UNIVERSITY OF ALBERTA
FACULTY OF AGRICULTURAL, LIFE & ENVIRONMENTAL SCIENCES

Summer Program 2020

Faculty of Agricultural, Life and Environmental Sciences University of Alberta Edmonton, Alberta, Canada July – August 2020

Program Introduction:

The Faculty of Agricultural, Life and Environmental Sciences (ALES) at the University of Alberta offers a four-week* summer program for international students wanting to study at a top Canadian university, while improving their English language skills and learning more about Canadian culture and practices.

The summer program includes lectures, field trips, communication skills training, sightseeing activities and social activities. Students have the opportunity to experience campus life at one of Canada's top universities, with some extra time for fun and exploration.

For more information about the ALES Summer Program, please contact Jingyang Gao with any further questions you have and to register (jgao5@ualberta.ca).

Students can choose from one of two packages. Each package consists of two courses. The University of Alberta does not offer credit for these courses, but your home university may choose to grant credit for them.

To complement the in-class learning, the packages offer a variety of field trips. Through hands-on experience, we aim to enhance the students' learning experience and to provide students with the opportunity to develop various skill sets. We emphasize the importance of communication skills and expect that students will have their communication skills substantially improved.

Package A: Science Perspectives on Canadian Agriculture and Natural Resources

Course 1: Introduction to Canadian Agriculture and Natural Resources Sectors

Course 2: Introduction to Forest Ecology and Management in Canada

Package B: Socio-Economics of Canadian Agriculture, Natural Resources and Energy

Socio-Economics is the study of the relationship between social and economic factors in a society. No prior knowledge of social or economic theory is required to take these courses.

Course 1: Introduction to Socio-Economic Issues and Policies in Canadian Natural Resources and Energy

Course 2: Introduction to Socio-Economic Issues and Policies in Canadian Food and Agriculture

Detailed descriptions of the courses can be found in the Appendix.

Program Fee: The cost of package A or B for 2019 is $6010 (Weekend & Weekday meals) or $5870 (Weekday meals only)

What is Included:

- Tuition
- Accommodations
- Meals
- Group transportation to and from the airport
- City tour
- Field trips
- Social activities
- Orientation and farewell events.
- Banff trip

Students are responsible for the cost of their international travel, visa application fees and medical insurance.

Banff Alberta

Banff Trip:

Alberta is known for its beautiful Rocky Mountains. At the end of the program, students will be taking a three-day group trip to the Rocky Mountains to visit Banff National Park. The trip is at an additional cost.

University of Alberta

Why the University of Alberta?

The University of Alberta is one of the top 5 universities in Canada and top 100 in the world! Home to more than 500 graduate programs, 200 undergraduate programs and 450 active student groups. The University of Alberta is globally connected through nearly 400 teaching and research partnerships in 50 countries.

Fast facts:

- Over 38,000 students, including 7,700 international students from 148 countries
- 18 faculties
- 5 campuses

About ALES

- Ranked in the top 100 universities for Agriculture & Forestry, and Environmental Sciences (QS World University Rankings by Subject)
- Degree programs offered in agriculture, forestry, environmental & conservation sciences, animal health, agricultural/food business management, forest business management, and nutrition & food science.
- 1600 undergraduate students and 500 graduate students
- 120 faculty members
- Extensive research and teaching infrastructure
- Annual average of $40 million in external research funding

Some of the reasons to visit Edmonton, Alberta, Canada

- Beautiful long summer days. Over 17 hours of daylight!
- Canada's festival city. Enjoy live music, art, theatre, carnivals, sports and more.
- West Edmonton Mall. North America's largest shopping mall, and tenth largest in the world.
- The city's river valley is one of the largest urban parks in North America.
- Named one of the best summer trips in 2015 by National Geographic.
- The Canadian Rocky Mountains are only a four-hour drive away.

Four-week Summer Program Sample Schedule 2020

July 16 to August 16, 2020

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
				July 16	July 17	July 18	July 19
9:00 to 12:00					Orientation Campus tour	West Edmonton Mall trip	Free Time
13:00 to 16:00				Arrival Welcome dinner	Grocery tour		
	July 20	July 21	July 22	July 23	July 24	July 25	July 26
9:00 to 12:00	Intro to Canadian Education System	Introduction to the Canadian Natural Resources & Energy Sector	Introduction to Canadian Forestry	Forestry Fire	Water & Wetlands	K-day	Broomball
13:00 to 16:00	The U of A library system and how to conduct literature search/where to find information	Field trip: NRCan Devon research centre and Leduc #1	Campus Tree Walk	Fire Lab	Water Lab		
	July 27	July 28	July 29	July 30	July 31	August 1	August 2
9:00 to 12:00	Forest/Plant Ecology	Introduction to Canadian Agriculture	Natural Resource Economics (Externalities and Public Goods)	Intro. to Canadian Agriculture II (Animal and Crop Production)	Communication Skills (Oral & Poster presentation)	Curling	Fort Edmonton Park
13:00 to 16:00	Field trip: Plants and Ecology in the River Valley	Field trip: St. Albert Research Station	Lab Experiments	Field trip: Ruzicka Sunrise Farm	Field trip: Goats Walk		
	August 3	August 4	August 5	August 6	August 7	August 8	August 9
9:00 to 12:00	Wildlife Conversation Issues	Field trip: Breton Plots (Environmental Soil Science)	Protected Areas and Recreation	Land Reclamation & Remediation	An Introduction to Research Methodology I	Banff trip	Banff trip
13:00 to 16:00	Field trip: Devon Botanic Garden		Field trip: Elk Island National Park	Field trip: Edmonton Waste Management Centre	Farewell Event		
	August 10	August 11	August 12	August 13	August 14	August 15	August 16
9:00 to 12:00	HERITAGE DAY (STATUTORY HOLIDAY) NO CLASS	Field trip: Alberta Pacific Forest Industries Inc.	Introduction to Agroforestry Guest: Noel St Jean	Student Presentation	Student Presentations	Free time	Departure
13:00 to 16:00			Field trip: Agroforestry & Woodlot Extension Society	Student Presentations	Writing Lab – Feedback on Resume & Cover letter (for job and graduate school application)		

