

**Earth Institute Executive Education Program in Conservation & Environmental Sustainability (EICES)**

***The World on Your Plate: Food, Equity & Sustainability***

**Fall 2018**

Instructor: Mia MacDonald

Course ID: ENVB 0408 N / Module 1, 5 sessions

Wednesdays 6:10–8:10 PM

September 5, 12, 19, 26, October 3

Room: Schermerhorn Extension 652

Available via Distance Learning

Email address: [mism67@columbia.edu](mailto:mism67@columbia.edu) / professional email address:  
[macdonald@brightergreen.org](mailto:macdonald@brightergreen.org)

*No grades will be given, but students must attend at least three of the five sessions and complete all assignments to receive course credit. Of course, attendance at all five classes is necessary to master the material and obtain a reference (if needed) from the Center and/or instructor.*

**Course Description**

This course will provide an overview of the multiple and varied intersections among environmental and social factors involved in food production and consumption. The broad challenge and opportunity of sustainability require a multifaceted approach. The course is about policy: its development as well as implementation. It will, however, also explore the roles of public understanding and collective and individual action in informing policies and changing practices. Among the topics that will be covered are the relationships of food and agriculture to climate change, land use change, water use, and biodiversity, as well as human health and well-being. The course will also investigate the ethical questions food systems pose as natural resources come under growing pressure from global warming, rising human populations, and the internationalization of Western consumer lifestyles along with methods of food production and ways of eating.

A focus of the course will be animal agriculture and the effects on prospects for sustainability and equity of rising global consumption and production of meat, dairy and other animal products. This important but often neglected set of issues has recently begun to receive increased attention in U.S. and global policy arenas, public discussions and the media. Animal agriculture in a global context is also a particular area of interest for and expertise of the instructor and the non-profit policy action tank she runs, Brighter Green ([brightergreen.org](http://brightergreen.org)).

The course will be global in outlook, with case and thematic examples drawn from the U.S., other industrialized regions, and the broad swath of the world known as the global South (Africa,

Asia, and Latin America). U.S. food systems, which provide a “model” for much of the world, and debates about food and sustainability in the U.S., will be examined. So will urban agriculture and its role in accelerating sustainable food systems, and the realities of rural, farming communities. Venues and processes for shifting food and agricultural policy in a more sustainable direction will be discussed, including the United Nations Framework Convention on Climate Change (UNFCCC); the sustainable development goals (SDGs); expert commissions and working groups on food, agriculture and climate change/natural resources; and national diet and nutrition guidelines.

Through the course, students will develop knowledge and skills to identify creative, ambitious and practical approaches to fostering more sustainable, equitable and humane food systems. They will also learn about policy processes and entry points. Students also will be encouraged to view their own plates and ideas about food and the environment as both a source of information and a starting point for policy action. Course materials will reflect these as well, drawing from a varied range of sources, perspectives, and types of material. Course readings include scientific papers, policy documents, civil society-produced research, education/advocacy materials, and media reports, along with podcasts and videos.

### **Assignments:**

1. In weeks 1–5, one or two students will be asked to circulate before class an article about food and sustainability that drew their attention and then lead a short discussion about the issues it covers, why it’s of interest/relevance to the course and to them, and the conclusions and/or further questions it led them to.
2. In week 3, students will submit a short personal reflection (150–250 words maximum) on how their thinking about food is evolving through participating in the course, both in 1) the context of prospects for sustainability and; 2) their individual analysis of or relationship to food and agricultural systems they encounter.
3. For the final assignment, due in week 5, students will: 1) write a three-page, double-spaced paper on a food and sustainability issue that most interests them (covered in class or not), and how they would explain its importance to a colleague, a researcher, a journalist, or a policy-maker in a U.S. or international body; or 2) write a short paper (three pages double-spaced maximum) outlining their policy idea and a plan for influencing policy-making in a specific policy arena (or space); or 3) make a short (five-minute) in-class presentation using slides and/or video on written topic 1 or 2. Students completing option 1 or 2 will be asked to give a short summary in class of their paper, but no formal presentation is required.

If students cannot attend class, they should plan to email their assignment before the class session. Please complete the reading for the first class session before the class.

## **WEEK 1. Introduction: Food and Sustainability**

What is the current state of food systems? How did we get here? What are some of the key issues, challenges and opportunities on the table right now for policy development and action? What are various entry points and venues for working on these issues now and in the future?

### Required

Hawkes, Corinna, “We need a food system that works for everyone, and our planet. This is how we can do it,” World Economic Forum, November 22, 2016.

<https://www.weforum.org/agenda/2016/11/we-need-a-food-system-that-works-for-everyone-and-our-planet/>

Bajželj, Bojana, *et al.*, “Importance of Food-demand Management for Climate Mitigation,” *Nature Climate Change*, August 31, 2014.

