



University  
of Victoria  
Environmental  
Studies

## **ES 480/580 Nature & Technology**

Spring Term 2014

*Wednesdays 4:30 - 7:20*  
*Turpin B255*

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Office consultations: by appointment

### **Description**

We know that our practices, personal identity and social relationships are shifting in response to rapidly changing technologies. Most are exhilarated by the promises of a thoroughly interactive world, in which ubiquitous and instantaneous devices provide encyclopedic references for what we want to know. Synthetic biology, robotics, nanomaterials, genomics: these, too, beckon a new era.

Some (many?) of us are also uneasy. Too much, too fast? Is technological progress inevitable? What is being lost? Is there too much human control? What about the more-than-human world? How is nature reshaped by a technology and technological culture?

We will focus on questions about nature and natural processes for two reasons. First, they are much less studied than many other implications of contemporary technology. Second, nature offers a counterpoint to technology, and provides the clearings that allow a better view of life in a technological society.

Technology is a vast and sprawling subject. There are some fresh and profound reflections on technology, as well as important ideas that predate much of the internet era. I will guide us through some of this intellectual landscape, and encourage you to bring your own experiences, investigations and encounters to the conversation. We will necessarily cover a wide range of subjects, from contemporary social media to barcoding life to robotics.

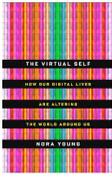
### **Required readings**

Garrett Keizer's compelling book on noise, *The Unwanted Sound Of Everything We Want*, will be our primary touchstone in the first few weeks of term. Copies are available in the Bookstore. A study of noise may seem an odd place to begin our explorations. Keizer's book shows that noise, as just one aspect of life in a technological society, exposes many of the political, social and ecological patterns that will occupy our conversations in the coming term.



**The unwanted sound of everything we want: A Book About Noise.** Garrett Keizer, Public Affairs, 2010.

Nora Young, the host of CBC Radio's *Spark*, writes compellingly about rapid changes to our sense of self and the implications for "the world around us." We'll use this text a bit later in term.



**The Virtual Self: How Our Digital Lives Are Altering the World Around Us.** Nora Young. McClelland and Stewart, 2012.

A series of readings and on-line references are also available on the course's *CourseSpaces* site, and these range from the *essential* to the ornamental; I will let you know the difference. I will adjust and add readings as we go along, and will push out notices to you on a frequent basis.

## Course Themes

Each class is anchored to a theme, which will be developed through lectures, break-out discussions, featured media, guest lecture and conversations. The readings associated with each week will develop over the term; I've given only readings from the two texts below.

Wednesday January 8 <sup>th</sup>	<b>Openings</b>
Wednesday January 15 <sup>th</sup>	<b>[no class]</b> Readings: Keizer, <i>Unwanted Sound</i> , Part 1
Wednesday January 22 <sup>nd</sup>	<b>Noise</b> Readings: Keizer, <i>Unwanted Sound</i> , Part 2
Wednesday January 29 <sup>th</sup>	<b>Silence</b> Readings: Keizer, <i>Unwanted Sound</i> , Part 3
Wednesday February 5 <sup>th</sup>	<b>Tracking</b> Readings: Young, <i>Virtual Self</i> , chapter 1-3
Wednesday February 12 <sup>th</sup>	<b>[Reading Week]</b>
Wednesday February 18 <sup>th</sup>	<b>Distraction</b> Readings: Young, <i>Virtual Self</i> , chapter 4-6
Wednesday February 26 <sup>th</sup>	<b>Numbers</b> Readings: Young, <i>Virtual Self</i> , chapter 7-9
Wednesday March 5 <sup>th</sup>	<b>Disposability</b> Research Project Proposal due <i>before class</i> .
Wednesday March 12 <sup>th</sup>	<b>Grounding</b>
Wednesday March 19 <sup>th</sup>	<b>Novelty</b>
Wednesday March 26 <sup>th</sup>	<b>Synthesis (creating nature)</b>
Wednesday April 2 <sup>nd</sup>	<b>Reform</b>

