

The Human Environment

LSC 362

Tu & Th 1:30 – 2:45 AM

CLCC 158

Instructor

Dr. Becky Ball

FAB 161

602.543.2010

becky.ball@asu.edu

Office hours: Tu 3-4 PM, Th 12A-1P

or by appointment

Class info

Semester hours: 3

Pre-requisites: None

Co-requisites: None

Course Webpage: myasucourses.asu.edu

Course Introduction:

This course will serve as a concise account of human beings' interactions with one another and with the biophysical world in which we evolved, and how, over millions of years and through countless genetic twists and turns, we came to dominate the planet. We have populated the globe, reshaped most landscapes, eradicated myriad populations and species of other organisms, and transformed the land surface, oceans, and climate. To understand the roles we play in our social and biophysical environments, we need to look at what science can tell us about topics as seemingly disparate as climate change, genes, sex, religion, epidemics, ethics, education, politics, and nuclear war. From the complex workings of our genes to what we eat and how we govern ourselves, we are changing our world and our world is changing us. We are creating our future. But what kind of future will it be? We will cover a body of scientifically grounded information to attempt to explain how the environment has shaped humans and what human dominance means for the functioning of our planet and therefore for our future.

Excerpts taken from *The Dominant Animal*

Course Readings:

Required Text

P.R. Ehrlich & A.H. Ehrlich. [The Dominant Animal](#). Island Press, Washington, D.C.

NOTE: You can purchase the eBook at a cheaper price than purchasing a new hard copy. This is also a more sustainable way to acquire your course text.

I expect that students read the assigned materials *before* coming to class! Your ability to absorb course material will be severely limited if you have not read this material before I discuss it. Also, you will not be prepared to ask questions about topics that confuse you if you fail to read it before lecture.

Assessment and Evaluation:

Quizzes Throughout the term I will test your understanding of the material via quizzes that each cover a few chapters of the book, including material to be covered in the sections that you are expected to read *before* lecture. All quizzes will be available on Blackboard for at least 24 hours and must be completed by 8:00 AM the day of class that it is due. The five quizzes are each worth **5 % of your grade**, for a total of **25%**.

Assignments Throughout the term, you will be given a variety of assignments that aim to increase your understanding of particular material covered in lecture. Each one will be worth **10 % of your grade**, for a total of **50 %**.

Participation We will have in-class discussions, problem-solving activities, or practice exercises on a regular basis. Your participation in these exercises will be monitored, and **5 % of your grade** will reflect this. It is crucial that you actively participate, as the assignments mentioned above will be the product of some of these activities, so lack of participation will also be reflected in each assignment's grade.

Final Exam There will be one, cumulative final exam worth **20 % of your grade**. While the book's authors do provide a summary of each chapter on the website (<http://morethebook.org/dominantanimal.org/students>), please be aware that the level of detail covered in these summaries will generally not be sufficient to get you through quizzes and the final exam. Instead, the ultimate study guide is your own personal notes taken as you read the book and we convene to discuss the material. If you do not attend each lecture, you will not do well on the exam.

Grading Scale The grading scale that will be used for the course is:

	A+	≥	98%	
98%	>	A	≥	92%
92%	>	A-	≥	90%
90%	>	B+	≥	88%
88%	>	B	≥	82%
82%	>	B-	≥	80%
80%	>	C+	≥	78%
78%	>	C	≥	68%
68%	>	D	≥	58%
58%	>	E		

Contacting me:

The best way to contact me is by email. I will typically respond within 24-48 hours. If I do not respond in 2 days, feel free to call or email again. *A lack of response from me should never be interpreted as agreeing to your request!* If I have not responded, it is because I did not receive your email, and you need to try again.

Course Policies and Expectations:

Assignments. Written assignments must be word-processed and spell-checked. Your name should appear at the top of each assignment. Please submit your work electronically as a PDF (preferred) or a Word (.doc or .docx) document using the Assignment feature on Blackboard. All assignments must be turned in on time to be eligible for full credit; 10 points per day will be automatically deducted for days 1 and 2 late. Assignments will not be accepted more than 2 days late.

Attendance. Miss class at your own peril! Some days you might get away with this, others you will lose points for being absent. Perhaps the simplest way to get a good grade is to attend all of the lectures, pay attention and ask questions when you are confused. The lectures often include material that is not found in the textbook but will appear on exams. If you miss a lecture you may never be exposed to some information on which you will be tested.

