
An Animal Science Industry Travel Course

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Abstract

The purpose of this course is to expose students to animal production operations, agribusiness, industry leaders throughout various geographical areas of the United States. Through assignments students develop employability skills. The course meets weekly and the 3000-mile trip takes place over the University spring break. Students pay a \$150 fee plus about \$100 for lodging and food expenses on the trip itself. Evaluations indicate benefits of new friendships, knowledge gained that can be applied directly to classroom studies, enhanced job opportunities, broadened interests and networking across all species, a better understanding of agricultural practices, and requirements for success in agricultural employment positions. Overall, there is a great deal of time that goes into a travel course, but the benefits are worth the effort. Faculty need to let students do the bulk of the tasks and reap the majority of the benefits. The key to student growth and development of skills is in the responsibilities they are assigned.

Introduction

More and more agricultural employers expect a national or international perspective as employment criteria. Many curricular changes have emphasized international exposure of students and the study abroad programs (Schweitzer and Baumgardner, 1993; Mason, et al. 1994; King and Marti, 1994). We have long encouraged students to gain practical work experience away from home through internships and found that this has become more of an important selection criteria sought by employers (Bekum, 1993).

At Purdue University, 82% of the undergraduates in the School of Agriculture are residents of Indiana and many would prefer to find employment within the state. Apparent to the faculty is that many of the students preferences about staying close to home came from a lack of awareness of the agricultural industries, attitudes and opportunities beyond the state borders. Thus in 1987, the department determined that a travel course trip should be proposed with the purpose of

exposing students to animal production operations, agribusiness, industry leaders and their philosophies throughout various geographical areas of the United States. We chose to build an entire course around the travel experience, rather than include the trip into another existing course.

More specific objectives include:

- exposure to different aspects of animal agribusiness, industry leaders, and their philosophies
- see production practices different than in Indiana and gain an appreciation of the size and scope of the animal industry
- see other universities, environments, and graduate program opportunities relate materials and experience to classes taken
- meet people with common industry goals as well as develop contacts for internships and job opportunities
- provide experiential learning of skills through the industry contacts, team responsibilities, written assignments, and the class and seminar presentations.

The course has now been conducted seven years and it has been very rewarding for both the students and the faculty involved. We believe that it has broadened our students perceptions of animal agriculture and employment opportunities across the country. Many students have become more motivated to pursue graduate degrees after seeing some of the top university programs first hand. The purpose of this paper is to encourage other faculty to pursue travel courses and to provide enough detail that they will be successful in their efforts.

Course Description

The course includes weekly sessions throughout the spring semester with discussion of trip responsibilities, cultural and geographical characteristics of the region, aspects of agricultural enterprises and markets in the targeted region to be visited. Travel is conducted during the Purdue University spring break (usually early March) and includes visits to approximately 30 farms, universities, and agribusinesses. The class leaves early Saturday morning on a 47-seat Purdue University owned coach bus, travels 2800-3000 miles and returns the following Friday night. Each class visits three or four universities, about 7-10 agribusinesses, and 15 production

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enterprises. There are normally three or four stops each day. Each stop is usually 90 minutes in duration during which time students are introduced to principles, hear an overview of the manager's philosophies, go on a tour, and then conclude with a discussion of their operation and a thank-you presentation. The assigned team leads the de-briefing discussion on the bus for up to 30 minutes while enroute to the next stop.

The class meets weekly after the trip to discuss the experiences and impressions gained and then plan a seminar to formally describe their experiences to faculty, parents, and other students. The students pay \$150 which covers the transportation, faculty involvement, and thank-you souvenirs for the hosts. The ANSC 393 course may be repeated for a maximum of three credits; limited to two credits toward Animal Sciences departmental requirements. Students receive two credits for the first time they take the course and one credit a subsequent time. Many of the social experiences of the trip are similar from year to year, however the destination and types of agricultural enterprises visited change each year.

The course has included the following universities: Auburn, Colorado State, Cornell, Iowa State, Kansas State, Louisiana State, Michigan State, Mississippi State, Oklahoma State, Southern A&M, Texas Tech, Arkansas, Delaware, Florida, Guelph, Kentucky, Maryland, Missouri, Nebraska, Wisconsin, and Virginia Tech.