## Assignments

- 1. Participation. 15%.** Based on attendance and meaningful participation in class discussions, including weekly “digital potluck.”
- 2. Research brief and presentation. 25% (15% research brief/10% presentation).** Please prepare a research brief on an emerging technology that fascinates you. Each 1,000 word (max) brief should contain an overview of what the technology is and what it does, its history, connections to other technologies/practices, implications especially for nature and natural processes, and works cited. Based on the brief, prepare a 5-minute presentation to the class using powerpoint or a similar visual presentation tool, and manage the follow-up discussion. Several presentations will be given each week (research brief handed in at the same class), and a schedule will be decided early in term.
- 3. Environmental Reflection Assignment. 20%.** Please consult the detailed description (below).
- 4. Research Project Proposal. Due before class March 5<sup>th</sup>. 10%.** In this assignment you will develop a proposal that sets out clearly the specific topic of your research project and how you will accomplish it. Since this proposal is to proposals you will be asked to write in any number of professional or personal situations (e.g., a thesis proposal as a graduate student; a pitch for a new project in your workplace; a community development grant), I am asking you to follow a rigid standard (in this case, adapted from the Canada Graduate Scholarships-Master's Program of the Social Sciences and Humanities Research Council of Canada <sshrc.ca>

Please submit a proposal that conforms to the following presentation standards:

Text must be single-spaced, with no more than six lines per inch.

The acceptable font is Times New Roman (regular, minimum 12-pt.) or any comparable serif font.

Condensed type is not acceptable.

Set margins at a minimum of 2 cm (3/4 of an inch) all around.

Use a left-justified, standard page layout.

Include your name in the page header (on every page).

For multipage attachments, number the pages sequentially.

All submissions must be in PDF format.

The proposal has a limit of two pages and must adhere to the following:

- a maximum of one page can be used for the outline of proposed research; and
- a maximum of one page can be used for citations.

Provide a detailed description of your proposed research project. “Be as specific as possible. Provide background information to position your proposed research within the context of the current knowledge in the field. State the objectives and hypothesis, and outline the experimental or theoretical approach to be taken (citing literature pertinent to the proposal), and the methods and procedures to be used. State the significance of the proposed research.”

- 5. Research Project. 30%. (25% research brief/5% presentation) Due no later than 4 p.m. Friday April 4<sup>th</sup>.** This research project allows you to dive into a project that matches your particular interests. I encourage you to speak with me directly once you have settled on a rough idea of what you’d like to do, and in advance of submitting your research proposal (see above). For those of you looking for additional experience with writing, I encourage a research essay, and I am happy to discuss in class or individually some best practices. Others may wish to tackle the development of a photographic essay, a web-based presentation, a social media exploration, poster, or other medium. These and other modes of research project are encouraged, but please be aware that some approaches can take more time in preparation and successful execution. Please prepare a very brief presentation describing your project for the last class of term, Wednesday April 2<sup>nd</sup>. Since the timing available will depend on the final number in the class, specific details will be worked out later in term.

## Detailed Description of the Environmental Reflection Project

What is really learned by walking over grassy hills, through sagebrush, in river bottoms, beneath the crowns of a forest?

What is learned wading rivers, hiking ridges, climbing mountains, listening to waterfalls, swimming in lakes, lying beneath the stars? There is not a simple answer to these questions. Perhaps it is misguided to think there are any essential answers, however some seem to clue us in.

**Preamble.** In an age of pervasive visual stimulation we are increasingly gaining our knowledge of nature through podcasts, on-line media, games, the Web, clothing catalogues and documentaries. What time we do spend outdoors carries with it the attitudes, perceptual boundaries and patterns of belief formed by our allegiance to the new digital order of things. A significance challenge for any of us is to strip away some of these trappings in order to witness directly and deliberately our personal relationships with nature (Raymond Williams, noted 20<sup>th</sup> century British scholar once observed that nature “is perhaps the most complicated word in the English language”). This activities in this assignment provide insight into the way relationships are formed in general with environments, and how our beliefs affect whatever counts as “nature” or “environment.” Thus, this assignment invites you to challenge your own beliefs, and also to reflect on the ideas being presented and discussed. Consider it a quiet moment in your hectic week.

### **The Task**

Find a natural place sufficiently close to campus or your living space to make it suitable for regular visits. I do not mean a natural place in a literal sense. There is probably nothing that is fully natural, a subject that we will no doubt discuss this term. What you should look for is some place that you think is more natural than human, a place that your friends would easily identify as natural. It could be someplace that you know well, or a spot that you discover on a long ramble. Whatever the case it should be someplace that exerts a draw on your imagination.

At least once a week visit your place for at least 15 minutes. Pause, look around, smell, touch, and reflect. Take notes as you go, although as you will see below there are specific functions to each venture to your place. Try to arrange visits at different times of the day, in different weather conditions and at times when interruptions are least or most likely. Take notes on your perceptions and reflections. When you emerge to confront your computer screen or notebook write a series of brief essays—not longer than 250 words (one double-spaced, typed page) describing your experience. Write and submit them based on the schedule outlined below.

