

Special Topics Capstone Climate Change
ENVS 4940
Department of Natural Resources and the Environment (DNRE)
Monday/Wednesday, 2:45pm – 4:00pm
Fall 2021

Instructors

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COURSE SUMMARY

Interested in working toward solutions to the climate crisis? In this course, you will choose and implement a climate action from Project Drawdown's (www.drawdown.org) list of 82 climate solutions. You will also apply social sciences research to influence your friends, family, Instagram followers, or another of your social networks to implement your climate action. The capstone team project will focus on one of the most effective ways to reduce greenhouse emissions: plant-rich diet. You will collect plant-rich recipes from around the world, taste test them under the supervision of a nutritionist, present them in an engaging format, and create educational materials and reports in collaboration with community partners in upstate New York, Zimbabwe, China, and elsewhere.

Credits: Course is three credits, S/U or graded.

Learning outcomes. By the end of the course, students will be able to:

1. Compare approaches to mitigating climate change and choose an individual climate mitigation action.
2. Apply social sciences research to develop and implement an action plan to influence one of your social networks (e.g., friends, family, Instagram followers) to take that action alongside you.
3. Create your own arguments for the responsibility of individuals, corporations, and the broader collective to foster climate and food justice.
4. Collaborate professionally and equitably with US and international colleagues to collect and taste test plant-rich diet recipes, develop plant-rich diet internet-based media, and synthesize information for reports and recommendations related to sustainable and healthy diet policies.
5. Communicate through a variety of media including writing, presentations, and internet-based media.
6. Demonstrate critical thinking skills while providing and responding to constructive peer feedback on discussion boards and during real-time online discussions.
7. Experience the FUN of climate actions.

Benefits to the Learner. Students will: (1) learn which climate actions are most effective in drawing down atmospheric greenhouse gases; (2) learn how to apply social sciences research to influence friends and family to take climate actions; (3) conduct a fun and meaningful project involving taste testing plant-rich recipes from China, Zimbabwe, and other countries; (4) contribute to climate and nutrition

education and action in collaboration with community partners; (5) forge relationships with US and international organizations and individuals that could prove useful in future internships.

COURSE OVERVIEW

This course will engage students in critically assessing the effectiveness of a broad spectrum of actions to address the climate crisis and in conducting two projects to help draw down greenhouse gases in the atmosphere. For their network climate action project, students will use the [Drawdown](#) website to identify a climate action they would like to implement themselves and in one of their social networks (e.g., friends, family, student club, dorm). Drawdown's top ten actions include educating girls, reducing food waste, plant-rich diet, wind energy, and silvopasture, and thus cut across the bio-physical and social sciences disciplines. Students will draw from research about the spread of complex behaviors, social mobilization, social norms, social marketing, social media, nudges, and choice architecture to learn about ways to influence individuals to take climate action. Students will be required to select and implement one Drawdown action and engage with their social networks to implement the action (e.g., limit meat and dairy consumption, reduce food waste, raise money for women's education in developing countries). Guided reflections and small group and full class discussions about the climate impacts and challenges of implementing their actions will foster critical thinking.

For their team project, student teams will work with a nonprofit organization to identify a means to promote plant-rich diet among the organization's audiences and members. Possible activities include collecting, taste testing, and compiling plant-rich recipes; developing plant-rich diet infographics, and compiling reports or recommendations on how organizations can promote policies that reduce food-related emissions.

TECHNOLOGY

Students will use multiple platforms in the course.

1. **Assessments – *Canvas*.** All assignments, grading, announcements, discussions will be done in Canvas.
2. **Team Project Management --** We will set up a google doc for each team to report project progress. You can choose any tool your team and community partner prefer to use in ongoing communications about your project.
3. **Weekly Meetings — *160 Mann Library***
4. **Communication Platforms.** Communication with community partners will occur via Zoom, WhatsApp, WeChat, and email.

INSTRUCTORS' NOTE TO LEARNER. As a Cornell junior or senior, you are transitioning from student to professional and citizen in communities beyond the university. We have organized this class to help you in this transition. In particular, similar to workplaces and community forums, you will have "rights" and "responsibilities." Your rights and responsibilities will play out in the decisions you make about your participation and roles in the class. For example, we offer you an array of video, PDF, and other learning resources; although some videos and readings are required to complete the weekly discussion board questions, you have the right to choose other resources that are most valuable for your learning goals and your contributions to our group discussions and team projects. If you have already covered the material in a particular video or article, or it is of limited interest, choose to watch/read other resources, including those you find on your own (and please share valuable resources you discover with the class). In addition to contributing to the online and group synchronous discussions, you have a responsibility to complete the network climate action project and to contribute significantly to the team

project. The team project is designed to simulate teamwork in the workplace and in voluntary organizations, where team members are responsible for outlining goals and objectives, creating outputs, time/task management, and working with clients or community partners. Each team member has the responsibility to contribute to the team project in ways that reflect the course content, their own skills and interests, and the interests and needs of the partner organization.

