## University of North Texas at Dallas Summer 2015 5-Week 2 Session

	SYLL	ABUS
BIC	L1132D_031_331: E	invironmental Science: 3 Hrs
Department of Life and Health Sciences		School of Liberal Arts and Sciences
ctor Name:	Dr. Irene T. Rodriguez	

Instructor Name:	Dr. Irene T. Rodriguez	
Office Location:	Room 253, Founders Hall (Building 2)	
Office Phone:	(972) 338-1525	
Email Address:	Irene.Rodriguez@untdallas.edu	

virtual Office Hours:	Monday to Friday 10:00 am to 11:00 am
Classroom Location:	ONLINE
Class Mosting Days 9	Times: ONLINE

Available Monday to Friday from 8:00 am to 5:00 pm BY APPOINTMENT

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Class Meeting Days &	i imes:	ONLINE

Office Hours:

# Course Catalog Description: Interdisciplinary approach to understanding basic concepts in environmental science including critical scientific thought, biodiversity, resource management, pollution, global climate change, resource consumption and population growth. Emphasis on how these concepts affect and are affected by human society. Includes laboratory. May not be counted toward a major or minor in biology. Note: May be used to satisfy a portion of the Natural Sciences requirement of the University Core Curriculum.

Prerequisites:	None
Co-requisites:	BIOL1132D_031 (Lecture) and BIOL1132D_331 (Laboratory)

## Required Text: Textbook: Karr, S., J. Interlandi, and A. Houtman. 2015. Environmental Science for a Changing World. Second Edition. Macmillan Education. ISBN10: 1464162204; ISBN13: 9781464162206 (LaunchPad platform accompanying the textbook will be provided by the instructor). Lab learning materials: Jones & Bartlett Learning. 2013. Navigate Scenario: GameScape for Environmental Science. Jones & Bartlett Learning. ISBN13: 9781284049794

Access to Learning Resources:	UNT Dallas Library:
	phone: (972) 780-3625;
	web: http://www.unt.edu/unt-dallas/library.htm
	UNT Dallas Bookstore:
	phone: (972) 780-3652;

## e-mail: <u>1012mgr@fheg.follett.com</u>

#### **Course Goals or Overview:**

The goal of this course is to introduce students to environmental science and to give students the background information needed to critically think about current environmental issues. Topics will include basic ecology, a review of environmental policy, and resource management theories. The course will include discussions of current environmental and conservation challenges, many of which do not have a clear-cut solution. Students should be willing and able to voice and defend their opinions on these subjects as well as be respectful of the opinions of others. Students will be evaluated based on online activities, research paper, exam performance and laboratory reports.

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Learni	Learning Objectives/Outcomes: At the end of this course, the student will			
1	Demonstrate the ability to assimilate and critically think about biological and scientific processes/theories.			
2	Demonstrate the ability to assimilate and critically think about environmental policy and legislation.			
3	Explain the various roles of organisms in their environment, and discuss the interrelatedness of living			
	organisms, environmental processes, and human cultural and societal needs.			
4	Be able to accurately explain the conflicting social, economic, and biological needs of humanity and other			
	living organisms.			

5	Identify the major attributes and characteristics of the earth's major ecosystems and explain the role they
	play in economically important ecosystem services and biotourism.
6	List and discuss various personal and corporate actions that can mitigate or reverse the negative impact of human activities on the biosphere; explain various tradeoffs related to sustainable stewardship of the earth's biodiversity and its resources.

#### **Course Outline**

These schedules are subject to change by the instructor. Any changes to these schedules will be communicated by the instructor through **Blackboard**.