Example agribusinesses that have hosted this class include: American Breeders Service, Birchwood Genetics, Brookover Feedlot, Dairyman's Inc., Decatur County Feedlot, Delta Pride Catfish, Excel, Harper Bros. Lamb Co., Hormel, IBP, Mid-Am Milk Co-op., Karl Akey Co, Monfort, Monsanto, Pig Improvement Company, Purina Mills, Smith-Cline Beecham, Select Sires, Swine Genetics Inc., Tyson, and Upjohn Corp. Major production units include: MapleLeaf Farms, Monfort, Murphy Family Farm, Gardener Angus, Harvey Lemmon, Martin Jorgenson, David Nichols, Campbell Soup, Pitzers, Carol Rose, Lazy E Ranch, Rocking J Ranch, Creek Plantation, Mastoak Dairy, Hatfield Quality Meats, Gainesway, Iron Springs, Spur Ranch, Lonestar Feedlot, Batson's Catfish Farm, EE Herefords, Randy Owens, Heartland Cattle Co., Olson Dairy, Fair Hill Training Center, and David Landrum Stables. An attempt is made to include operations of various sizes and at least two stops within the same species each year for comparison purposes.

Budget/Costs

The buses are owned by Purdue University and are hired for this trip just as any charter company would be engaged for such services. The transportation department charges by the mile and then the hour whenever the driver is on duty and the bus is not moving. The student fee of \$150 covers the bus and driver expense (including room, meals, and transfer of drivers), expenses of the three faculty which accompany the class, and the souvenirs that are left at each stop. The seminar typically costs the department about \$200 in refresh-

ments plus approximately \$400 for phone and postage needed to correspond with the stops and parents. Total costs not covered by the students is consequently about \$500-700 to the Department.

Student costs are lodging (about \$40 for their share of three nights). Lodging is provided free the three or four nights that we are hosted by a university student group. Students pay for their meals and any entertainment while on the trip. Approximately one-third of the meals are sponsored by tour stops to keep the cost to the students as low as possible.

Student Responsibilities

The principle behind learning in this course is that faculty organize the framework of the trip and then assign students to contact, plan, organize, interpret, analyze, evaluate, and conclude thoughts and impressions in the reports and final seminar. Through assignments and responsibilities, students not only learn technical subject matter but also desirable employee skills so often mentioned by business, i.e., communications, organization, teamwork and leadership (Covey, 1991; and Radhakrishna and Brueing, 1994). It is critical that students be actively involved and accountable for a major part of the responsibilities and learning process in this course. Without this involvement and commitment, students will become passive and gain very few skills. Summarized below are the actual student responsibilities and their descriptions.

Before the trip

Attendance and active participation in discussions is essential each weekly class period (50 min.). This is where teams are assigned to stops and assigned to study different cultural, climatic, agronomic and economic characteristics of the tour region. Students fill out an information form giving their career goals, work experience, courses taken and parents' names and addresses, relevant health information, etc. These forms provide the necessary information to assign each student to teams for approximately three different stops.

Once the teams of three are assigned to their respective stops, they are required to contact their stop for detailed maps/directions, to obtain background information and plan the visit. Directions, maps and information obtained by students is the only way we will find the stop and know much about the visit. This is a critical responsibility and often creates a lot of pressure on students when their contacts do not respond by the deadlines. Each student team must submit a two-three page written introduction and overview of their stop for the notebook, in addition to any brochures, printed material, video tapes, etc. relevant to their stop before the trip.

Each student serves on one team to describe normal production levels and recommended management practices for their species and each student serves on a team to describe an aspect of the tour region (i.e., climate, major transportation, major industry, population centers, major soil types and geography, major crops, markets, etc.).

On the trip

First and foremost, students must represent Purdue University with positive and cooperative behavior, dress appropriately, and respect other's rights and property. They learn the importance of being very punctual, helping the efforts of the whole group and contributing to their different teams efforts.

As a member of each team they introduce their stop on the bus public address system, depart from the bus first and greet the host, introduce the host to the class, lead questions and document details of the stop, take slide pictures for use in seminar, present host with souvenir and lead the thank-you presentation for the group as they depart. Team members also lead debriefing discussions of the stop which often last more than 30 minutes on the bus after each stop. This is where the frank and critical evaluation of the stop are the most educational and revealing. Individual students with strengths in the area of the enterprise do most of the educating in these bus discussions. Students pay for non-university lodging, non-sponsored meals, and incidental costs on the trip. Each lodging group is responsible for checking out and paying for their own hotel room.

After the trip

Within one week of returning to Purdue, each team must send their stop a thank-you letter on behalf of the class and submit a copy with the written report. The written report documents aspects of the stop such as size, labor, marketing niche, economic organization, sustainability, general impressions of their use of technology and general impressions. This report also must have the names of everyone we contacted at the stop and the mailing address, fax and phone numbers. These reports become part of a notebook on the trip and are very valuable resources for both students and faculty.

Each team is responsible for developing slides for their stop and leading the in-class debriefing session in which their stop is compared and contrasted with other stops in the same category. The class selects the moderators and species presenters for the seminar. Each student is responsible for serving on a committee to plan and conduct the seminar. Committees include greeters, display table, slide and visual aids, name tags and seating, refreshments, set-up, clean-up and promotion. The seminar is entirely a student-lead production with the faculty playing a supportive role.

