

ERS 401 – Translational Ecology

The course is being offered asynchronously through LEARN – Please read the syllabus carefully and follow the instructions on LEARN

The Teaching Team for the course is:

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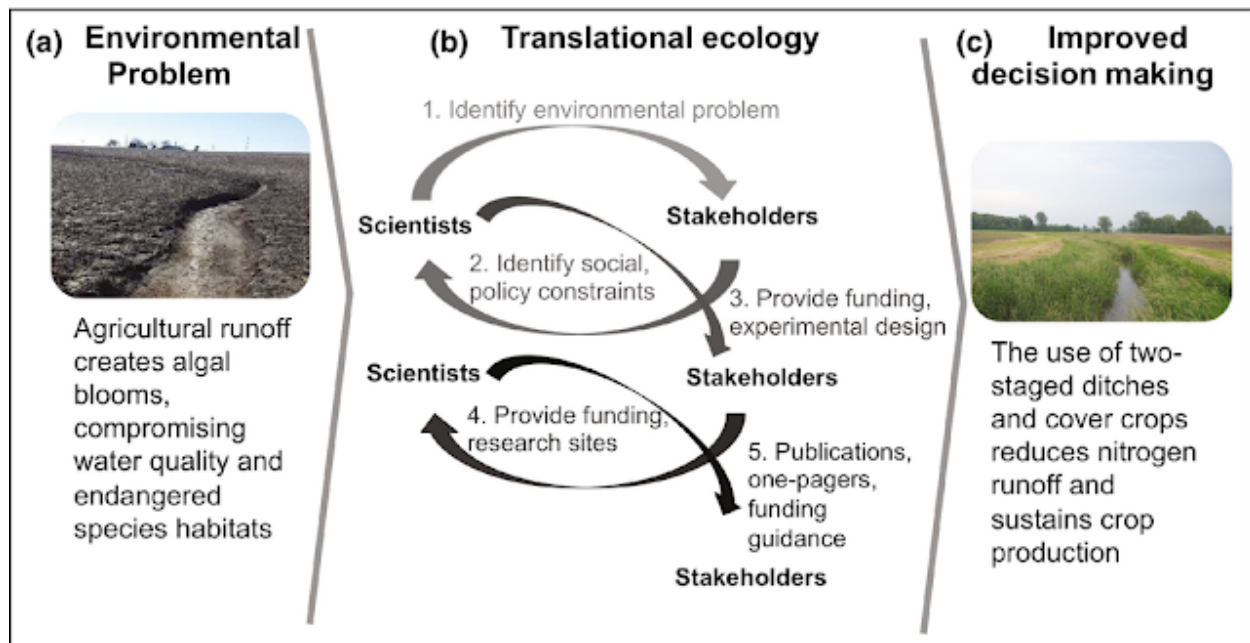
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All readings will use be from sources available on-line via LEARN; there is no extra cost. We will use readings strategically – to inform and launch discussions *as opposed to memorizing or enduring them.*



Via Lauren Hallett et al. 2017. *Frontiers in Ecology and Environment* 15:578–586.

This is the ERS 401 class schedule

DATE/TOPIC READINGS FOR THE WEEK	LEARNING OUTCOMES	DUE DATES
<p>Week 1 (11/01) Translational Ecology Enquist et al. (2017) Schlesinger (2010) Collins et al (2011) McNie et al (2016) Biggs et al (2017) Chapin (2017) Jackson et al. (2017) O'Reilly et al (2018) Wyborn et al. (2019)</p>	<p>Translate the term “translational ecology” and link it back to socioecological systems philosophy, history, analysis and theories of change (the core of ERS 3rd and 4th year)</p>	
<p>Week 2 (18/01) Yes, there are jobs Brunson & Baker (2010) Cedefop (2014) Schwartz et al. (2017)</p>	<p>Figure out how to get a job, make some cash, save the planet, and maybe get your own reality show</p>	
<p>Week 3 (25/01) The planet’s on f**ing fire! Wall et al. (2017) Lewandowsky & Whitmarsh (2018) Littel et al. (2017) Lloyd & Oreskes (2018) Jacobsson (2019) Kirchmeier-Young et al (2019) Nye (2019) Pelenc et al (2019) Purvis et al (2019) Somerville (2019)</p>	<p>Figure out what the f**k we do now!</p>	<p>Group 1 Video Summary and Summary Notes due in appropriate LEARN Dropbox 29/01 at 11:30pm</p>
<p>Week 4 (01/02) Beyond “meh” in learning and society Tilbury (1995) Belovsky et al (2004)</p>	<p>The world is changing fast; how would you keep pace with this?</p>	<p>Group 2 Video Summary and Summary Notes due in appropriate LEARN Dropbox 05/02 at 11:30pm</p>