We expect you to also consider your impending transition away from college in thinking about assignments and grading. To the extent possible, we hope you are motivated by the desire to learn and to make a difference in mitigating the climate crisis, rather than grades.

TEAM PROJECT. The team project entails working with a community partner to design and post plant-rich eating resources that meet our partners' needs. Four tasks are integral to accomplishing the project: (1) communication with community partner to assess their needs and interests; (2) designing a project to meet those needs and interests (e.g., recipe collection and tasting, a multimedia presentation); (3) implementing that project; and (4) ongoing reflection and discussions with your team members and community partner on how to create the best possibly project. You will work in four-person project teams in which all team members contribute to all tasks, but one team member assumes leadership for each task. So, for example, the community partner communication team member will organize meetings with the partner and handle emails or other messages with the partner, but each team member will participate in partner meetings and be copied on emails. The technology team member will seek out innovative uses of technology to communicate plant-rich diet messages, such as using Comic Life to design messages using a comic strip or WeChat streams with simple animations and photos (e.g., [example 1](#), [example 2](#)).

In addition, all students with the same leadership role will meet together to share strategies, challenges and what seems to be working, and in turn share what you have learned from "role mates" with your team members. You can imagine this as a 2x2 matrix in a workplace or volunteer organization. You have a unique role within your team, and you meet with all other colleagues who have the same role to learn from each other.

We have received funding from Cornell's [Active Learning Initiative](#) and Engaged Cornell to support the team project. Check out the [Engaged Cornell resources for students](#)

COURSE REQUIREMENTS

In this three-credit course, you will choose a climate change action and implement it yourself and with one of your social networks (e.g., housemates, Instagram followers). You will also work with outside Cornell (community) partners to develop plant-rich diet educational media and reports. Each week will feature required readings, online lectures, online discussion responses, as well as small group and full class discussion sessions.

Course Requirements

1. Participate in weekly meetings on Mondays and Wednesdays. Mondays we will engage in discussion of the week's short video lectures, readings, and discussion questions. Wednesdays will be largely devoted to your network climate action and team projects.
2. Participate in discussions on Canvas course platform including posting your own thoughtful answers and commenting on at least two other students' answers each week. Discussion questions will require students to think critically about Drawdown climate solutions in the US and internationally, and about how spread of complex behaviors, social norms, social mobilization, social marketing, social media, and choice architecture influence climate behaviors. We will also

explore questions related to who has responsibility for addressing the climate crisis and climate justice.

3. Plan and conduct a climate action yourself and with one of your social networks, and assess the effectiveness and barriers to that action in a final report and presentation.
4. Contribute significantly to the team project focused on plant-rich diet and reducing emissions from food.
5. Create a document or other media outlining your reflections on responsibility for climate/food justice.

GRADE DISTRIBUTION

Theme	Requirement	Percent of Grade
1. Class participation (10%)	Engage in weekly discussions and activities.	10
2. Canvas discussion (15%)	Engage in online Canvas discussion, including posting short, thoughtful answers to questions and commenting on two other students' answers.	15
3. Network climate action project (30%)	a. Drawdown action plans, implementations and updates (on discussion board)	15
	b. Drawdown action final evaluation and reflection report	15
4. Team project (35%)	a. Collect, taste test and compile plant-rich diet recipes and infographics OR research food emissions policies and develop reports/recommendations for partner organizations	25
	b. Professional collaboration with team members and community partners	10
5. Final Essay - Reflections on responsibility (10%)	Reflections on readings and discussions on responsibility and justice relative to the climate crisis	10

Grade Descriptions

1. Class participation (10%)

We (the instructors) value your ideas about the lectures and readings, and expect you to share your reactions, reflections, and what you learn each week. We also value your insights about the network climate action and team projects, and are available to help you think through your strategies. You are responsible for contributing to these discussions, both by sharing and thoughtfully commenting on other students' contributions. We view participation as critical and expect you to attend every class. If you are not able to attend a class, contact both instructors (Marianne Krasny and Yue Li) via email beforehand.

2. Canvas Discussion Board (15%)

Each week you will be asked to post your responses to two-three discussion prompts and to comment on at least two other students' response posts. Your grade for the discussion board will be based on whether your response is thoughtful and demonstrates critical thinking.

3. Network climate action project (30%)

a. Action plan and updates (15%)

You will use a weekly discussion board and Google doc to plan your action, and update your plan as you learn about new ways of influencing people.