Classroom Civility. We will often talk about controversial topics in this class. We will always do so in a professional manner and convey respect to all members of our classroom community, especially when we disagree with and challenge their ideas.

Withdrawals. **The instructor will NOT withdraw students for any reason.** Specifically, students should be aware that non-attendance will NOT automatically result in their being dropped from the course. Therefore, if a student does not attend class during the first week or for any extended period of time during the semester, they should not presume that they are no longer registered. It is the student's responsibility to be aware of their registration status. Please note the following dates:

Drop/Add Deadline	January 18, 2015
Tuition and Fees 100% Refund Deadline	January 25, 2015
Course Withdrawal Deadline	April 5, 2015

Complete Withdrawal Deadline

May 1, 2015

*As part of a complete session withdrawal a student must withdraw from all classes in a session. Beginning the first day of classes, undergraduate students are required to work with a Student Retention Coordinator to facilitate the withdrawal process. Please refer to <http://students.asu.edu/StudentRetention>

Any withdrawal transaction must be completed by the deadline date in accordance to the appropriate session at the registrar's office. If not, you will still be officially enrolled and you will receive a grade based on your work completed. For additional information about ASU's withdrawal policy and the possible consequences of withdrawing from a class, contact Registration Services or your academic counselor. **Students are responsible for their registration status!**

Final Exam Make-up Policy. The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the director of the School of Mathematical and Natural Sciences for one of the following reasons: religious observances, the student has more than three exams scheduled on the same day, or two finals are scheduled to occur at the same time. Make-up exams will NOT be given for reasons of non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, or other such activities. Students should consult the final exam schedule before making end-of-semester travel plans. If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and makeup the final within one calendar month. The student must provide written documentation and be passing the class at the time to receive an Incomplete. A signed "Request for Grade of Incomplete" must be submitted by the student and approved by the student's instructor and the Director of the School of Mathematical and Natural Sciences.

The Grade of Incomplete. A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents a student who is doing acceptable work from completing a small percentage of the course requirements at the end of the semester. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. **A grade of incomplete will NOT be awarded unless there is documented evidence of extreme personal or immediate family hardship.** Changes in work hours, child-care emergencies, or other similar personal problems will not be approved as reasons for awarding incompletes. The Director of the School of Mathematical and Natural Sciences must approve all incomplete grade requests.

Disability Accommodations. The Disability Resource Center (DRC) provides information and services to students with any documented disability who are attending ASU West. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and should contact the instructor for accommodations that are necessary for course completion.

Academic Integrity and Misconduct. As defined in the ASU Student Academic Integrity Policy (<http://provost.asu.edu/academicintegrity>), each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. A student may be found to have violated this obligation and to have engaged in academic dishonesty if during or in connection with any academic evaluation, him or her:

- Engages in any form of academic deceit;
- Refers to materials or sources or employs devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not authorized by the instructor for use during the academic evaluation;
- Possesses, buys, sells, obtains, or uses, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;
- Acts as a substitute for another person in any academic evaluation;
- Uses a substitute in any academic evaluation;

- Depends on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- Provides inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- Engages in plagiarism;
- Permits his or her work to be submitted by another person without the instructor's authorization; or
- Attempts to influence or change any academic evaluation or record for reasons having no relevance to class achievement.

LSC 362 follows the ASU Academic Integrity Policy in the administration of all course examinations and assignments. Violations of the University Academic Integrity policy will not be ignored. Penalties include reduced or no credit for submitted work, a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees. The university requires that the implementation of any of these penalties for violations of the academic integrity policy be reported to the Dean's office. The Integrity Policy defines the process to be used if the student wishes to appeal this action. In LSC 362, you are expected to follow the ASU Student Code of Conduct (<http://students.asu.edu/srr/code>) especially when communicating with your peers, instructors, and teaching assistants. Violations of the student code of conduct may result in withdrawal from the class.

Course/Instructor Evaluation. The course/instructor evaluation for this course will be conducted online 7-10 days before the last official day of classes of each semester or summer session. Your response(s) to the course/instructor are anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (1) help faculty improve their instruction, (2) help administrators evaluate instructional quality, (3) ensure high standards of teaching, and (4) ultimately improve instruction and student learning over time. Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is critical. About two weeks before the class finishes, watch for an e-mail with "NCIAS Course/Instructor Evaluation" in the subject heading. The email will be sent to your official ASU e-mail address.