<https://www.nature.com/nclimate/journal/v4/n10/full/nclimate2353.html>

UN Environment Programme/The Economics of Ecosystems and Biodiversity (TEEB), “Measuring What Matters in Agriculture and Food Systems: A synthesis of the results and recommendations of TEEB for Agriculture and Food’s Scientific and Economic Foundations Report, June 2018, pp. 3-12.

[http://teebweb.org/agrifood/wp-content/uploads/2018/Synthesis\\_report\\_lowres.pdf](http://teebweb.org/agrifood/wp-content/uploads/2018/Synthesis_report_lowres.pdf)

Brighter Green, “Climate Policy Needs to Address the Urgency of Ensuring Sustainable, Equitable, and Climate-Compatible Food and Agriculture Systems.” Talanoa Dialogue submission to the UNFCCC, Bonn, April 2, 2018.

Sustainable Development Goals, United Nations, 2015.

<http://www.undp.org/content/undp/en/home/sustainable-development-goals/>

Chef’s Manifesto [explore manifesto itself and other materials here]

<http://www.sdg2advocacyhub.org/chefmanifesto>

### Additional reading (optional)

UNFCCC Talanoa Dialogue process and other submissions (governmental and non-governmental).

<https://unfccc.int/process-and-meetings/the-paris-agreement/2018-talanoa-dialogue-platform>

De Schutter, Olivier, “Don’t Let Food Be the Problem: Producing too much food is what starves the planet,” *Financial Post*, July/August, 2015.

Key Findings and Executive Summary, *Changing Climate, Changing Diets: Pathways to Lower Meat Consumption*, London: Chatham House, 2015.

<https://www.chathamhouse.org/publication/changing-climate-changing-diets>

Jacobs, Andrew and Matt Richtel, “How Big Business Got Brazil Hooked on Junk Food,” *New York Times*, September 16, 2017. <https://www.nytimes.com/interactive/2017/09/16/health/brazil-obesity-nestle.html>

MacDonald, Mia, and Anthony Froggatt, "What the Paris Agreement Left Out: A Crucial Path for a Lower Emissions Future," *Huffington Post*, January 7, 2016.

[http://www.huffingtonpost.com/mia-macdonald/what-the-paris-agreement-left-out\\_b\\_8897798.html](http://www.huffingtonpost.com/mia-macdonald/what-the-paris-agreement-left-out_b_8897798.html)

## **WEEK 2.: The Global Plate**

What are the linkages between food and agricultural policies in industrialized countries and the changes underway in food systems in other regions? We will examine the realities in big national food and agricultural producing, consuming, and exporting countries, and in countries where eating patterns are changing quickly. We will also take into account the context that, in all regions to varying degrees, the effects of climate change and pressures on natural resources are increasingly evident, and food insecurity and inequities persist.

### Required

Zhou, Wanging, *The Triangle: The Evolution and Future of Industrial Animal Agriculture in the U.S., China and Brazil*, Brighter Green, 2016. <http://brightergreen.org/the-triangle>

Kuo, Lily, "The World Eats Cheap Bacon at the Expense of North Carolina's Rural Poor," *Quartz*, July 14, 2015. <http://qz.com/433750/the-world-eats-cheap-bacon-at-the-expense-of-north-carolinas-rural-poor/>

Maathai, Wangari, "Moving Beyond Subsistence," *The Challenge for Africa*, New York: Pantheon, pp. 11–18.

Cernansky, Rachel, "Kenyans Reacquire an Old Taste: Eating Healthier," *New York Times*, February 23, 2016. [http://opinionator.blogs.nytimes.com/2016/02/23/kenyans-reacquire-an-old-taste-eating-healthier/?\\_r=0](http://opinionator.blogs.nytimes.com/2016/02/23/kenyans-reacquire-an-old-taste-eating-healthier/?_r=0)

Tura, Urgessa, "Ethiopia's Persistent Food Insecurity: What Went Wrong?," *AllAfrica.com*, March 2, 2016. <http://allafrica.com/stories/201603021761.html>

Smith, Georgina, "Paving Africa's way towards a sustainable, profitable food future with women at the lead," *CIAT blog*, October 13, 2017.

<http://blog.ciat.cgiar.org/paving-africas-way-towards-a-sustainable-profitable-food-future-with-women-at-the-lead/>

Podcast: The Food Chain, "I Won't Farm!," *BBC World Service* (27 minutes),

<https://www.bbc.co.uk/programmes/w3csvsc3>

### Additional reading (optional)

Searcey, Dionne and Matt Richtel, "Obesity Was Rising as Ghana Embraced Fast Food. Then Came KFC," *New York Times*, October 2, 2017.