Responsibilities of the Faculty

The team-teaching of this course is essential because of the need to have faculty that are familiar with the wide range of industries to be studied, the amount of planning, and the amount of correspondence required compared to other one-two credit hour courses. The key to success with this course has been the enthusiasm of interested faculty and the strength of the industry liaison available to the instructors.

The faculty meet in early/mid summer to decide which three faculty want to go and which direction the trip will take.

This is rotated geographically each year. Universities that will host the group in the selected region of the United States are identified and contacts are made with university and industry people to locate key enterprises to visit along the selected route. Universities that have student groups interested in providing student lodging are identified. In late September, before pre-registration for the spring semester, the faculty team creates a flyer that includes direction, universities, and key stops to be visited

In October and November the faculty team works to refine the schedule, balance the diversity of stops, check the distances and travel times, and make reservations at motel/hotels when not at universities. A draft schedule is taken to the transportation office to determine feasibility of the day lengths and the distances traveled. Once confirmed, the faculty team writes a letter to each stop with an entire itinerary to confirm involvement and purpose and to solicit lunches, meals, etc. The faculty also plan the class sessions and guest speaker presentations.

At the beginning of the semester, faculty collect information forms with each student's career interests, work experience, courses taken, and home address information. Each student is assigned to three stops according to their career and species interests. Faculty send a letter with the final itinerary to parents/guardians explaining students activities and responsibilities.

Faculty collect detailed maps and background reports from each team for each stop, collect lodging combination requests, arrange parking and departure details, get notebooks of detailed maps to the bus driver, and accompany the students on a well-planned trip. It is vital that the teams understand what is expected of them before, during and after their stops on the trip. The faculty organizes the schedule for debriefing of stops by type of enterprise and distribute this to all teams.

Upon return from the trip, the faculty should send a letter of thank-you to each stop, collect student reports and thank-yous, and supervise the organization of the trip notebook with all reports and souvenirs. The faculty team must make arrangements for evaluation of the trip itself as well as the whole course. A letter of invitation to the seminar must be reviewed by the faculty before it is sent to parents, faculty, and option clubs. The faculty finalize committee assignments for refreshments at the seminar, greeting, moderating, coordinating the slides, speaking, and clean-up after the seminar.

As with any course, the faculty are responsible for writing and administering quizzes, collecting all reports and assignments, assigning grades and reviewing the evaluations of trip and course.

Grading

There was concern expressed by the Faculty about the objectivity of assigning grades in a course like this and that the assignments justified the credit hours awarded. The following scale was adopted.

Attendance at 16 weekly class sessions at 10 pts each	160 points
Three quizzes, each worth 50 points	150 points
Species and region team involvement and presentations	100 points
Stop team discussion on bus/at stop/during debriefing in class	100 points
Written team reports (three) and thank yous	150 points
Support and participation in seminar/committees	50 points
Total Possible	710 points

Letter grades are assigned on a straight scale of: A > 90% (639), B > 80% (568), C > 70% (497), D > 60% (426), F < 60%

History and Results

This annual course has been conducted since 1988, excepting 1991 in which there was a conflict with the National Block & Bridle Convention in Houston. The average enrollment has been 41 students accompanied by either two or three faculty. Totally across the eight course offerings, 284 students have participated in the class with 23 students that repeated the course for a second time and three students that have utilized three of their spring breaks to take ANSC 393. Twenty one students (7.66%) were freshman (all before 1993), 81 (29.6%) were sophomores, 111 (40.51%) were juniors, and 25.91% (71) were seniors.

Initially two faculty members went on the trip and 44 students were possible. With the responsibilities of assisting the driver to the next stop, de-briefing the previous stop, and working with the next team to review the introduction and plans, there was little time left to informally interact with students and play Euchre. A third faculty member with 43 students creates a better ratio of students to faculty and greater interaction with students.

The mix of students has been very diverse with the majority coming from Animal Sciences and Pre-Veterinary Medicine. Because there are only 43 seats for students on the bus, prioritizing of students enrolled in the course has been problematic. Freshman benefit the least from this experience because they don't have the coursework foundation necessary to understand a significant amount of the technology and practices discussed. Experiences during the first two years suggested that enrollment should be restricted to second through fourth year students.