### **Lecture Schedule**

MODULE	Date	Topics	LaunchPad	LaunchPad	
		Research Project (deadline)	LearningCurve	Activity	
		Discussion Board (deadline)	DEADLINE	DEADLINE	
		EXAMS (deadline)			
1	July 13-19	Chapter 1 Environmental Literacy	July 19 at 11:59 pm		
		and the Goal of Sustainability			
		Chapter 2 Science Literacy and the	July 19 at 11:59 pm	Activity 1	
		Process of Science		July 15 at 11:59 pm	
		Chapter 3 Information Literacy and	July 19 at 11:59 pm		
		Toxicology	1 1 40 -144 50	A a timiture O	
		Chapter 4 Human Populations	July 19 at 11:59 pm	Activity 2 July 19 at 11:59 pm	
		Research Project: Thesis			
		Sentence			
		(Friday July 17 at 11:59 pm)			
		Discussion Board 1			
		(Sunday July 19 at 11:59 pm)			
2	July 20-26	Chapter 6 Ecological Economics	July 22 at 11:59 pm		
		and Consumption			
		Chapter 7 Managing Solid Waste	July 22 at 11:59 pm	Activity 3 July 22 at 11:59 pm	
		<b>EXAM 1:</b> Chapters 1, 2, 3, 4, 6, 7			
		(Wednesday July 22 at 11:59 pm)			
		Chapter 8 Ecosystems and Nutrient Cycling	July 26 at 11:59 pm		
		Chapter 9 Population Ecology	July 26 at 11:59 pm		
		Chapter 10 Community Ecology	July 26 at 11:59 pm	Activity 4 July 26 at 11:59 pm	
		Research Project: Annotated		July 20 at 11.59 pm	
		Bibliography			
		(Friday July 24 at 11:59 pm)			
		Discussion Board 2			
		(Sunday July 26 at 11:59 pm)			
3	July 27-	Chapter 11 Evolution and	July 29 at 11:59 pm		
	August 2	Extinction	· · · · · · · · · · · · · · · · · · ·		
	J	Chapter 12 Biodiversity	July 29 at 11:59 pm	Activity 5 July 29 at 11:59 pm	
		Chapter 13 Preserving Biodiversity	July 31 at 11:59 pm	day 20 at 11.00 pm	
		Chapter 15 Water Pollution	July 31 at 11:59 pm	Activity 6	
		Chapter to trace i onducti	Cary or at 11.00 pm	July 31 at 11:59 pm	
		<b>EXAM 2:</b> Chapters 8, 9, 10, 11, 12, 13, 15		,	
		(Friday July 31 at 11:59 pm)			
		Research Project: Rough Draft			
		(Sunday August 2 at 11:59 pm)			
		Discussion Board 3			
		(Sunday August 2 at 11:59 pm)			

4	August	Chapter 16 Feeding the World	August 5 at 11:59 pm	
	3-9	Chapter 17 Sustainable Agriculture	August 5 at 11:59 pm	Activity 7
				August 5 at 11:59 pm
		Chapter 18 Coal	August 9 at 11:59 pm	
		Chapter 19 Oil and Natural Gas	August 9 at 11:59 pm	Activity 8
				August 9 at 11:59 pm
		Research Project: Final Research		
		Paper and Presentation		
		(Sunday August 9 at 11:59 pm)		
		Discussion Board 4		
		(Sunday August 9 at 11:59 pm)		
5	August	Chapter 20 Air Pollution	August 12 at 11:59 pm	
	10-14	Chapter 21 Climate Change	August 12 at 11:59 pm	Activity 9
				August 12 at 11:59 pm
		Chapter 22 Nuclear Power	August 14 at 11:59 pm	
		Chapter 23 Sustainable Energy for	August 14 at 11:59 pm	Activity 10
		Stationary Sources		August 14 at 11:59 pm
		Discussion Board 5		
		(Friday August 14 at 11:59 pm)		
		<b>EXAM 3:</b> Chapters 16, 17, 18, 19,		
		20, 21, 22, 23		
		(Friday August 14 at 11:59 pm)		

#### Lab Schedule

Week	Date	Topic	Submission/Completion deadline
1 July 13-19		Lab Exercise 1: Human Population and Ecological Footprint	Friday July 17 at 11:59 pm
		GameScape <b>Episode 2</b> : Managing Population Growth	Sunday July 19 at 11:59 pm
2	July 20-26	Lab Exercise 2: Owl Pellet	Friday July 24 at 11:59 pm
		GameScape Episode 1: Balancing Ecosystems	Sunday July 26 at 11:59 pm
3 July 27-		Lab Exercise 3: Water Quality	Friday July 31 at 11:59 pm
	August 2	GameScape <b>Episode 3</b> : Maintaining Terrestrial and Atmospheric Resources	Sunday August 2 at 11:59 pm
4	August 3-9	Lab Exercise 4: Marine Fisheries	Friday August 7 at 11:59 pm
	_	GameScape Episode 4: Controlling Energy Systems	Sunday August 9 at 11:59 pm
5	August 10-14	GameScape <b>Episode 5</b> : Building a Positive Environmental Legacy	Friday August 14 at 11:59 pm