Blumstein & Saylan (2007) Sand-Jansen (2007) Hunter et al (2018; ch 1 only) Pennington et al (2019) Von Poeck (2019)		Group 9 Response (to Group 1) due in appropriate LEARN Dropbox 03/02
Week 5 (08/02) “First thing we do, let’s kill all the lawyers” Pressey et al. (2015) Armitage et al. (2018) Ash et al. (2018) Behagel et al. (2019) Ruseva et al. (2019)	People tend to dismiss dusty law books, arcane policy levers and governance as being irrelevant. Actually, manipulation of these leads to corruption and death.	Group 3 Video Summary and Summary Notes due in appropriate LEARN Dropbox 12/02 at 11:30pm Group 8 (to Group 2) Response Due in appropriate LEARN Dropbox 10/02 at 11:30pm
Reading Week (15/02) No Class		
Week 6 (22/02) Defeating BS/Stupidity Lafleur (1951) Gould (1996) Gibson (2011) Cook & Lewandowsky (2011)	How not to get sucked into other people’s agendas and allow them to ‘neg’ you endlessly	Final Project Proposal due in appropriate LEARN Dropbox 26/02 at 11:30pm Group 7 (to Group 3) Response due in appropriate LEARN Dropbox 24/02 at 11:30pm
Week 7 (01/03) Translational Ecology - social influencers before it was a thing Carson (1943) Evans (1946) Hardin (1968) Ehrlich & Holdren (1972) Commoner (1972) Ehrlich (2010) Mahrt and Puschmann (2014) Scolere (2019)	Social media is a mess and yet it has long been a thing; it is now a badly mutated thing so how does one control the beast?	Group 4 Video Summary and Summary Notes due in appropriate LEARN Dropbox 05/03 at 11:30pm

<p>Week 8 (08/03) Apocalypse now?</p> <p>Zencey (1988) Skurka et al (2018)</p>	<p>This will be a wide-ranging discussion of the idea of fear and apocalypse and its role in translational ecology</p>	<p>Group 5 Video Summary and Summary Notes due in appropriate LEARN Dropbox 12/03 at 11:30pm</p> <p>Group 6 (to Group 4) Response due in appropriate LEARN Dropbox 10/03 at 11:30pm</p>
<p>Long Weekend – No Classes on 15/03 and 16/03</p>		
<p>Week 9 (17/03) Apocalypse nope!</p> <p>Huber-Sannwald et al. (2012) Strunz et al (2019)</p>	<p>Let's see if you figured out how one translates socioecological systems</p>	<p>Group 6 Summary and Summary Notes due 19/03 at 11:30pm</p> <p>Group 1 (to Group 5) Response due in appropriate LEARN Dropbox 17/03 at 11:30pm</p>
<p>Week 10 (22/03)</p> <p>Hallett et al. (2017) Tank (2017) Swain (2018; in Filho 2018) Powell et al. (2019)</p>	<p>Let's get it done</p>	<p>Group 7 Video Summary and Summary Notes due in appropriate LEARN Dropbox 26/03 at 11:30pm</p> <p>Group 2 (to Group 6) Response due in appropriate LEARN Dropbox 24/03 at 11:30pm</p>
<p>Week 11 (29/03)</p> <p>Cooke et al. (2016) Safford et al. (2017) Alexander et al. (2019) Cooke (2019)</p>		<p>Group 8 Video Summary and Summary Notes due 01/04 at 11:30pm</p> <p>Group 3 (to Group 7) Response due in</p>

		appropriate LEARN Dropbox 31/03 at 11:30pm
<p>Week 12 (05/04) Get on with it, then</p> <p>Hornik et al. (2016) Lawson et al. (2017) Holzer et al. (2019) Horcea-Milcu et al. (2019) Rose et al. (2019) Sutherland et al. (2019)</p>	<p>Your term project was long-term. What will you do in the short-to-medium term?</p>	<p>Group 9 Video Summary and Summary Notes due in appropriate LEARN Dropbox 09/04 at 11:30pm</p> <p>Group 4 (to Group 8) Response due in appropriate LEARN Dropbox 07/04 at 11:30pm</p>
<p>Week 13 (12/04)</p>		<p>Group 5 (to Group 9) Response due in appropriate LEARN Dropbox 14/04 at 11:30pm</p>
<p>Your Fast-Forward Project is Due 16/04 at 11:30pm</p>		

The Scope and Process of ERS 401.

What we are doing here is termed ‘Translational Ecology’. While it does critique, analyze, and act upon the broad concept of sustainability, Translational Ecology is a more tractable approach. Translational ecology is a relatively new term (it may or may not be a new conceptual, theoretical or methodological framework though).

What is it?

