

# Economics of Natural Resources (ECN 362)

Syllabus – Spring 2014 – March 6, 2014

## 1 Logistics

### 1.1 People

**Instructor:** David Zetland (dzetland@gmail.com; 778-387-2300)

**Office hours:** Tues 11:00-12:00 and Thurs 15:00-16:00 in WMC 1688

**TA:** Hossein Ayouqi (Hossein.Ayouqi@sfu.ca)

### 1.2 Class Times

Item	Day/Time	Location
Lecture	Tues. 8:30-10:20 (10 min break)	AQ 3005
Lecture	ThuR, 8:30-9:20	AQ 3005
First Lecture	T 7 Jan	
Reading Break	T-Sa 11-15 Feb	
Last Lecture	T 8 Apr	
Final	Su 13 Apr (15:30)	AQ 3005?

### 1.3 Technology

- Canvas is set up with readings.
- Do not use laptops or cell phones during lecture. First use = warning; second use = 5 points off your *course* grade; third use = fail
- Lecture videos are posted at <http://tinyurl.com/n2zxfus>

### 1.4 Assignments and grades

Item	Points	Date/Due	% of grade
Homework 1	1–5	16 Jan (R)	5
Homework 2	1–5	30 Jan (R)	5
Briefing 1	6/8/10	6 Feb (R)	10
— Peer-Ranking 1	1/3/5	18 Feb (T)	5
— Feedback 1	—	20 Feb (R)	
Midterm	1–20	25 Feb (T)	20
Blog post	2/5/8	28 Feb (F)	10
Homework 3	1–5	13 Mar (R)	5
Briefing 2	6/8/10	20 Mar (R)	10
— Peer-Ranking 2	1/3/5	25 Mar (T)	5
— Feedback 2	—	27 Mar (R)	
Homework 4	1–5	3 Apr (R)	5
Final exam	1–20	13 Apr (Sun, 15:30-18:30)	20

- It's ok to discuss assignments but submit your own answers
- Assignments are due at the start of class. Missing or late assignments receive zero points
- Assignments will be graded and returned in the following class. Exams will be returned one week later
- Typed requests for regrading are due within two classes (e.g., if you get your grade on T, then submit regrade request at start of next T). Regrades may result in a higher score, no change, or a loss in points (don't waste my time)
- Cheating (not doing your work) means zero on the assignment and perhaps an F for the class
- I may give a pop quiz if I feel it's useful to test your work and knowledge
- Your course grade will be based on your total points. Your grade MAY BE adjusted for Economics Department norms, i.e., 11-26% As, 36-46% Bs, 26-36% Cs and 5-15% D/F. I reserve the right to fail students who do not "put in effort" (as determined by me).

### 1.4.1 Briefings

**Length:** Two pages (about 1,000 words/6,000 characters in 12 point with 2.5cm margins).

**Copies:** Submit on Canvas with the last 4 digits of your student ID (no name). We will redistribute these among you.

**Grading:** Three of your classmates will review each briefing, type comments, and rank them according to logic, exposition, clarity and style (remember that you're a politician in a hurry). Grades for 1st, 2nd or 3rd place (A/B/C) are 10, 8 and 6 points. You will ALSO rank-grade this feedback as A/B/C (5/4/3 points).

**Feedback:** Briefing writers will rank the comments they get as first-, second-, OR third-best. Points for ranking are 5 for 1st, 3 for 2nd or 1 for 3rd. Ranking should be based on helpfulness, accuracy and clarity. I'm not going to see if you "reward" someone who gives you high points (as opposed to good feedback). You choose whether to be corrupt or honest

### 1.4.2 Blog post

Your blog post will be on anything that includes natural resource and/or the environmental economics as a central theme (yes to the impact of cars on health or pollution; no your awesome car stereo). I will post 2-3 entries on my blog ([aguanomics.com](http://aguanomics.com)) per day, in random order. I will ask a few regular readers to grade the best and worst posts (see below).