- b. Final evaluation and reflection report (15%)
Students will be required to write a short (5-page) reflection on the Drawdown action they chose, the network they implemented it in, the strategies and research (from the lectures and readings) they applied, any assessment data from their implementation, and what lessons they learned from the project

4. Team project (35%)

- a. In collaboration with team members and community partners, collect, taste test, and compile plant-rich diet recipes and educational materials OR create report and recommendations on reducing food climate emissions (25%)
- b. Professional collaboration with community partners and team members (10%)
Working with community partners to address social and environmental issues is integral to Cornell's community engagement mission. We expect students to respond in a timely and professional manner as they get to know and work with their community partners. For example, Cornell Cooperative Extension-Warren County works with farm and rural communities north of Albany NY, and CASL Trust works with farming communities in Zimbabwe.

5. Final Essay - Reflections on Responsibility (10%)

Toward the end of the class, we will have several readings related to Iris Marion Young's social connection model of responsibility and Robin Zheng's role-ideal model of responsibility for (in)justices. You will reflect and state your position on ideas about shared and individual responsibility for climate and food justice.

Grades

The grades will not be graded on a curve. Your total score for the course will be converted into a percentage (properly rounded), which will be used to determine your letter grade based on the following scale.

<ul style="list-style-type: none"> ● 98% - 100% A+ ● 93% - 97% A ● 90% - 92% A- 	<ul style="list-style-type: none"> ● 88% - 89% B+ ● 83% - 87% B ● 80% - 82% B- 	<ul style="list-style-type: none"> ● 78% - 79% C+ ● 73% - 77% C ● 70% - 72% C- 	<ul style="list-style-type: none"> ● 60% - 69% D ● below 60% F
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Late Policy. Discussion posts should be submitted by 11:59pm on Saturdays and discussion comments should be submitted by 12 noon on Mondays except the first two weeks (posts due by 11:59pm on Tuesdays and comments due by 12 noon on Wednesdays). Submitting discussion assignments on time is critical because much of the class involves discussion of each of your Discussion Board posts, and you will need to read each other's posts. The team projects also depend on each student's timely contributions. Points will be taken off for late assignments. If there are documented emergencies or illnesses, or you anticipate other challenges, please discuss with us as soon as possible.

Course Participation. An important aspect of a capstone course is the opportunity to meet and support peers. Please share your thoughts about course materials, your climate actions and team projects, your successes, and challenges you have faced when dealing with climate change issues.

Academic Integrity Policy. All students are expected to adhere to the University's Code of Academic Integrity, which states that any submission of work by a Cornell student for academic credit indicates that the work is the student's own. (<http://cuinfo.cornell.edu/Academic/AIC.html>). All outside assistance should be acknowledged and truthfully reported in all circumstances. Students who violate the code will be given a grade of zero for the assignment and/or a failing grade for the course.

FINAL NOTE. We (the instructors) realize that each of us reacts to the current crises and unrest in different ways. If the pandemic, climate crisis, and other current events are impacting your ability to learn, please let us know and we can support you to find resources to help. We look forward to working with all students to help you learn and engage meaningfully in our course climate and food projects.

Course Timeline

(Subject to minor changes)

Weekly discussions are DUE on Saturdays at midnight before Monday class meetings

Comments on other students' posts due 12 noon on Mondays.

(First two weeks, discussion posts due Tuesday at midnight and comments on other students' posts due Wednesday at noon)

Network Climate Action Project Updates are DUE on Tuesdays at midnight, starting from Sept 14.

8/30 (Monday)

Introductions and Climate responsibility

Class Discussion: (1) Who is responsible for climate mitigation ([Count Us In](#)); (2) Introduction to Network Climate Action projects

No assignments due

9/1 (Wednesday) For this week and next week only, discussion posts are due Tuesday at midnight, and comments on other students' posts are due Wednesday at noon.

Climate Justice and Plant-rich Diet (PRD, Readings about plant-rich diet are marked by "PRD" throughout syllabus)

Class Discussion: (1) What is climate justice? (2) Introduction to network climate action projects

Video lectures (1 and 2 optional for students who need background on climate change science)

1. Optional: Climate Change 101. Mike Hoffman
2. Optional: Climate Change: The Evidence. Mike Hoffman
3. Climate Justice. Annie Armstrong
4. Green New Deal Explained. David Roberts, Rhiana Gunn-Wright