This is it (straight from the brains of my friends/colleagues):

“Translational ecology is boundary-spanning environmental science that leads to actionable research focused on maintaining or enhancing the resilience of social-ecological systems. Using an adaptive and iterative mode of inquiry, it extends beyond traditional scientific boundaries. It provides accessible tools and frameworks that allow exchanges of knowledge among ecologists and intended beneficiaries of their science, to promote mutual learning and a shared sense of its utility.”

(<https://www.sesync.org/what-is-translational-ecology-definition>)

I take an ecumenical view of Translational Ecology. Being ‘boundary-spanning’, we probably don’t have to limit ourselves to the traditional, narrow view of ecology – anything that touches on society and environment is fair game in this concept and in ERS 401.

For me, it’s all about how we do what SERS does: Take the explanations from theoretical frameworks and apply them on the ground. While we often define boundaries around systems of interest and try and devise rules to make sense of the world, that’s just because we like convenience and comfort. Kind of like a security blanket for adults.

Upsetting those boundaries really does make people unhappy, mad, and even over-the-top enraged. Challenging the social order is especially risky, especially when those seeking to preserve it are always prone to casting themselves as being the disruptors. Think I’m wrong? Go on twitter and explain why transgender rights are sacrosanct. In about 30 seconds, you’ll get bombarded with people ALL CAPPING that there are only two genders, that Bob Q Deity says they will burn someplace nasty for that notion, that we need to protect freeze peach, demanding ‘debate me!’, committing the act of sealioning, and probably posting a whole pile of memes that were worn out even before 4chan existed.

I’m not so interested in argument for argument’s sake. but Translational Ecology does take the position that boundaries between disciplines or between scholarship and action are porous (and should be porous) at best. This is the last core course and (in 2020 for some but in 2021 for all) a brand new one. This course will be structured in some familiar ways (students may wish the occasional bout of PowerPoint and ostensibly wise analysis – no giggling please) but we’re going to this in more creative ways because in 4B, it’s time to cast off the shackles. I have structured it so that you will be able to gauge your progress (after all, there are grades to be had here) and to provide some whole-class exercises each week to, I hope, stir your interest. The way I will grade this follows on the next page.

ERS 401 Grade Allocation

Activity/Assignment/Exam	Weight
Video Summary Assignment	25%
Responses to Video Summaries	10%
Fast Forward Project Proposal	5%
Fast Forward Project	30%
Take Home Exam	30%

- 25% of final grade: Reflective yet pithy summations / analyses at the end of each week (in the appropriate LEARN Dropbox. Each group will submit a 10-15 minute video summary / analysis of their assigned, weekly readings (using something like Zoom or whatever software you'd like to ensure social distancing – NO face-to-face meetings – submitted to Bongo on LEARN) as well as a brief, 1-page written summary (single spaced). Imagine the whole class is a reading group and your subgroup is in charge of a week (see below). Your job is to thoroughly read the week's readings and give your colleagues in the course a good summary and analysis of the readings. This way, the entire class can use these video summaries, written summaries and the written responses by a paired group, to understand that week's readings. What am I looking for? Any insight related to that week's topic, discussions, and tasks. You can draw on outside sources or current events. I'm looking for serious summations and analyses (don't let your fellow groups down) however, please feel free to make the videos interesting (and maybe a bit entertaining, but still serious). Beyond that, you can decide what you'd like to say. These are deliberately kept brief to (a) not overburden you, but more importantly (b) to ensure you can present and write in a substantive yet concise manner – that is what gets you attention, jobs, and so forth.
- 10% of final grade: Another paired group will provide a 1-page response to your summary / analysis providing counterpoint, missed points or to re-emphasize key points for the whole class. Similar to above, in these brief responses, I am looking for the group to pick up on the insights the presenting group raised related to that week's topic, discussions, and tasks. Similarly, your response can draw on outside sources or current events. Again, I'm looking for serious responses (don't let your fellow groups down). Beyond that, you can decide what you'd like to say. These are deliberately kept brief (1-page, single spaced) to (a) not overburden you, but more importantly (b) to ensure you can present and write in a substantive yet concise manner – that is what gets you attention, jobs, and so forth.
- 35% of final grade: Complete "The Fast-Forward Project". That's described on the next page. It is the big product for ERS 401. This project is due at the end of term (April 16th). There will be a brief, 1-page (single spaced) proposal due February 26th to get you thinking about it early. (see more detail on next page)
- 30% of final grade: **Final exam is NOW A TAKE HOME EXAM.** It will be distributed to you via email by 1300 hours on the last day of classes. It is due APRIL 20 at 2300 h via LEARN Dropbox folder. This will be based on class discussions, tasks, lessons, and readings (again, I don't dive into trivia – I'm looking for you to attend classes, read stuff strategically rather than like a novel, and be reflective and insightful). One question will be dependent on you preparing a reflection (of some substance)

on a translational ecology event or idea you've come across outside of this course (and different from your project); in other words, I expect you to keep abreast of current events and figure out how to translate this into ideas relevant to ERS 401. The rest of the exam questions will be anchored to the substance of the classes but even there, these are not delimited by what I provide on slides or commentary because each week we have class discussions or tasks – and those form the basis of quite a lot of the answers on the final exam (yet another reason for you to attend classes regularly).