**Content:** It's best to highlight an issue, diagnose its cause/impacts and then suggest a solution

**Length:** I recommend less than 200 words. Longer posts bore readers

**Format:** Email me your post in a plaintext email. Do NOT embed URLs. Include them in [] brackets

**Personal:** I will include your name by default. TELL ME in the email if you want initials instead of your name

**Comments:** You are **required** to leave at least one comment on another student's blog post (use your name or last 4 #s on your SFU ID) within one week of your post going live. No comment means -3 points. Early comments do not count.

**Responses:** You can reply to others' comments if you want

**Grades:** The top and bottom 5-10 posts (as determined by me and my advisers) will get 8 and 2 points, respectively. Middle posts will get 5 points. FAIL posts will get zero points

**Zero:** Miss the deadline (my inbox by midnight, 28 Feb) and get zero. You can submit before 28 Feb.

## 2 Reading (\* Posted on Canvas)

### Required:

Dolan, Ed (2011) *TANSTAAFL* (There Ain't No Such Thing As A Free Lunch). Searching Finance Ltd.

We are reading this book because Dolan criticizes mis-pricing, which leads to mismanagement of resources and the environment. Dolan is more relevant in part II of the course (environment/ecology), but those topics are implicit in the part I (natural resource use affects environment). So think in terms of backwards induction. Note that prices can be found in markets; they can also be set by bureaucracies or implied by communities. The intellectual argument for "prices are information" is presented in \*Hayek, F. A. (1945) "On the Use of Knowledge in Society" in *American Economic Review* (35): 519-530 (posted on SFU connect).

Pairings:

1. \*Coase, R. H. (1960). "The Problem of Social Cost" in *Journal of Law and Economics* (3): 1-44
2. \*Dietz, T.; Ostrom, E. & Stern, P. C. (2003) "The Struggle to Govern the Commons" in *Science* (302): 1907-1912
1. \*Gordon, H. S. (1954). "The economic theory of a common property resource: the fishery" in *The Journal of Political Economy* (62): 1241-1242
2. \*Hardin, Garrett (1968) "The Tragedy of the Commons" in *Science* (162:3859): 1243-1248

**Optional:** \*Hazlitt, Henry (1946). *Economics in One Lesson*. Posted on SFU connect. A clear essay on visible winners, invisible losers and how short-term politics leads to bad economics.

If you want to get a better understanding of how I'm discussing these issues, then I suggest \*Zetland, David (2013) "Economists owe ecology an apology" from *Green Growth and Water Allocation*, edited by S. Primot, M.R. van der Valk, and P. Keenan. IHP-UNESCO, Den Haag.

### 3 Lectures

This class applies microeconomic theory to natural resources. That means we will apply economic analysis to managing natural resources and protecting the environment that are compatible with economic activity and social sustainability. We will spend a little time on basic theory and much more time applying theory to thematic modules

**7 Jan (T) L1** Getting started; economics & politics; resources & environment  
**9 Jan (R) L2** Microeconomics  
**14 Jan (T) L3**  
**16 Jan (R) L4** Resource economics  
**21 Jan (T) L5**  
**23 Jan (R) L6**  
**28 Jan (T) L7**  
**30 Jan (R) L8**  
**4 Feb (T) L9** Fisheries  
**6 Feb (R) L10**  
**11-15 Feb Reading Break**  
**18 Feb (T) L11** Forests  
**20 Feb (R) L12**  
**25 Feb (T) Midterm**  
**27 Feb (R) L13** Renewable and non-renewable energy (coal, hydro, solar, oil, gas, solar)  
**4 Mar (T) L14** Mid-term feedback.  
**6 Mar (R) L15** Water  
**11 Mar (T) L16** NO CLASS  
**13 Mar (R) L17** Mining (gold, iron, copper)  
**18 Mar (T) L18**  
**20 Mar (R) L19** Land  
**25 Mar (T) L20**  
**27 Mar (R) L21** Air  
**1 Apr (T) L22**  
**3 Apr (R) L23** Population  
**8 Apr (T) L24** Last Class REVIEW  
**13 Apr (Su) Final @ 15:30**