When demand warrants, the first priority is now all juniors, (with the idea that they can still adjust course selection and internship opportunities), followed by seniors in the School of Agriculture, sophomores in the School of Agriculture, all non-Agricultural seniors, and finally all non-Agricultural sophomores. We have learned that the courses that go to the west and southwest from Purdue University are in higher demand than those going east and northeast. We attribute this to the fact that many students have traveled with families to Washington DC and Florida and a significant number of the out-of-state students at Purdue University are from the eastern states. This attitude has hampered our ability to expose the maximum number of students to agricultural pro-

duction, business and policy-making opportunities in the eastern states.

There have been a total of five faculty members participate in this course and the faculty members involved have gained a great deal from the exposure to animal agribusiness and production practices across various regions of the country. It is essential that the same two or three faculty not go on the course forever. An individual faculty member can remain a valuable part of the planning team for extended periods of time, but three consecutive years of travel is realistically the upper limit. Faculty should be invited to volunteer for this course and should not be arbitrarily assigned. Interested and dedicated faculty keep the class dynamic and maximize student experiences and interaction.

Conclusion

Student evaluations of the course have indicated that the primary benefits to the students are: new friendships, knowledge gained that can be applied directly to classroom studies, enhanced job opportunities, broadened interests and networking across all species, a better understanding of agricultural practices and greater appreciation of the requirements for success in agricultural employment positions. Ninety three percent of all students would recommend it to others and 96% stated that their awareness of industry opportunities was increased greatly. Numerous students have accepted graduate stipends to do advanced degrees and obtained employment through contacts gained as part of the 393 course experience.

Faculty benefits for those choosing to be involved have been tremendous. The knowledge gained of technical subjects beyond individual expertise has been very broadening. Contacts with national production and business leaders in our chosen fields has lead to greater networking and even research collaboration. The understanding of issues and concerns with which the students are dealing has allowed us to become much more effective and capable counselors upon completion of this course.

The benefits over costs to the Department have been outstanding in building industry contacts and with other university faculty and researchers. Many students have transferred into Animal Sciences after being exposed to the breadth of opportunities for employment. The wide-ranging travel of the Boilermaker Express coach and the behavior of our students has helped promote our University as a place to study agriculture.

Overall, there is considerable effort and planning that goes into organizing a travel course of this nature, but there are tremendous benefits. The key to student growth and development of skills is in the faculty expectations and responsibilities students are assigned. Faculty need to let students tackle a majority of the tasks and reap most of the benefits. We have used the ANSC 393 course as a way for the faculty to stop at places that they want to see and take the students along for an educational experience.

References

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NACTA '96 Spouse/Youth Working Program

University of Minnesota, Crookston, June 15-18, 1996

Saturday	Spouse Activity	Location	Youth Activity	Location
9:00-12:00	Cheese-making Computer workshop	Hospitality Dowell Hall	Cheese-making Computer workshop	Hospitality Dowell Hall
1:00-2:30	UMC Focus Chancellor Sargeant UTOC Demo/Tour	ARC Auditorium University Teaching Outreach Center	Supervised play UTOC Demo/Tour	UMC Children's Center University Teaching Outreach Center
2:30-4:00	Tea: Mrs. Sargeant	White House		
3:00-5:00	NACTA Opening	ARC Auditorium	AG Olympics	UTOC
4:15-5:00	Tracking migrating osprey via GPS/Internet	ARC Auditorium osprey via GPS/Internet	Tracking migrating	ARC Auditorium
6:30-7:00	New member/ First Timer meeting	Bede Conference Center		
7:00-9:00	Reception (casual)	Bede Ballroom	Pizza/Ice cream reception/movie	Trojan Inn
Sunday				
11:00-12:00	Family brunch	Conference Center	Family brunch	Conference Center
12:45-3:00	Polk Co. Museum Fire Hall Tour	Crookston	Polk Co. Museum Fire Hall Tour	Crookston
3:00-4:30	Floral Design	Owen Hall	Barn Tour	Dairy Barn
5:30-9:00			BBQ Nature hike evening activities	Red River Valley Natural History area - UMC
6:00-9:00	Awards banquet	Brown Dining room		
Monday				
9:30-11:45	Computer exploration	Dowell Hall		
9:45-11:00			ARTCO tour	Thief River Falls
11:00	Leave TRF for Maple Lake or return to Crookston		Leave TRF for Maple Lake or return to Crookston	
12:45	Tours: Wild Rice, High Tech Farming, Minnesota Tree Crops		Fishing, swimming Rydell National Wildlife Refuge	Maple Lake
Tuesday				
9:00-10:00	Sunflower Plant tour "How Do They Make Those Great Sunflower Seeds That Were On My Ice Cream?"	Dahlgren's	Sunflower Plant tour	Dahlgren's

To Register: Contact Harvey Peterson, 13 UTOC-UMC, Crookston, MN 56716, (218)281-8109 or e-mail: nacta@mail.crk.umn.edu. See pages 50 and 51 for more program details.