainability	Last update: July 2016
Major: Energy Management and Sustainable Development	Plan: 401
Semester: 4th	Credits: 3

Week	Subject	Activities, homework, exams	Bibliography
1	Introduction to the course Introduction to the subject Work methodology, bibliography, qualifications	 All students should make a report of the Reading unit. Responsible team of the class exhibition. Preparation of the presentation. 	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
2	UNIT 1 Basic Principles of the nature ► Introduction, planet earth as ecosystem ► Structure and functions of the earth ► Energy flow ► Biogeochemical cycles ► Sustainability rule		Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
3	Role of living organisms in the ecosystems ➤ The origin of life ➤ Goods and Services of the ecosystems ➤ Limiting factor and load capacity ,determining factors of the ecosystems. Unit 2. Principles of sustainability ➤ Introduction, Agenda 21 ➤ Millennium Declaration ➤ Sustainable development ➤ Sustainability Indicators, sustainability criteria ➤ Parameter environmental performance ➤ Sustainable development and environmental services	Evidence 1 Essay on the relationship between urban development policy of a city with high industrial activity and the basic principles of nature	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.





4	Social and institutional participation in sustainable development ▶ Introduction to sustainable development trends, social participation ▶ Institutional participation ▶ The economy and the environment. Cost-benefit analysis.	Evidence 4 Essay on the analysis of environmental indicators in a city of México.	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
5	Unit 3 environmental problems ► Introduction ► Human intervention in the environment, factors that determine the environmental problem ► Ecosystem Services (2) emissions to the atmosphere and air pollution		Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
6	1st partial exam Unit 1 and 2 and all assignments		
7	Global environmental problems ► Greenhouse effect ► Degradation of the ozone layer Natural disturbances		Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
8	Climate change and its effect on biodiversity All Chapter 11 Investigate online the disappearance of Lake Chad and prepare PowerPoint presentation.	Evidence 2 Essay where test points relate of this phase around a problem of environmental pollution and its effects on global warming and the loss of biodiversity	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.





9	Unit 4 environmental health	Requirement A in English. Pollution News Around the World: A Matter of Choice http://www.nytimes.com/2014/12/31/up shot / pollution-around-the-world- amatter-ofchoices.html? ref = earth & abt = 0002 & abg = 0	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
10	 Environmental Health in the sustainable development ▶ Perception of environmental health in the sustainable development ▶ Interactions of the health with the environment and development ▶ Poverty, environment and health ▶ Global change, interaction of temperature, climate and health 		Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
11	Instruments for environmental health management ► Introduction, proposals of the OMS ► Need for action in the region of Latin America and the Caribbean ► The environmental health on the agenda 21	Evidence 3 Conceptual Map on a case study that is related to the information in this phase with current environmental health problems	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
12	Unit 5 Politics and Environment ► Introduction to environmental legislation ► The ecological environmental law ► Meetings, international treaties and agreements ► Other international commitments of Mexico in the ecological ambit. ► Environmental legislation in Mexico. ► Functional classification of the laws.	Requirement B in English. BE why recycle video https://www.youtube.com/watch?v=0hl 9 WKT02Kw	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.





13	 ▶ formulation of environmental policy ▶ The general law of ecological balance and environmental protection. ▶ environmental policy (principles) ▶ LGEEPA consists of six major titles 	Partial Exam 2	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
14	Instruments of environmental policy in Mexico and the participation of the society. ▶ Instruments of the current environmental policy ▶ Investigate what was the committed made by Mexico, the United States and Germany in the Copenhagen summit and investigate the COP 16 in Cancun on December 2010.	Evidence 5 Participation in a role play game about environmental policy in Mexico, analyzing the participation of the Mexican government in an international convention or agreement, identifying the actions undertaken and advances made.	Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
15	Integrator product: environmental campaign The campaign must establish the following description: Campaign Objective, Scope, Impact, Slogans, promotional Designs (graphics, sound, etc.)		Ambiente y Sustentabilidad Universidad Autónoma de Nuevo león Alfaro/ Limón/Martínez/Tijerina, Patria Internet, Revistas Otros Textos.
16	Delivery of final results and Signature of Student		
17	Counseling for second opportunity		
18	Second opportunity	Evidence 1 Evidence 2 Evidence 3 Evidence 4	
19	Second opportunity	Evidence 5 Product integrator	
20	Grades of Second Opportunity will be in SIASE and reviews		
	Results	Final results	