#### **Course Evaluation Methods**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Participation in Discussion Board Forums (50 points) – This component involves communications between the instructor and the students and among students through discussion boards on **Blackboard**. Each participation is worth 5 point, thus each student should participate in these discussions at least twice each week to get up to 10 participation points per week. In 5 weeks you would get up to 50 points. In order to get these participation points, your contribution should provide logic insight into the corresponding topic and not merely ask questions (although you are encouraged to ask questions) or add not related comments.

**LaunchPad LearningCurve (100 points)** – On the **LaunchPad platform** each chapter of your book has a series of questions (quiz) that will test your reading comprehension. There is no grade for this assignment, simply by completing the questionnaire you will get the corresponding 5 points per chapter. Out of the 22 scheduled chapters, you will have to complete 20 LearningCurve quizzes to get up to 100 points.

**LaunchPad Activities (50 points)** – These are brief activities on the **LaunchPad platform** or another website that will reinforce your understanding of selected materials. Each activities is worth 5 points, for a total of 50 points.

Research Project (100 points) – This assignment has a written and an oral component designed to supplement and reinforce course materials. Each students will work during the first four weeks of the course on a topic that has been approved by the instructor. First, the student will turn in a thesis sentence (10 points), then an annotated bibliography (10 points), a rough draft (20 points), and by week four, the final version of the research paper (40 points). In addition to the paper, the student will produce a short video where he or she will present his or her topic to the class (20 points). The entire research project is worth 100 points. The guidelines for this assignment will be posted on **Blackboard**.

**Exams (300 points)** – These are tests designed to measure knowledge of the course material. The material covered in the exam will come from the textbook, discussion boards, and lecture activities. Students will have three **online** examinations (there will not be any on-campus exam, nor a comprehensive final exam!). Each exam will be worth 100 points. Exams may consist of a combination of multiple choice, matching, fill-in-the-blank, short answer, and essay items. Any student found cheating will receive a zero (0) for that exam and may face other disciplinary action(s).

Laboratory (200 points) – You will perform four laboratory exercises designed to give you hands-on real-world applications of the lecture material. For the lab exercises you will collaborate with other students in your group. After each laboratory exercise, each student will turn in a lab report (25 points each, for a total of 100 points). In addition to lab reports, you will complete five GameScape activities, one per week, each of them is worth 20 points, for additional 100 lab points. You will not receive a separate grade for lab, so the points received for the laboratory (out of 200) will be added into the lecture grade calculation. Note: The lab is worth 25% of your final overall grade for the course. However, you must receive a passing grade (60% or higher) in the laboratory to receive a passing grade in the class. Students must pass both the lecture and the lab independently to pass the course (i.e. if you fail the lab, you automatically fail the entire course and if you fail the lecture, you automatically fail the course).

**Grading Matrix:** 

Instrument	Value (points)	Total
Participation in Discussion Boards	Up to 10 points per week	50
LaunchPad LearningCurve	20 (out of 22) chapters at 5 points each	100
LaunchPad Activities	10 activities at 5 points each	50
Research Project	Thesis sentence (10 points) Annotated bibliography (10 points) Rough draft (20 points) Final research paper (40 points) Presentation (20 points)	100
Exams	3 exams worth 100 points each	300
Lab Reports	4 lab reports at 25 points each	100
Lab GameScape Activities	5 activities at 20 points each	100
Total:		800

#### **Grade Determination:**

A = 720 – 800 points; i.e., 90% or better

B = 640 - 719 points; i.e., 80 - 89 %

C = 560 - 639 points; i.e., 70 - 79 % D = 480 - 559 points; i.e., 60 - 69 %

F = 479 points or below; i.e., less than 60%

#### **University Policies and Procedures**

#### **Students with Disabilities (ADA Compliance):**

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Any student requesting academic accommodations based on a disability is required to register with Disability Services each semester. A letter of verification for approved accommodations can be obtained from this office. Please be sure the letter is delivered to me as early in the semester as possible. Disability Services is

located in the Student Life Office in DAL2, Suite 200 and is open 8:30 a.m. – 5:00 pm, Monday through Friday. The phone number is (972) 338-1775.