Readings

1. Caney, Simon. "[Climate Justice](#)", The Stanford Encyclopedia of Philosophy (Summer 2020 Edition), Edward N. Zalta (ed.)
2. [Equitable Climate Action](#). Explore the website. Read plan for at least one sector (e.g., agriculture)
3. [Climate Justice Alliance Food Sovereignty Working Group](#). Explore the Climate Justice Alliance website and read about their work in food sovereignty, including about local groups that are engaged in this work.
4. [Red Black and Green New Deal](#). Explore the Red Black and Green New Deal website.
5. PRD. Willett, W., J. Rockström, B. Loken, M. Springmann, T. Lang, S. Vermeulen, T. Garnett, D. Tilman, F. DeClerck, A. Wood, M. Jonell, M. Clark, L. J. Gordon, J. Fanzo, C. Hawkes, R. Zurayk, J. A. Rivera, W. De Vries, L. Majele Sibanda, A. Afshin, A. Chaudhary, M. Herrero, R. Agustina, F. Branca, A. Lartey, S. Fan, B. Crona, E. Fox, V. Bignet, M. Troell, T. Lindahl, S. Singh, S. E. Cornell, K. Srinath Reddy, S. Narain, S. Nishtar and C. J. L. Murray (2019). "Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems." The Lancet 393(10170): 447-492.

Discussion Board

1. *Introduce yourself to the instructors and other classmates.* Introduce yourself (feel free to post a picture of yourself, optional); Share why you are interested in this course; Describe any particular skills you have or are interested in gaining related to reducing greenhouse gases, project management and communication, creating educational materials, communication technologies, cooking, etc.

2. *Green New Deal*. The core of the Green New Deal is that economic and social justice needs to be addressed along with climate. Make an argument for why you agree or disagree with this statement drawing on a justice argument from Caney reading, and propose one policy that illustrates your argument.
3. *Climate Justice and Food*. Integrate what you know about climate justice and food. Is there a role for low carbon emissions diet in climate justice communities? Explain your response.

9/6 (Monday)

Labor Day—NO CLASSES

9/8 (Wednesday)

Project Drawdown, Food and Climate Justice

Class Discussion: Meet with Cornell Cooperative Extension Community partners.

Video Lectures

1. [Project Drawdown Reducing Sources](#). Jonathan Foley
2. [Supporting Sinks and Improving Society](#) -Jonathan Foley
3. [Drawdown Actions](#). Marianne Krasny

Readings

1. Drawdown. (n.d.). "[Solutions](#)." Explore the website paying attention to solutions.
2. PRD: McGregor, J. (2019). [The Intersection of Environmental, Climate, and Food Justice. Food, Environment, and Climate Change: Justice at the intersections](#). E. Gilson and S. Kenenhan. Toronto, Rowman & Littlefield: 29-46.
3. PRD. Gilson, E. (2014). "Vote With Your Fork? Responsibility for Food Justice." *Social Philosophy Today* 30: 113-130.
4. PRD. Cornell Cooperative Extension—Warren County [Nutrition Program](#). Explore website.

Discussion Board 1 - Content

1. *Drawdown*. How are Drawdown solutions arrived at? Do you feel the process of choosing and ranking these solutions makes them credible and rigorous? Please explain your answers.
2. *Critical thinking and credibility*. Please choose a statement from the McGregor reading that you question or disagree with. Write down the statement and page number where it occurs, and then describe an argument for why you question the validity of or disagree with the statement.
3. *Vote with your Fork*. Outline Gilson's argument about who is responsible for food (in)justice and state the consequences of that for how individuals should address food injustice.

Discussion board 2 -- Network Climate Action Project: Discuss your action. Based on the Project Drawdown solutions, state which climate action(s) you are interested in pursuing, and why. Consider that this is an action that you will be implementing in your own life, as well as in your social network (e.g. friends, family, dorm, fraternity). For example, are your solutions important in the context of your hometown? Are they something that you can readily do? Would you be able to devise a strategy to engage your social network in these actions? Other reasons?

9/13 (Monday)

Network structure and behavior spread, and Food Citizenship

Class Discussion: 1) How do behaviors scale up to become consumer movements? 2) How do behaviors spread in different networks?

Video lectures

1. Social networks and climate behaviors. Marianne Krasny
2. How Behavior Spreads: The Science of Complex Contagions. Damon Centola
<https://www.asc.upenn.edu/news-events/annenberg-video/faculty-videos/how-behavior-spreads-science-complex-congation>
3. Plant-rich diet webinar, Damon Centola