Appendix: Course Descriptions

Package A: Environmental Science Perspectives on Canadian Agriculture and Natural Resources

Course 1: Introduction to Canadian Agriculture and Natural Resources Sectors

This course offers an overview of Canadian agriculture and natural resources (forestry and energy) from an environmental sciences perspective. The course begins with an introduction to the major crops grown in Alberta and Canada, and examines how crop production is managed. This is followed by an introduction to food production systems. Forestry, as a very important component of the natural resources sector, is then discussed. Students are provided with examples of competing uses of forest resources, e.g., the need for wildlife conservation versus use for timber extraction. In the last part of the course, students are introduced to the energy sector, with an overview of the sector and a focus on environmental issues related to the extraction of energy from the oil sands, e.g., the need to reclaim the disturbed land.

To support learning outcomes, the lectures are supplemented with several field trips, including trips to Alberta Pacific Forest Industries, the Edmonton Waste Management Centre, the St Albert Research farm, and the Agri-Food Discovery Place, among others.

The ultimate goal of this course is to provide students a basic understanding of the unique Canadian agriculture and natural resources sectors, the opportunities and the challenges Albertans face, and the contribution of those sectors to the global community.

Course 2: Introduction to Forest Ecology and Management in Canada

This course provides students with an overview of key topics in forest ecology and management. The course begins with an introduction to some of the basic concepts in forest/plant ecology and how those concepts apply to Canadian forest management. This is followed by a discussion of wildland fire, a very important ecological agent in boreal forests. The students are then immersed in the science of the management of wetlands, an important part of the boreal ecosystem. The course continues with coverage of other key aspects of forest ecology: the soil and its relationship with plant growth, and forests and global change. This course also offers training in research methodology and communication skills. Students have the opportunity to practice their English writing and public speaking skills.

To complement the in-class learning, the course will offer a variety of field trips, including a trip to the river valley to study plant ecology, a trip to the Devon Botanic Garden, and a trip to visit Elk Island National Park or a trip to discuss urban forestry issues. The course also includes several laboratories to provide students with hands-on experience.

The ultimate goal of this course is to provide students a basic understanding of the ecology of the Canadian boreal forest and the unique challenges and opportunities of managing this vast landscape within a diversity of ecological and economic values. Further, students will gain an understanding of the importance of the Canadian boreal forest to the global community.

Package B: Socio-Economics of Canadian Agriculture, Natural Resources and Energy

Course 1: Introduction to Socio-Economic Issues and Policies in Canadian Natural Resources and Energy

This course offers an overview of socio-economic aspects of the management of a number of different types of natural resources in Canada. The course begins with an introduction to Canadian political systems and the rationale behind public involvement in the management of natural resources. Students are then provided with illustrations of how socio-economic reasoning and principles can help make informed decisions in the management of land, forest, wildlife, wetlands and other resources. Current issues such as development of the green energy sector and the management of wild lands for industrial development and as protected areas are discussed.

To support learning outcomes, the lectures are combined with a variety of field trips. In 2017, we offered field trips to Alberta Pacific Forest Industries, Elk Island National Park, Edmonton Waste Management Centre, Net-Zero show homes, and other places.

The ultimate goal of this course is to enable students to recognize some of the basic socio- economic phenomena that play a key role in the management of natural resources in Canada.

Course 2: Introduction to Socio-Economic Issues and Policies in Canadian Food and Agriculture

This course offers an overview of the Agriculture and Food Sector in Canada. Students are first provided with an introduction to the role of agriculture and food production and trade in the Canadian economy. Some of the major socio-economic issues and policies in Canadian agricultural and food sector are then discussed through a number of lectures on cooperatives, land-use, consumer trends, and other topics. Current issues such as development of urban agriculture and small food business management in Canada are also discussed in this course. This course also offers training in research methodology and communication skills. Students have the opportunity to practice their English writing and public speaking skills.

To complement the in-class learning, the lectures are combined with a variety of field trips. In 2017, we offered field trips to University of Alberta's St. Albert Research Farm, an Alberta grain farm, community gardens, urban farms, and other places.

The ultimate goal of this course is to enable students to recognize some of the major trends, policies, and other basic socio-economic phenomena that play a key role in today's Canadian Agriculture and Food Sector.

Talk to Jingyang Gao (jgao5@ualberta.ca) should you have any further questions.