**A Note on Evaluation.** Coming up with a numerical evaluation scheme for this assignment is difficult. Since I hope that your writings will be erudite, well-formed and imaginative, it would be misleading to assign a fine-grained numerical scale to each essay. On the other hand, a simple pass/fail scheme would fail to reward those who put in extra effort. Instead, I will assess each separate essay on a three part scale: excellent, good (the majority of essays would fall in this category), and unsatisfactory. At the end of the term, your overall performance in the essays will be judged and used to weight the rest of your course grade. For instance, if you perform consistently at a “good” level then the reflection project will not affect your overall grade. However, if you perform either very well or not so well, then this may figure in lowering or raising your grade, in theory perhaps as much as a full grade point. This is especially important for those who find themselves on the border between two grade points. Each essay will be read carefully but I shall refrain from making a large number of comments on each essay. Please see me if you would like extensive commentary, particularly on the entire series of writings.

**1. Week of January 13<sup>th</sup>.** Describe exactly where your place is located, and indicate why you chose it. Draw a map of your place. I hope to visit some of the “places”, and the information you provide in this first week will help me to locate. You must hand in two copies of this first essay.

**2. Week of January 20<sup>th</sup>.** Write an inventory of the objects in and around your place, and reflect upon a specific object or phenomenon that has gripped your attention and interest. Try for something in between a simple list and a poetic ramble. You need not worry about precision in identification: feel free to “wing it”. *Please record your thoughts in a handwritten notebook and provide your assignment in legible handwriting.*

Essays 1&2 due at the beginning of class on Wednesday, January 22<sup>nd</sup>

**3. Week of January 27<sup>th</sup>.** What does your place “tell” you about the idea of nature, environment or ecology? How does your experience of the place help you to understand abstract concepts? If you feel so moved,

concentrate on senses other than vision to stimulate your thinking. *Please record your thoughts on a laptop or portable device and present these in printed form.*

**4. Week of February 3<sup>rd</sup>.** Take a camera (can be a smartphone) and compile a selection of 2-4 images with brief descriptions.

Essays 3&4 due at the beginning of class Wednesday, February 5<sup>th</sup>

**5. Week of February 17<sup>th</sup>.** Reflect upon some interaction between technological and natural forces in your place. Consider bringing along some kind of device (smartphone, GPS, MP3 player & etc.) that amplifies this interaction.

**6. Week of February 24<sup>th</sup>.** Bring a friend to your place. How does the experience of companionship change your perception of the place?

Essays 5&6 due at the beginning of class Wednesday, February 26<sup>th</sup>

**7. Week of March 3<sup>rd</sup>.** Instead of heading to your place this week, take a walk to your favorite built (technological?) spot near campus or home (e.g., café, library). Use this new vantage point to reflect on your natural place, and upon the differences between the two.

**8. Week of March 10<sup>th</sup>.** You have had opportunities to visit your place at different times and under different conditions. Has it changed? Reflect on how your experience of the place has altered over time and mediated in different ways. What can you sense now about your place that wasn't apparent at the beginning? Concentrate on the elusive.

Essays 7&8 due at the beginning of class Wednesday, March 12<sup>th</sup>

**9. Week of March 17<sup>th</sup>.** Write a short (self-)assessment of this project. Has the project been of value in shaping your understanding of thinking about/in technology? Has the regularity and intensity of observation and reflection changed your perceptions? Did you end up liking your place? Was there an observation or reflection that swept you away during your visits?

Essay 9 due at the beginning of class Wednesday March 19<sup>th</sup>

## Course Policies

**Attendance and Participation:** Regular attendance and active participation in classroom discussions are expected for successful completion of the course.

**Reading and Preparation:** It is expected that you will arrive in class fully prepared to discuss the assigned readings of the day. Discussions in class depend on careful reading and analysis of the assigned texts.

**Accessibility.** Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <http://www.uvic.ca/services/rcsd/>. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

**Deadlines:** Please respect deadlines. Except in cases of emergency (health, family etc.) or prior agreement, penalties will be assigned to work that is handed in late. This approach ensures fairness for those who submit their work in on time.

**Assignment of Grades:**

Grades are assigned according to the policies and standards governed by the UVic Academic Calendar. The following correlation of letter grade and numerical score will be used in the class. Some flexibility, no more than 1-2%, may be used in the application of this scale:

<b>GP</b>	<b>Letter Grade</b>	<b>Range (%)</b>
9	A+	90-100
8	A	85-89
7	A-	80-84
6	B+	75-79
5	B	70-74
4	B-	65-69
3	C+	60-64
2	C	55-59
1	D	50-54
0	F	<50; work not completed