Readings

1. Centola, D. (2019). [The truth about behavioral change](#). MIT Sloan Management Review 60(2): 1.
2. Popp, T. 2019. [The virality paradox](#). The Pennsylvania Gazette. Mar/Apr: 42-49.
3. Networks Dynamics Group. <https://ndg.asc.upenn.edu/> Explore this website for additional information on complex contagion and behavior change. There is a free short Coursera course you can sign up for and view that covers the concepts in Centola's book.
4. *Optional*: Centola, D. (2018). How Behavior Spreads: The Science of Complex Contagions. Princeton, NJ, Princeton University Press. You can download the e copy if you want to learn more about Centola's work. There are also many related papers on the Networks Dynamics Group or Centola website.
5. PRD. Wilkins, J. L. (2005). [Eating Right Here: Moving from Consumer to Food Citizen](#). Agriculture and Human Values 22(3): 269-273.
6. PRD. Ankeny, R. A. (2019). From Food Consumers to Food Citizens: Reconceptualizing environmentally conscious food decision-making. Food, Environment, and Climate Change: Justice at the intersections. E. Gilson and S. Kenenhan/. Toronto, Rowman & Littlefield: 267-280.

Discussion board

1. *Diffusion of behaviors*. In Centola's article "The truth about behavior change," he offers four explanations for why behaviors diffuse through small networks with strong ties rather than large networks with weak ties. Please reflect on each of these mechanisms as applied to what you have observed about climate change or other environmental behaviors.
2. *Food Citizenship*. Jennifer Wilkins proposes the idea of food citizenship. If you were working for Cornell Cooperative Extension-Warren County, what strategies might you use to promote food citizenship among the rural population in your county?

9/15 (Wednesday)

Projects

Class Discussion: (1) Team projects, roles, and management tools; (2) Network climate action projects

1. Team Project: Decide on team members and community partners for each team.
2. Network Climate Action Project: Identify your Drawdown action and implementation network

Discussion board -- Network Climate Action Project. Fill in as much of the network climate action template as you can at this time.

1. Drawdown solution
 - Which climate action(s) are you considering taking yourself and in your network?
2. Personal implementation

- How will you implement the solution personally?
3. Network Implementation
- Which social network do you plan to influence to take your action alongside you?
 - Why did you choose this network?
For example, are they people who trust you? Please describe their demographics. For example, their approximate ages, country or region, and what you have in common with them.
 - How will you communicate with your network? For example, what face-to-face meetings will you have, if any? If you communicate with your network online, which tool(s) will you use? How will you use social media to mobilize these actions? (e.g., a contest, a one-week activity)
 - What kind of incentives or recognition might be important to them, if any?
4. Barriers
- What barriers will you and your group face in trying to implement your action?
5. Assessment
- How will you know if you influenced people to adopt your climate action?
 - How will you measure any changes in your network's carbon footprint?
6. Timeline
- What are the key dates for implementing and evaluating your action?

9/20 (Monday)

Social mobilization

Class discussion: Applying PANIC principles to your network climate action and team project

Video lectures

1. Social mobilization. Marianne Krasny
2. Plant-rich diet webinar. Robert H Frank

Readings

1. Rogers, T., N. J. Goldstein and C. R. Fox (2018). [Social Mobilization](#). Annual Review of Psychology 69(1): 357-381.
2. Sheppard, S., D. M. Iype, S. Cote and J. Salter (2015). [Special Report – A Synthesis of PICS-Funded Social Mobilization Research](#). Victoria, BC, Pacific Institute for Climate Solutions.
3. Sussman, R., R. Gifford and W. Abrahamse (2016). [Social Mobilization: How to Encourage Action on Climate Change](#). Victoria, BC, Pacific Institute for Climate Solutions: 20. (scroll down to 2016.) NOTE: This is a 20-page report; Rogers et al 2018 reference goes into social mobilization in more depth.
4. PRD. Krasny, ME. in preparation. Plant-rich diet chapter. Cornell University Press.

Discussion Board

1. *PANIC and Complex Contagion*. How do the PANIC principles relate to the social networking/complex contagion explanations and recommendations of Centola and Frank? Are they saying the same thing using different language? Do they add to each other?

9/22 (Wednesday)

Projects

Class Discussion: (1) Team projects, roles, and management tools; (2) Network climate action projects

1. Team Project: Develop team strategy and timetable
2. Network Climate Action Project: Apply PANIC principles in your DD action project.

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. *Complex contagions application.* How might you apply Centola's work on complex contagions to your network climate action? How large is your network? How tightly connected are its members?
3. *Social mobilization principles application.* The Rogers reading proposes five guiding principles for social mobilization, which the authors summarize as "PANIC." Take one or more of the PANIC principles and apply them to your action planning. (For example, under "N" or "Normative," they suggest reminding people of shared values and beliefs about how a group behaves, and under "C" or "Connected," they talk about influential people in a social network. How might these or other PANIC principles be applied to your action? Please state what principle(s) you are applying in your answer.

9/27 (Monday)

Social norms

Class Discussion: How can we apply research on norms to our network climate actions?

