### **Course information**

AGBE 315—Agriculture in a Global Context Meeting Times: Tuesdays, 4–5:30 p.m.

Room: TBD

### **Instructor information**

Dr. Anton Bekkerman (anton.bekkerman@montana.edu)

Dr. Wendy Stock (wstock@montana.edu)

### **Course resources**

Desire2Learn (https://ecat1.montana.edu/)

# **Course description**

A global perspective of production agriculture and agricultural markets is critical. Montana's producers and consumers of the rapidly growing specialty grain (e.g., canola, malting barley, durum, Kamut), pulse, and organic markets face unique opportunities and challenges in producing and marketing their products. As demand for these crops continues to increase nationally and globally, Montana producers are uniquely situated to be major players in these markets. However, identifying the pressing challenges and developing multidisciplinary, research-based solutions to those challenges is critical to ensuring that Montana producers are successful in the short- and long-run.

The Agriculture in a Global Context 2016 program will focus on facilitating student-led undergraduate research projects that (a) identify high-priority challenges in Montana's specialty crops markets by working closely with Montana's agricultural industry leaders, (b) develop high-quality multidisciplinary research that seeks to economically overcome these challenges, and (c) provide tangible deliverables that can immediately be used by industry leaders to cost-effectively identify and invest in industry growth opportunities.

## **Course Learning Outcomes**

Upon completion of this course, students will be able to:

- 1. Better understand the challenges and opportunities that exist in the rapidly expanding specialty crops industry in Montana, the United States, and the world.
- 2. Work with agricultural industry leaders to develop multidisciplinary research that can identify timely and relevant questions about specialty crops markets and provide research-based answers.
- 3. Understand the connections among agricultural industries around the world through an international learning experience.

## Course framework

This course has an experiential learning design in which students will work in groups with industry mentors to identify pressing challenges in the state's and region's specialty crops markets and developing multidisciplinary, research-based solutions to those challenges. Each team will be responsible for developing a research question, research outline, methods, description of deliverables, and timeline to ensure that each team's project is achievable and progress can be tracked throughout the program.

As part of the course, students will have weekly class meetings, during which they will interact with invited speakers who have extensive knowledge and experience in specialty crops production and marketing in Montana, the United States, and the world. Speakers will include university professors specializing in production and marketing, agribusiness leaders and agricultural producers, and extension specialists. In addition to the weekly class meetings, each team will be required to meet as a group at least one other time each week (outside of the classroom) to work on their research, to provide weekly summaries of their research progress and communications with their industry mentor, and to identify challenges that they may be encountering. These reports will be evaluated by each group's faculty mentors to ensure that the research projects are progressing successfully.

At the conclusion of the semester, students will participate in a 10-day international field trip experience in northern Italy and southern/central France. This region is selected for this trip because of its extensive involvement in specialty grain, pulse, and organic crop production and marketing. These regions also have a well-developed supply chain infrastructure, including multinational production and marketing facilities. Students will visit and learn from small- and large-scale farming operations, grain handling facilities, milling and production agribusinesses, multinational specialty grain cooperatives, and Italian and French university and industry research facilities.

## **Course Timeline**

Class meeting	Topics	Materials for class meeting
1/26	Course orientation	Syllabus and course overview discussion
2/2	Research methodology	Introductions to course leaders.
	overview	<b>Wendy Stock:</b> introduction to research methods and expectations.
2/9	Topic 1	Speaker: <b>Dr. Jamie Sherman:</b> introduction and overview of trends in barley and durum wheat breeding, production, and product characteristics.
2/16	Topic 2	Speaker:  Dr. Perry Miller: introduction and overview of trends in pulse breeding, production, and product characteristics.

2/23	Topic 3	<i>Speaker:</i> <b>Dr. Joseph Janzen</b> , overview of marketing issues in the pulse industry.
3/1	Topic 4	Speaker: <b>Jeff VanPevenage</b> , Columbia Grains Regional Manager: pulse marketing in Montana and Europe, where pulse
	Payment #1	markets are headed, and the challenges and opportunities in pulse markets.
		Students submit a \$1,000 initial payment. Make checks payable to: <i>Department of Agricultural Economics &amp; Economics</i>
3/8	Topic 5	Speaker: In-class project work
3/22	Topic 6	Speaker: <b>Bob Quinn</b> : organic production overview and trends in Montana and Europe.
3/29	Topic 7	Speaker: Greg Gilpin: exchange rates and trade.
4/1	Passports due	Copies of current U.S. passport must be submitted.
4/4	Topic 8	Speaker: Mark Black: head of Malteurop's (Great Falls) barley procurement will provide an overview of the malt barley industry and lead the tour of the Great Falls facility
4/12	Topic 9	Speaker: Anton Bekkerman: trip overview and preparation
4/19	International travel discussion	Speaker: Megan Shroyer: Northwest Farm Credit Services, senior vice president of credit services in Montana. Discussion of the financial aspects of the evolving Montana pulse crop industry.
4/26	Student	Student groups will present their research to the class.
	presentations	Presentations will be recorded to be available for viewing by applicable industry group.
	Payment #2	Students submit the remaining balance of their payments. Make checks payable to: <i>Department of Agricultural Economics &amp; Economics</i>

*Itinerary:* 

- May 9: Depart Bozeman
- May 10: *Morning:* Arrive in Milan in the morning; transfer to hotel and settle in. *Afternoon:* Tour of city in the afternoon or free time to explore city.
- **May 11**: *Morning:* Meet with U. Milan ag science faculty *Afternoon:* Visit U. Milan experiment/extension stations and dairy/wheat research farm
- May 12: Morning: To Argenta, Italy: visit first ever Kamut pasta factory in Italy
  Afternoon: To Bologna, Italy: visit Italy's Kamut
  Enterprises headquarters and meet faculty from
  University of Bologna
- May 13: *Morning:* Visit Sima Molina (organic flour mill) *Afternoon:* Return to Milan
- **May 14**: Free day to explore Milan, Italy
- **May 15**: *Morning:* Board train to travel to Lyon, France *Afternoon:* Walking tour of Loyn
- **May 16**: *Morning:* Meet with ISARA-Lyon agricultural faculty *Afternoon:* Student presentations to ISARA faculty
- **May 17**: *Morning:* Visit large organic wheat farm near Lyon *Afternoon:* Visit a mixed organic crops/livestock farm
- May 18: *Morning:* Visit organic research farm and new farmer test farm facility in French "Organic Valley" region *Afternoon:* Visit a conventional corn seed farm operation in southeastern France
- **May 19**: *Morning:* Depart from Lyon to Bozeman.