#### Student Evaluation of Teaching Effectiveness Policy:

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class.

#### **Assignment Policy:**

Collaborative efforts on completing the assignments are encouraged so long as all member of the collaboration contribute equally. As with all other graded assessments, cheating will not be tolerated. While collaborations are encouraged, each student must submit their own work, which <u>cannot</u> be identical to the work submitted by the other members of the collaboration. Assignments should be turned in on time. **Late assignments will NOT be accepted.** 

#### **Exam Policy:**

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook). Students are allowed to take make-up for *ONLY ONE* missed exam, with proper documentation. The instructor must be contacted within 24 hours of the exam to schedule a make-up. A makeup exam must be taken within one week of the original exam. If a student knows in advance that they will miss an exam, they must take the exam prior to the exam date. There is no make-up for the second or subsequent missed exams. Students should take the exam on time, before the deadline date and time. Any student caught cheating will automatically receive a 0 on the exam, and the instructor may pursue further disciplinary action.

#### **Academic Integrity:**

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at <a href="http://www.unt.edu/unt-">http://www.unt.edu/unt-</a>

dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic\_Integrity.pdf for complete provisions of this code.

In addition, all academic work submitted for this class, including exams, papers, and written assignments should include the following statement:

On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy.

#### **Attendance and Participation Policy:**

The University attendance policy is in effect for this course. Class participation is expected because the class is designed as a shared learning experience and because essential information may come from discussions or other activities. Participation in all discussions and other activities is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the instructor if they are missing any activity and for what reason. Students are responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

#### **Diversity/Tolerance Policy:**

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive and inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate.

#### **UNT Dallas Learning Commons**

#### **Writing Center**

The UNT Dallas Writing Center offers free, one-on-one or group tutoring services to all registered undergraduate and graduate students. Our goal is to help students write a good paper, and most importantly, become better writers. We work with students on any type of written or oral project and can help students at any stage of the writing process (from brainstorming and outlining to citing and looking over a final draft).

The Writing Center is located on the 3<sup>rd</sup> floor of DAL 1 (big glass structure in front of the stairs).

We are available for appointments during the following hours: *Tues/Thurs: 12:00p-7:00p; Wed: 10:00a-7:00p*To make an appointment, browse the Writing Center's online resources, or see a list of our student FAQ's, please visit <a href="www.untdallas.edu/wc">www.untdallas.edu/wc</a>. If students cannot come in for a face-to-face appointment, students can take advantage of our free online tutoring service through SMARTHINKING. To submit drafts and get more information about this service, visit <a href="www.untdallas.edu/smart">www.untdallas.edu/smart</a>.

To make the best use of your time, please bring as much information as possible with you to your appointment (assignment, grading rubric, previous graded papers from the class, etc.). The Writing Center will not proofread papers or talk with you about grades, but we will help you become better writers over time.

#### Math Lab

The UNT Dallas Math Lab offers free, one-on-one or group tutoring services to all registered undergraduate students. Our goal is to help students improve their math skills, succeed in all of courses requiring math, and learn math-related skills they will need post-graduation. We work with students enrolled in all MATH courses at UNT Dallas and provide limited assistance with STATS and ACCT courses.

The Math Lab is located on the *3<sup>rd</sup> floor of DAL 1 in room 336*. Students can walk-in at any time. Check the summer hours at: <a href="http://www.untdallas.edu/aas/tutoring/mathlab">http://www.untdallas.edu/aas/tutoring/mathlab</a>

If students cannot come in for face-to-face tutoring, students can take advantage of our free online tutoring service through SMARTHINKING. To get more information about this service, visit <a href="https://www.untdallas.edu/smart">www.untdallas.edu/smart</a>.