Video Lecture

1. Social influence and norms. Xoco Shinbrot
2. Plant-rich Diet Webinar. Elizabeth Fox

Readings

1. Cialdini, R. (2001). [Harnessing the science of persuasion](#). Harvard Business Review October, 2001: 10.
2. Nolan, J. M et al. (2008). [Normative Social Influence is Underdetected](#). Personality and Social Psychology Bulletin 34(7): 913-923.
3. Sparkman, G. and G. M. Walton (2019). "[Witnessing change: Dynamic norms help resolve diverse barriers to personal change](#)." *Journal of Experimental Social Psychology* **82**: 238-252.
4. Mortensen, C. R., R. Neel, R. B. Cialdini, C. M. Jaeger, R. P. Jacobson and M. M. Ringel (2019). [Trending Norms: A Lever for Encouraging Behaviors Performed by the Minority](#). *Social Psychological and Personality Science* 10(2): 201-210.
5. Higgs, S. (2015). [Social norms and their influence on eating behaviours](#). *Appetite*, 86, 38-44. doi:<https://doi.org/10.1016/j.appet.2014.10.021>
6. PRD. McCarthy, J., & Dekoster, S. (2020). *Nearly One in Four in U.S. Have Cut Back on Eating Meat*. Retrieved from Washington, DC: <https://news.gallup.com/poll/282779/nearly-one-four-cut-back-eating-meat.aspx>

Discussion Board

1. *Identify social norms.* What injunctive, descriptive, and/or trending social norms influence your climate or other environmental behaviors?

9/29 (Wednesday)

Projects

Class Discussion: (1) Team projects, roles, and management tools; (2) Network climate action projects

1. Team Project: Report on progress in implementing plan
2. Network Climate Action Project: Apply social norms and plant-rich diet readings/lectures in your action project.

Video Lectures

1. Theory of Change (lectures from EEO MOOC)
2. Evaluation.

Readings

1. Krasny, ME. 2020. Evaluation, in Advancing Environmental Education Practice. Cornell University Press.
2. Krasny, ME. 2020. Theory of Change, in Advancing Environmental Education Practice. Cornell University Press.

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. *Social norms application.* How will you apply what you learned about social norms to your climate action?
3. *Theory of Change.* Construct your Theory of Change for your Drawdown Action project including diagram and explanation, based on what you have learned about networks, behavior spread, and behavior influence.
4. *Evaluation.* Describe your evaluation methods and results reporting strategy for your DD action project.

10/4 (Monday)

Social marketing

Video Lectures

1. Social marketing. Xoco Shinbrot
2. Plant-rich Diet webinar. Jennifer Wilkins

Readings

1. McKenzie, M. (2000). Fostering sustainable behavior through community-based social marketing. *American Psychologist*, 55(5), 531
2. Corner, A. and A. Randall (2011). [Selling climate change? The limitations of social marketing as a strategy for climate change public engagement](#). *Global Environmental Change* 21(3): 1005-1014.
3. Weinreich, N. (n.d.). [Supercharge youth social impact: Using social marketing for behavior change](#). Weinreich Communications.
4. Krasny, M. E. (2019). Social Influence, Social Marketing, and Social Mobilization: A Quick Summary for Cornell Climate Online Fellows. Ithaca NY, Cornell University: 4.
5. PRD. [Menus of Change website](#). Explore website.

Discussion Board

1. *Social marketing principles.* The Weinreich reading proposes three Social Marketing Principles: Focus on behavior change (awareness is overrated); Understand your audience (be more specific than “general public”); and Keep the social in social marketing (reinforce social norms and use social media to spread a behavior). Comment on how the social marketing principles relate to the complex contagion, social mobilization, and social influence principles from previous weeks—see summary of three of these approaches in the readings.

2. *Plant-rich diet or other Drawdown solution.* Summarize the arguments for promoting a plant-rich diet. If you have chosen plant-rich diet for your DD action, which arguments do you think will be most salient for your DD Action Project network, and which do you think would not resonate with them? Please explain why (e.g., based on the network demographics, norms, etc). If you have not chosen plant-rich diet, please answer the same questions for your team project, given your understanding of the demographics you will be working with.

10/6 (Wednesday)

1. Team Project: Applying plant-rich diet arguments (see Discussion Board).
2. Network Climate Action Project: Apply social marketing and plant-rich diet in your action project.

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. *Social marketing application.* How will you apply what you learned about social marketing to your climate action? Talk to members of your target audience and ask about the barriers and benefits to engaging in the behavior. What are those barriers and what strategies might you use for overcoming them? What potential repercussions or boomerang effects would you expect if any? How would you address them?