Programa Condensado



ACTIVITIES FOR STUDENT

Evidence 1: Essay on the relationship between urban development policy of a city with high industrial activity and the basic principles of nature. Electronic file of at least 5 pages. 10 minutes of oral presentation with questions and answers with visual support of 10 slides tops. Addresses a current problem of urban development at the local or national level. Relates the basic principles of nature. Identifies violations of the basic principles of nature. Includes reliable literature.

Evidence 2: Essay where test points relate of this phase around a problem of environmental pollution and its effects on global warming and the loss of biodiversity. Electronic file of at least 5 pages. 10 minutes of oral presentation with questions and answers with visual support of 10 slides tops. Addresses a current problem of urban development at the local or national level. Relates the basic principles of nature. Identifies violations of the basic principles of nature. Includes reliable literature.

Evidence 3: Conceptual Map on a case study that is related to the information in this phase with current environmental health problems. Electronic file of at least 5 pages. 10 minutes of oral presentation with questions and answers with visual support of 10 slides tops. Addresses a current problem of urban development at the local or national level. Relates the basic principles of nature. Identifies violations of the basic principles of nature. Includes reliable literature.

Evidence 4: Essay on the analysis of environmental indicators in a city of México, according to the criteria, aims and objectives of the various international meetings on the environment and sustainability, considering the available natural resources, air quality, water and soil and waste generated by the city chosen. Electronic file of at least 5 pages. 10 minutes of oral presentation with questions and answers with visual support of 10 slides tops. Addresses a current problem of urban development at the local or national level. Relates the basic principles of nature. Includes reliable literature. Includes statistical information of the rhythm of population growth. Relate the demographic development to the economic situation of the city. Includes reliable bibliography.

Evidence 5: Participation in a role play game about environmental policy in Mexico, analyzing the participation of the Mexican government in an international convention or agreement, identifying the actions undertaken and advances made. In the game 3-5 students participate with different roles and a current problem is addressed at the international level where the Mexican government has a stake. Electronic file of at least 5 pages with the conclusions of each participant in the activity. The file contains current references and there are from reliable sources. Oral presentation of 5 minutes each participant defending the position that represents the role.

Integrator product: presentation and defense of an assay where critical analysis and develop solutions to a specific environmental problem are proposed, in accordance with sustainable development.





EVALUATION	%
Evidences = 5% c/u	25
Development of book activities	15
Participation in the classroom	5
Values (punctuality and attendance, honesty, respect, good behavior inside and outside the classroom.)	5
Integration product of learning unit	50
Total	100
English requirements are mandatory and unscored , omit one of them will not allow the delivery of the product integrator. Requirement A : After the reading of the news, the student must present in his notebook 10 solutions to the problems presented in the review.	
Requirement B : Following the student has seen the video, the student need to map the recycling process, with a brief explanation of its importance.	

BIBLIOGRAPHY			
Book's name: Ambiente Y Sustentabilidad			
Author:	Alfaro/ Limón/Martínez/Tijerina		
Editorial:	Patria		
Publication date:	Publication date: Primera Edición 2009		
Factores De Riesgo Psicosociales Y Ambientales Asociados A Trastornos Mentales			
Http://Dialnet.Unirioja.Es/Servlet/Busquedadoc?T=Problemas+Ambientales&Db=1&Td=Todo			
Problemas Ambientales Y Socioeconómicos Asociados A Las Actuales Formas De Uso De La Tierra En Ur Área De La Región Chaqueña (Argentina)			
	Http://Rua.Ua.Es/Dspace/Bitstream/10045/7777/1/Eco_15%283%29_17.Pdf		
	Problemas Ambientales, Agricultura Y Globalización En América Latina Http://Www.Ub.Edu/Geocrit/Sn-		
	92.Htm		