Important information for students interested in taking ESPP 90Y

Please read the Harvard Business School "case" on *Heineken - Brewing a Better World* **before** to coming to the first class. Please also think about the discussion questions from Professor Reinhardt that are included with the reading. You can pick up a hard-copy of the reading from Lorraine Maffeo in the ESPP concentration office or you can download it here. Note: if we have to limit enrollment, we will look favorably on those students who demonstrate that they have done the reading for the first class.

Welcome to ESPP 90Y!

photo: Trevor Keyler

Teaching Staff:

N. Michele Holbrook, Charles Bullard Professor of Forestry, Department of Organismic and Evolutionary Biology.

Office hours: Thursdays 9-10am, 3119 Biolabs, 16 Divinity Ave - or by appointment.

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Robert Paarlberg, Adjunct Professor of Public Policy, Harvard Kennedy School of Government

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Office hours: Tuesday's 1-4 pm in k240, 1737 Cambridge st., the CGIS building

Forest Reinhardt, John D. Black Professor of Business Administration, Harvard Business School

Email: freinhardt@hbs.edu Website: http://www.people.hbs.edu/freinhardt/

Office hours: contact Kate Jenkins kjenkins@hbs.edu and make an appointment, either for office hours at HBS, or right after class ends on Mondays at the HUCE.

Anju Manandhar (teaching fellow), Graduate Student, Department of Organismic and Evolutionary Biology

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Office hours: email to make an appointment.

Course Logistics:

The class meets on Monday afternoons from 2:45 to 5:15 pm in the Harvard University Center for the Environment, located on the 4th floor of the Museum of Comparative Zoology (from Oxford Street, use the leftmost entrance and go up the stairs or elevator to the 4th floor). We will meet in room 440, which is the large conference room adjacent to the main lounge/meeting area at the Center. Each class meeting will consist of two parts with a short break in the middle. Attendance at all sessions is mandatory.

Readings: We will read selected Harvard Business School (HBS) cases focusing on specific firms in the food/agriculture sector, scientific and policy related papers, and chapters from "*Global Agriculture and the American Farmer,*â€ available at the Coop.

Each week students must submit two discussion questions based on the assigned readings (see course site (pages tab) for the weekly reading assignments). Discussion questions are due by 2 pm Sunday and should be submitted via the course site (under the discussions tab). Note: you are not required to submit discussion questions for the first class.

The HBS cases will be handed out in class on the week prior to the discussion of that case. Other readings will be available via the course website. (note: we are still in the processes of updating reading assignments on the webpage).

Note: The reading for week one can be picked up from Lorraine Maffeo in the ESPP concentration office, located in the Harvard University Center for the Environment, or downloaded here.

Written Assignments: Students are required to write two short papers (about 1000 words) during the

term, topics to be set during the second week of class (due dates: Feb 27 and April 16). In addition, students are required to write a significant research paper (about 8000 words), with footnotes and bibliography. Proposals for these papers (about 500 words) are due on March 9. Detailed outlines and lists of sources (about 1500 words) are due on April 9. In class presentations on your paper topic are May 2 (reading period). Final papers are due on May 11.

Grades: Grades will be based on the two short papers (15% each), the research paper proposal (5%), the outline (5%), the final paper (30%), and class participation (30%).

Class Participation: Active participation is an important part of this seminar and it will constitute a significant part of your grade. We suggest that you come to class with a clear idea of what points and perspectives you wish to contribute. We will seek to engage everyone in the discussion, but it is ultimately your responsibility to get in the conversation. If you are finding this difficult -- please ask us for help. We will evaluate course participation for each session. In general, all four of the course instructors will be present and those not leading the class will be tasked with evaluating the insights and engagement of students in the discussion. We will provide timely feedback on how you are doing in terms of class participation and we are always available to discuss how you can improve in this area.

Optional Fieldtrips: We hope to schedule one or more optional field trips to local firms working in the food/agriculture sector during reading period. The photo below is from our 2016 field trip to a local cranberry grower. In 2017 we visited a Hood dairy packaging plant, the UNH organic dairy production barns, and a Pete & Gerry's egg farm. These were all really interesting; we encourage you to attend the field trips.

photo: Cape Cod Cranberry Growers

Syllabus:

January 22: Introduction

Part 1: We will analyze a Harvard Business School case about a firm that uses agricultural commodities to make branded consumer goods.

Part 2: The course faculty will offer overviews of the course from three perspectives: science (Professor Holbrook), public policy (Professor Paarlberg), and business strategy (Professor Reinhardt).

January 29: Historical Trends in Food Production and Consumption

Part 1: Physiological basis of agricultural productivity (Holbrook).

Part 2. Demographic, Industrial, and Dietary Transitions (Paarlberg).

February 5: Water, Land, and Food

Part 1: Land use changes arising from agricultural practices. (Paarlberg).

Part 2: Discussion of HBS case about Blue Sky Water Partners (Reinhardt).

February 12: Agricultural Inputs I

Part 1: Discussion of HBS case about OCP Group, a Morocco phosphate fertilizer firm (Reinhardt).

Part 2: Soils I: Texture, drought, salinity, and erosion (Holbrook).

February 19 (President's day): no class.

Students are encouraged to attend the Global Food+ Symposium on Friday Feb 16 (12:30 â€“ 4:30): https://nutrition.tufts.edu/event/2018-02-16/global-food-2018-symposium. See https://sites.tufts.edu/globalfoodplus2018/program/ for more info.

February 26: Agricultural Inputs 2: organic and alternative approaches

Part 1: Soils II: Fertilizers - organic and synthetic (Holbrook).

Part 2: A discussion of the economics and politics of the organic food industry and its renunciation of â€œsyntheticâ€ fertilizers (Paarlberg).

March 5: Farm Subsidies and Agricultural Markets

Part 1: Discussion of HBS case on CME Corporation; parent of the Chicago Board of Trade and the New York Mercantile Exchange (Reinhardt).

Part 2: Farm subsidies and agricultural markets (Paarlberg).

March 19: Climate Change and Crop Improvement

Part 1: Methods, old and new, for crop improvement - crop breeding and biotechnology (Holbrook).

Part 2: Effects of climate change on plant growth and crop production (Holbrook).

March 26: Climate Data and the Seed Business

Part 1: HBS case on Monsanto "Climate Corporation," a firm that sells data services and weather insurance to farmers (Reinhardt).

Part 2: GMO's -- intellectual property, market power, and environmental concerns (Paarlberg).

April 2: Agricultural Practices

Part 1: HBS case on NatureSweet (Reinhardt).

Part 2: Cropping Systems: cover crops, perennials, rotation, and pest management (Holbrook).

April 9: Animal Protein

Part 1: HBS case on Pete and Gerry's Eggs (Reinhardt).

Part 2: CAFO/animal welfare (Paarlberg).

April 16: Nutrition and Obesity

Part 1: Nutrition and obesity (Paarlberg).

Part 2: HBS case on HEB, a leading food retailer in Texas and Mexico (Reinhardt).

April 23: Energy and Agriculture / Agricultural Development in Africa

Part 1: Biofuels: ethanol from corn or sugar; diesel from soy; electricity from biomass, cellulosic ethanol and algal feedstocks (Holbrook).

Part 2: Agricultural challenges in Africa (Paarlberg).

May 2 (note: this is a Wednesday and class will begin at 2 pm): Reading Period discussion of student projects and course synthesis.