10/11 (Monday) NO CLASS FALL BREAK

10/13 (Wednesday)

Team project and Network Climate Action project updates

10/18 (Monday)

Social Media and Influencers

Class Discussion: Do influencers really influence us?

Video Lecture

1. The secret to online influence, Franc Carreras

Readings

1. Young, W., S. V. Russell, C. A. Robinson and R. Barkemeyer (2017). [Can social media be a tool for reducing consumers' food waste? A behaviour change experiment by a UK retailer.](#) Resources, Conservation and Recycling 117: 195-203.
2. Bedard, S. A. N. and C. R. Tolmie (2018). [Millennials' green consumption behaviour: Exploring the role of social media.](#) Corporate Social Responsibility and Environmental Management 25(6): 1388-1396.
3. Zhang, N. A. N. and M. M. Skoric (2018). Media use and environmental engagement. International Journal of Communication 12: 380-403.
4. Enjolras, B., K. Steen-Johnsen and D. Wollebæk (2013). Social media and mobilization to offline demonstrations: Transcending participatory divides? New Media & Society 15(6): 890-90
5. Paúl, María Luisa. 8/8/2021. [Jennifer Aniston and other celebrities endorse vaccines. Experts say their pleas may not help.](#) Washington Post.

Discussion Board

1. *Social media to influence others.* What types of social media do you use? Have you ever tried to use social media as a means to mobilize or influence your “friends?” Have you yourself ever been mobilized or influenced through social media? Was there an informational, emotional, or other type of influence? Please briefly describe how you may have influenced others or they influenced you.

10/20 (Wednesday)

1. Team Project TBD
2. Network Climate Action Project: Apply social media in your network climate action project.

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. *Social media application.* How will you apply what you learned this week to your action plan?

10/25 (Monday)

Choice Architecture and Nudges

Class Discussion: What ethical issues might you encounter with choice architecture and nudges in your network climate action projects?

Video Lectures

1. [Are We in Control of our own Decisions?](#) Dan Ariely. Ted Talk
2. [A Brief History of Nudge](#). Learn the power of nudge to win at behavioral change

Readings

1. The Behavioural Insight Team. 2018. Behavioural Insight’s Team: Annual Report 2017-2018.
2. [Love Food Hate Waste](#) website
3. Garnett, E. E., Balmford, A., Sandbrook, C., Pilling, M. A., & Marteau, T. M. (2019). Impact of increasing vegetarian availability on meal selection and sales in cafeterias. *Proceedings of the National Academy of Sciences*, 116(42), 20923-20929
4. Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

Discussion Board

1. *Nudge.* What nudge or choice architecture strategies would you use in your action plan? If you do not think these strategies are possible, explain why.
2. *Food waste and plant-rich diet.* Menus of Change is a collaboration between chefs and researchers to promote plant forward diet and Love Food Hate Waste is an initiative (originally from the UK but now in other countries) that promotes food waste reduction. From visiting their websites, describe, compare, and where appropriate critique the behavior/practice change strategies they use.

10/27 (Wednesday)

1. Team Project. Report on progress in implementing plan
2. Network Climate Action Project. Apply choice architecture in your network climate action project

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. Describe how you might apply choice architecture in your network climate action project.

11/1

Knowledge/attitude/behavior gap

Video Lectures

1. Types of knowledge, Marianne Krasny (from EEO course)
2. Attitudes
3. Behaviors & Action (Optional)

Readings

1. Krasny, ME. 2020. Knowledge, Critical Thinking, and Systems Thinking, in *Advancing Environmental Education Practice*. Cornell University Press.
2. Kollmuss, A. and J. Agyeman (2002). "Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior?" *Environmental Education Research* 8(3): 239-260.

Discussion Board

1. *Knowledge*. Given the relatively weak relationship between knowledge and behavior change, what is the role of knowledge in your team project? Your DD action project?
2. *Thinking*. How might you apply critical and systems thinking to your team project and your action project?

11/3 (Wednesday)

Team Project. Report on progress and any changes made

Network Climate Action Project. Report on progress and any changes made

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. *Thinking*. How might you apply critical and systems thinking to your team project and your action project?

11/8 (Monday)

Social influence synthesis

Class discussion: Students argue for behavioral contagion, social mobilization (PANIC), social norms, social marketing, social media (influencer), and choice architecture approaches

Video Lectures: None

Readings

1. Newell, P., F. Dailey and M. Twena (2021). [Changing our Ways: Behaviour change and the climate crisis](#). Cambridge UK, Cambridge Sustainability Commission on Scaling Behaviour Change: 72.
2. Nielsen, K. S., S. Clayton, P. C. Stern, T. Dietz, S. Capstick and L. Whitmarsh (2020). "[How psychology can help limit climate change](#)." *American Psychologist*.