<https://www.nytimes.com/2017/10/02/health/ghana-kfc-obesity.html>

MacDonald, Mia, “Kenya’s Encounter with Large-Scale Production Agriculture,” *Satya*, December 2015.

MacDonald, Mia, and Justine Simon, *Climate, Food Security & Growth: Ethiopia’s Complex Relationship with Livestock*, Brighter Green, 2011. <http://brightergreen.org/ethiopia>

“Declaration of the International Forum for Agroecology,” Nyéléni, Mali, February 27, 2015. <https://viacampesina.org/en/index.php/main-issues-mainmenu-27/sustainable-peasants-agriculture-mainmenu-42/1749-declaration-of-the-international-forum-for-agroecology>

### **WEEK 3. Policy Innovations; Sustainable Diets**

What is a sustainable diet? What role do concepts of “sustainable diets,” national nutrition and diet guidelines, and development policies and priorities have in shaping and reforming food and agriculture systems, food security, the food industry, and the global environment and public health?

#### Required

Bankman, Judy “Chronic Disease, Changing Diets, and Sustainability: The Globalization of Western-style Eating and Its Implications.” Brighter Green, 2017. [http://brightergreen.org/wp-content/uploads/2017/10/brighter\\_green\\_public\\_health\\_paper.pdf](http://brightergreen.org/wp-content/uploads/2017/10/brighter_green_public_health_paper.pdf)

Blackstone, Nicole Tichenor, with Naglaa H El-Abbadi, Margaret S. McCabe, Timothy S. Griffin, Miriam E. Nelson, “Linking sustainability to the healthy eating patterns of the Dietary Guidelines for Americans: a modelling study,” *The Lancet*, Vol. 2., August 2018. [https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196\(18\)30167-0.pdf](https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196(18)30167-0.pdf)

Tuomisto, Hannah L., “Importance of considering environmental sustainability in dietary guidelines,” *The Lancet*, Vol. 2., August 2018. [https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196\(18\)30174-8.pdf](https://www.thelancet.com/pdfs/journals/lanplh/PIIS2542-5196(18)30174-8.pdf)

Nordic Food Policy Lab, Nordic Council of Ministers, *Dreamer’s Guide: an abridged version of the Solutions Menu—A Nordic Guide to Sustainable Food Policy*, 2018.

Dewey, Caitlin, “Four of the world’s largest food companies have a new plan for fixing food and farm policy,” *Washington Post*, July 12, 2018. [https://www.washingtonpost.com/news/wonk/wp/2018/07/12/four-of-the-worlds-largest-food-companies-have-a-new-plan-for-fixing-food-and-farm-policy/?utm\\_term=.ecb88c99a04d](https://www.washingtonpost.com/news/wonk/wp/2018/07/12/four-of-the-worlds-largest-food-companies-have-a-new-plan-for-fixing-food-and-farm-policy/?utm_term=.ecb88c99a04d)

Podcast: The Real Story, “What is Wrong with Eating Meat?,” BBC World Service (53 minutes) <https://www.bbc.co.uk/programmes/w3csvqgg>

#### Additional material (optional)

Nordic Food Policy Lab, Nordic Council of Ministers, “Solutions Menu: A Nordic Guide to Sustainable Food Policy,” 2018, pp. 6–11 and Sustainability chapter, pp. 147–160. <http://norden.diva-portal.org/smash/get/diva2:1214792/FULLTEXT01.pdf>

FAO and FCRN, *Plates, Pyramids, Planet: Developments in National Healthy and Sustainable Dietary Guidelines: A State of Play Assessment*, March 2016. <http://www.fao.org/3/a-i5640e.pdf>

Daniells, Stephen, “Are Brazil’s dietary guidelines changing its food industry?,” Food Navigator, October 11, 2017. <https://www.foodnavigator-latam.com/article/2017/10/11/are-brazil-s-dietary-guidelines-changing-its-food-industry>

*The Chinese Dietary Guidelines* (2016): <http://dg.en.cnsoc.org>

**WEEK 4. Cities and Sustainable, Climate-friendly, and Fair Food Systems:** Urban agriculture is a growing area of interest and action, and more of the world’s cities are seeking to incubate fairer, healthier, less resource-intensive, less wasteful, and lower carbon food systems. Are these efforts key to changing local foodscapes and the global food system? What potential do they have? What can we learn from efforts undertaken at policy and community levels?