Policy against Threatening Behavior. In the classroom and out students are required to conduct themselves in a manner that promotes an environment that is safe and conducive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in Section 104-02 of the Student Services Manual (<http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>).

Power Outage. In the event of a campus power outage or other event affecting the ability of the University to deliver classes, any decision to cancel classes will be announced using the ASU emergency notification system. For this reason, it is imperative that students register with the ASU emergency notification system at: <https://cfo.asu.edu/emergency-alert>. In cases in which a limited number of buildings are affected, students should check the university website and/or call the School office at (602) 543-6050.

Emergency Evacuation Plan. Students should be aware of the evacuation route posted on the exit door of each classroom. Students who cannot walk down stairs should notify the instructor as early in the course as possible so the instructor can provide information regarding the location of the designated meeting area on each upper floor of the building (marked with a blue sign that states Emergency Evacuation Response Area).

Subject to Change. All class syllabi are subject to minor changes as necessary to accommodate the needs of the instructor, school, or class.

Tentative Schedule

Date	Assignments / Tests	Reading	Topic
Tu 1/13		Prologue	<i>Introduction</i> What is science? What is the human environment?
Th 1/15		Chapter 1	<i>Darwin's Legacy & Mendel's Mechanism</i> How populations (including humans) change in response to a changing environment
Tu 1/20	Selection assignment due	Chapter 2	<i>The Entangled Bank</i> How did we end up being this particular one of the many species on Earth?
Th 1/22			Climbing Mount Improbable
Tu 1/27	Quiz 1 due (Ch1-3)	Chapter 3	<i>Our Distant Past</i> What we know about human change over time
Th 1/29			Group break-outs #1
Tu 2/3		Chapter 4	<i>Of Genes & Culture</i> How biology gives us non-genetic information: culture
Th 2/5		Chapter 5	<i>Cultural Evolution</i> The workings of basic human nature
Tu 2/10	Quiz 2 due (Ch 4-6)	Chapter 6	<i>Perceptions, Evolution and Beliefs</i> How we process a dizzying amount of environmental information
Th 2/12			Group break-outs #2
Tu 2/17		Chapter 7	<i>The Ups and Downs of Populations</i> The ecology and demography of the human population
Th 2/19			Demographics Lab
Tu 2/24	Demographics assignment due	Chapter 8	<i>History as Cultural Evolution</i> How human culture has changed in response to the environment
Th 2/26		Chapter 9	<i>Cycles of Life and Death</i> Important aspects of ecosystems and their processes
Tu 3/3			<i>Cycles of Life and Death</i> Continued
Th 3/5	Quiz 3 due (Ch 7-10)	Chapter 10	<i>Ecosystems and Human Domination of Earth</i> Humans rely on the products of ecosystems
Tu 3/10	NO CLASS – Spring Break		
Th 3/12			
Tu 3/17		Chapter 11	<i>Consumption and Its Costs</i> The impacts of the human need for stuff
Th 3/19			The hidden impacts of food: Grocery Store Lab
Tu 3/24			Group break-outs #3
Th 3/26	Grocery store assignment due	Chapter 12	<i>A New Imperative</i> How humans are influencing the Earth's surface
Tu 3/31			<i>A New Imperative</i> Continued
Th 4/2		Chapter 13	<i>Altering the Global Atmosphere</i> What's up with the weather?
Tu 4/7	Quiz 4 due (Ch11-13)		Working with climate records: Data Exercise
Th 4/9			<i>Altering the Global Atmosphere</i> Air pollution

Tu 4/14	Climate data assignment due	Chapter 14	<i>Energy</i> Current status and future options to power humanity
Th 4/16			Energy Lab
Tu 4/21			Group break-outs #4
Th 4/23	Energy assignment due	Chapter 15	<i>Saving our Natural Capital</i> The value and methods for preserving biodiversity and therefore ecosystem services
Tu 4/28		Chapter 16	<i>Governance</i> Problems, challenges, and consequences
Th 4/30	Quiz 5 due (Ch14-16)	Epilogue & Postscript	Conclusions and review
Th 5/7	Final Exam 12:10-2:00 pm		