Discussion

1. *Social and psychological approaches to behavior change*. Consider all the approaches for behavior change we have discussed thus far in class. Argue for one approach as being particularly useful and another approach as not useful as you think about influencing family and friends.

11/10 (Wednesday)

Team Project

1. Update your team project in your team folder. Final plan, progress to date in implementing plan, and plans for completing team project before winter break.

Network Climate Action Project

1. Articulate theory of change and evaluation methods.
2. Continue implementing project in network

Discussion board -- Network Climate Action Project.

1. *Update: Did you make any changes to your action plan? If so, please describe.*
2. Articulate theory of change and evaluation methods

11/11 (Thursday) Menus of Change Day at Cornell Dining (Optional)—Enjoy eating plant-forward meal at any Cornell Dining facility (class “field trip”)

11/15 (Monday)

Justice and responsibility

Class Discussion: Applying Young and Zheng to responsibility in your own life

Video Lectures: None

Readings

1. Young, I. M. (2006). "Responsibility and Global Justice: a social connection model." *Social Philosophy and Policy* 23(1): 102-130.
2. McKeown, M. (2018). "Iris Marion Young's "Social Connection Model" of Responsibility: Clarifying the Meaning of Connection." *Journal of Social Philosophy* 49(3): 484-502.
3. Zheng, R. (2018). "What is My Role in Changing the System? A New Model of Responsibility for Structural Injustice." *Ethical Theory and Moral Practice* 21(4): 869-885.
4. Who's to Blame for Climate Change? 2019. [Climate Pledge Collective](#)

Optional Readings for those interested in delving more into responsibility.

5. Sinnott-Armstrong, W. (2005). It's not my fault. *Perspectives on Climate Change: science, economics, politics, ethics*. W. Sinnott-Armstrong and R. B. Howarth. New Milford, Emerald Group: 285-307.
6. Godoy, E. S. (2017). What's the Harm in Climate Change? *Ethics, Policy & Environment* 20(1): 103-117.
7. Fortier, N. (2018). ETMP Discussion of Robin Zheng's "What is My Role in Changing the System? A New Model of Responsibility for Structural Injustice"

Discussion Board

1. *Shared responsibility.* Young uses the example of sweatshop workers to illustrate her social connection model of shared responsibility, stating that all actors from workers to small businesses to multinationals to consumers share responsibility for the bad labor conditions in sweatshops, and that each should take action that makes sense given their power, privilege, interest, and collective ability. Describe how you would apply Young's social connection model to climate change (or a climate change issue like drought and small farmers).
2. *Your and Cornell's responsibility.* Given Young and Zheng's arguments, how would you describe your own responsibility and that of Cornell University for climate change.

11/17 (Wednesday)

Prepare for department seminar 12/14

Team projects

Network climate action projects

11/22 (Monday)

EAT! (Snow, sleet, rain or shine!)

Class Discussion: Plant-rich Thanksgiving—taste testing

11/24 (Wednesday) No Class, Thanksgiving Break**11/29 (Monday)**

Climate Justice

Class Discussion: Thinking back on the Drawdown Project, other readings, and your own projects, how well have we addressed climate and food justice issues?

Video Lecture: None

Reading

1. Revisit: Caney, Simon. "[Climate Justice](#)", The Stanford Encyclopedia of Philosophy (Summer 2020 Edition), Edward N. Zalta (ed.) (reread from earlier in semester)

Discussion Questions: None

12/1 (Wednesday)

Prepare for department seminar 12/14-

Team projects

Network climate action projects

12/6 (Monday)—Last day of class

Class Discussion: Reflecting back on the semester, how has your thinking about individual, corporate, and government responsibility and action changed?

Video Lectures: None

Readings: None

Discussion Questions: None

12/14 (Tuesday, 3:30-4:30) Department Seminar Capstone Course Student Presentation

NO EXAM—Will instead have final presentations on Team and Network Climate Action Projects

Study Week Final Assignment

Final Essay assignment

3 pages DUE December 10

The [Climate Pledge Collective](#) suggests that people should take action at multiple levels to address climate change. Young claims we are all responsible for injustices and should all play a role in addressing them, whereas Zheng claims we should “strive to do our best” and “push the boundaries” in each of our roles (e.g., student). Given what you have learned in this class, please describe briefly the most effective actions that you feel you could take, given your power, privilege, interests, and collective abilities, as a student and in one other role (e.g., intern, sports team player, family member). What might be some

helpful factors and barriers to you carrying out those actions? What actions will you not take and why not?

ALSO: Complete your network climate action project reports by 12/10.