#### Required

iPES Food, What Makes Urban Food Policy Happen?, Insights from Five Case Studies (Executive Summary), June 2017. [http://www.ipes-food.org/images/Reports/Cities\\_execsummary.pdf](http://www.ipes-food.org/images/Reports/Cities_execsummary.pdf)

Milan Urban Food Policy Pact, October 15, 2015: <http://www.milanurbanfoodpolicypact.org/wp-content/uploads/2016/06/Milan-Urban-Food-Policy-Pact-EN.pdf>

Linn, Amelia, “Climate-Friendly Diets: How Cities Can Cut Emissions and Improve Public Health,” NYU Guarini Center on Environmental, Energy and Land Use Law, July 2018. <https://guarinicenter.org/wp-content/uploads/2018/07/Linn-Climate-Friendly-Diets-FINAL.pdf>

Guardian Sustainable Business, “Next-gen urban farms: 10 innovative projects from around the world,” *Guardian*, July 2, 2014. <https://www.theguardian.com/sustainable-business/2014/jul/02/next-gen-urban-farms-10-innovative-projects-from-around-the-world>

#### Additional reading/viewing (optional)

Greenpeace, Less Is More Campaign, “Move Your City or University” [explore resources here] <https://lessismore.greenpeace.org/cities/>

Learn more about the campaign and impacts here: <https://lessismore.greenpeace.org/news-and-wins/>

MacDonald, Mia, “New York to Lead on Food and Climate Policy?,” Civil Eats, December 23, 2013. <http://civileats.com/2013/12/23/new-york-to-lead-on-food-and-climate-policy-bill-de-blasio-and-the-foodprint-resolution/#sthash.kbQvRRt8.dpuf>

NYC Foodprint Resolution text (2009):

[http://www.brightergreen.org/files/nyc\\_foodprint\\_resolution.pdf](http://www.brightergreen.org/files/nyc_foodprint_resolution.pdf)

NYC Foodprint Resolution policy and public education documents (2009):

[http://www.brightergreen.org/files/nyc\\_foodprint\\_policy\\_doc.pdf](http://www.brightergreen.org/files/nyc_foodprint_policy_doc.pdf)

[http://www.brightergreen.org/files/nyc\\_foodprint\\_outreach\\_doc.pdf](http://www.brightergreen.org/files/nyc_foodprint_outreach_doc.pdf)

Read materials about the C-40 Food Systems Network initiative:

[http://www.c40.org/networks/food\\_systems](http://www.c40.org/networks/food_systems)

**WEEK 5. Toward the Future: Shock? Or Sustainability and Sanity? Presentations.** Where do we go from here? What is a sustainable, equitable global plate? The final class will tie the course's themes together and focus on current and emerging possibilities for policy development and action. Plus, student presentations.

#### Required

Poore, J. and T. Nemecek, "Reducing food's environmental impacts through producers and consumers," *Science* 360, 987–992 (2018), June 1, 2018.

Declaration of the G20 Meeting of Agriculture Ministers, July 28, 2018, Buenos Aires, Argentina. <http://www.g20.utoronto.ca/2018/2018-07-28-agriculture.html>

iPES, *Unravelling the Food–Health Nexus: Addressing practices, political economy, and power relations to build healthier food systems* (Executive Summary), 2017.

[http://www.ipes-food.org/images/Reports/Health\\_ExecSummary.pdf](http://www.ipes-food.org/images/Reports/Health_ExecSummary.pdf)

Watch 2–3 videos ("EAT Talks") from the EAT Forum, archived here:

<https://eatforum.org/learn-and-discover/>

#### Additional material (optional)

iPES, *Unravelling the Food–Health Nexus: Addressing practices, political economy, and power relations to build healthier food systems* (Full Report), October 2017.

[http://www.ipes-food.org/images/Reports/Health\\_FullReport.pdf](http://www.ipes-food.org/images/Reports/Health_FullReport.pdf)

iPES, *From uniformity to diversity: a paradigm shift from industrial agriculture to diversified agroecological systems*. International Panel of Experts on Sustainable Food systems (Executive Summary), 2016. [http://www.ipes-](http://www.ipes-food.org/images/Reports/UniformityToDiversity_ExecSummary.pdf)

[food.org/images/Reports/UniformityToDiversity\\_ExecSummary.pdf](http://www.ipes-food.org/images/Reports/UniformityToDiversity_ExecSummary.pdf)

Garnett, Tara, et al., *Grazed and confused? Ruminating on cattle, grazing systems, methane, nitrous oxide, the soil carbon sequestration question—and what it all means for greenhouse gas emissions*, Food Climate Research Network, 2017, pp. 117–127.

[https://www.fcrn.org.uk/sites/default/files/project-files/fcrn\\_gnc\\_report.pdf](https://www.fcrn.org.uk/sites/default/files/project-files/fcrn_gnc_report.pdf)

Listen to 2–3 EAT podcasts, here: <https://itunes.apple.com/no/podcast/food-can-fix-it/id1404865286?mt=2&ls=1>