That's it. I kept it really simple – some breezy and pithy but trenchant observations each week, a major project that focuses on you doing something great that involves action, and a final exam to reflect on what has transpired in our time together.

We'll engage with quite a few readings and there are more resources on LEARN (some optional readings – but more than that). Note I wrote 'engage readings' not 'memorize every detail or read them like a boring novel'. The readings are to spur discussion; we'll home in on the stuff we think might be relevant in each.

The course is pretty open-ended beyond the above structure. The expectation is that you show the world why you are awesome now and how you will even get more awesome as you age.

The Fast Forward Project follows on the next page.

Late Policy:

Late assignments will be accepted up to one week after the due date with a penalty of one full grade (i.e., 80% becomes 70%) except for unusual mitigating circumstances that should, of course, be communicated as soon as possible. Any requests for extension without penalty or for more than one week must be made in writing in advance of the assignment due date.

The Fast Forward Project

For this final (soon to be core) course, the goal is for you to explore the meaning of “Translational Ecology” (sensu lato) in a manner that conveys a sense of urgency and ambition for you personally.

“What do you want to do with your life?”

I thought a lot about the scope and even the name of this project: “Carpe Vita”, “Project Awesome”, “Project Thunberg”, “The Rachel Project”, “The Thoreau Project”, “The Anti-Asshole Project”, “The Project Formerly Known as Capstone”, “I’m Fresh Out of Good Names”, “In Search of Rosencrantz and Guildenstern”, “JoJo Dancer, Your Life is Calling”, “Vikings and Beekeepers”, “Pussywillows, Cattails (Soft Wind & Roses)” “Project Mark Metcalf”, “À la recherche du temps perdu? Non! À la recherche du temps futur!”

Some of these might be better names, others were just me being silly (no guessing as to which are which). Bonus points on the final exam if you can decipher what these allude to.

In the end, this project is about giving you the space and freedom to imagine what you might accomplish over the next 50 years. That’s the scope. That’s it.

The only requirements I have are these:

- It should be conceived as a big thing that you want to do – something that interests you and inspires you.
- It does not have to be written, necessarily, as a report. Oh, it can be if you wish but I’m thinking this should be something that is motivating and immersive – it could be conveyed via art, music, photography, video, or some other form of expression. It must be translational – it must move people to do something. It must be ecological but only in the broadest sense of that word. Ecological essentially means ‘house’ – our planet – so a broad connection to any kind of environment is acceptable; I recognize most of us default to something ‘natural’ and that’s good but you have license to explore and push the boundaries of what ‘environment’ means to you and others.

That’s it. Yes, really.

Now if you want some help visualizing what this thing might be, we'll be discussing that first day in class. For now, I can give you some examples I've been part of or been around here in SERS and beyond:

- A visualization of a string of interconnected parks transforming degraded areas, wending around working farms, augmenting urban areas; that was done via a large moving Lego set
- A series of paintings that depicted how ecofeminism has and could change society for the better
- A musical treatment of the life of Rachel Carson
- An entire treatment for a children's educational show
- A guide to how government works and how you can create effective policies that lead to action
- A demonstration project built to show how to restore habitat to attract migratory birds

There is no real word limit (because it might not be much about writing words) or anything. It has to be substantive and serious in its intent. Best advice is for you to discuss this during class and/or with me outside of class – we can tailor this to each of you and we can agree on the scope on an individual basis. This means great expectations and fulfillment, but I appreciate the open-ended nature might be pretty scary so a discussion with me will make it less scary.

Resources for You – University Policies, Your Rights, Mental Health Help, AccessAbility

We used to have a mandatory 'advisory' from the Dean of Environment. That has been replaced with a webpage with many resources (policies, mental health help and so forth):

<https://uwaterloo.ca/environment/undergraduate-teaching-resources>

Please make all efforts to communicate with AccessAbility if there are acute or chronic struggles that affect your class attendance or course performance – I know it is tough to admit you need help or to trust anyone. The earlier we address issues and find a success path, the better; I am willing to assist and alter the standard path. There are cases where students prefer to talk to me directly; by all means, but please be aware you don't have to reveal anything personal or medical to get accommodations – that is why AccessAbility exists. We follow all policies on privacy and human rights.