

#### **ACKNOWLEDGEMENT**

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəÿəm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

### **COURSE INFORMATION**

Course Title	Course Code Number	Days and Time	Credit Value
Agricultural and Resource Policy Analysis - Policy and Project Evaluation	FRE 505	Tuesday, Thursday 12:30- 2:00pm on Zoom	1.5

### **DESCRIPTION**

This course introduces students to the use of two common evaluation tools for government policies and projects, the Policy Analysis Matrix (PAM) and Cost-Benefit Analysis (CBA). It also introduces students more briefly to the use of Domestic Resource Cost (DRC) and its calculation. The PAM and DRC are focused on policies and CBA on investment projects. Both involve distinguishing between private and social (or economic) profitability, and both involve data collection at the micro (farm or project) level. Substantial attention is given to understanding factor markets and related institutions to enable quality data collection. Case studies are used. In early lectures, the topic of agricultural productivity measurement is also introduced.

### **PREREQUISITES**

FRE 502: Food Market Analysis or,

FRE 501: Commodity Markets and Price Analysis

### **CONTACTS**

Course Instructor	Contact Details	Office Location	Office Hours
Rick Barichello	(604) 822-3473	MCML 339	Tuesday 11:30-12:15 Zoom (use Canvas to pre-
	rick.barichello@ubc.ca		book)
			Other times by appointment

# COURSE INSTRUCTOR BIOGRAPHICAL STATEMENT

Rick grew up on a dairy farm in the Fraser Valley near Vancouver, after which he completed his B.Sc. (Agr) at the University of British Columbia and his Ph.D. in Economics at the University of Chicago. He has taught at UBC since then, but has also worked for the Harvard Institute for International Development in Indonesia from 1986 to 1988, and has worked in most Southeast Asian countries since that time. His research interests include agricultural and trade policy, regulated markets, dairy industry economics, quota markets, international development, and rural labour markets. He teaches courses in Food Market Analysis and Policy Analysis in the MFRE program.

Specialization: Food security, Poverty alleviation, Regulated agricultural markets and farm quotas



# OTHER INSTRUCTIONAL STAFF

Juan Fercovic will be your resource for course materials and for grading-related issues.

# **COURSE STRUCTURE**

Students enrolled in this course will engage in numerous activities: attending lectures, completing problems sets, quizzes and exams; preparing policy briefs, and engaging in in-class discussion.

12 lectures of 1.5 hours, twice a week for 6 weeks (Jan 11, 13, 18, 20, 25, 27, Feb 1, 3, 8, 10, 15, 17).

# SCHEDULE OF TOPICS

Lecture 1,	Overall Introduction; Intro to PAM, including Field Research Methods			
2	E. Monke and S.R. Pearson 1989, "The Policy Analysis Matrix for Agricultural			
	Development", First Edition. Cornell: Cornell University Press.			
Lecture 3	Factor Market Estimation: Land			
Lecture 3/4	Factor Market Cost Estimation: Labour			
Lecture 4	Factor Market Cost Estimation: Capital, Credit			
	+ PAM Case Study, Empirical Application, calculating PAMs			
	Yao, Shujie, 1997, "Rice Production in Thailand Seen Through a Policy Analysis			
	Matrix", Food Policy, Vol. 22, No.6, pp. 547-560			
Lecture 5	Case Study of effects on agriculture of currency change: Indonesian Rice, Soybeans, Dairy, and Cashew Nuts, before and after 70% devaluation.			
	Richard Barichello, Scott Pearson, and Mona Selim, "The Impact of the Indonesian Macroeconomic Crisis on Agricultural Profitabilities", December 1998. 28 pages.      The Agricultural Profitabilities of the Indonesian Macroeconomic Crisis on Agricultural Profitabilities."			
	<ul> <li>Barichello, Richard R., 1000. "Impact of the Asian Financial Crisis on Trade Flows:         A Focus on Indonesia and Agriculture," Proceedings of the 5<sup>th</sup> Agricultural and     </li> </ul>			
	Food Policy systems Information Workshop, 1999, Policy Harmonization and Adjustment in the North American Agricultural and Food Industry 16797, Farm			
	Foundation, Agricultural and Food Policy Systems Information Workshops. DOI: 10.22004/ag.econ.16797 (provides background)			
Lecture 6	An Introduction to Project Evaluation (Benefit Cost Analysis)			
Lecture 0	Jenkins G. P, C. Y. K Kuo and A.C. Harberger, "Cost-Benefit Analysis for Investment			
	Decisions. (2011 Manuscript)			
Lecture 7	Cases in Cost Benefit Analysis			
	Glenn P. Jenkins and George Kuo, 1998. Buenos Aires – Colonia Bridge Project.			
	Financial and Economic Appraisal. International Institute for Advance Studies,			
	Inc.			
Lecture 8	Domestic Resource Cost: nature of concept, how to measure			
	Intro to Case Study on Community Pastures in BC (including homework)			
Lecture 9	Project Evaluation Case			
	Community Pastures in BC (cont; Solutions)			
	Ethiopia Honey CBA (Intro)			
Lecture 10	Project Evaluation Case.			
	Ethiopian Honey CBA, cont.			
	Case Study: Ethiopia Dairy/beef/coffee CBA Model, intro			
L				



Lecture 11	Project Evaluation Case.	
	Case Study: Vietnamese Electricity Investments	
Lecture 12	Project Evaluation showing complexity of multiple power sources: Evaluating Pump	
	Storage Investment in mix with solar/wind power	

### LEARNING OUTCOMES

- 1. Master the concepts in the PAM and CBA.
- 2. Understand the type of data required for each.
- 3. Identify key elements of local factor markets in order to collect appropriate data.
- 4. Apply the PAM and CBA in real life settings with actual data, including agriculture and resource industry settings.
- 5. Handle common difficulties or barriers to obtaining high quality data, and develop ways to overcome them.

#### LEARNING ACTIVITIES

In addition to attending lectures and reading assigned materials, students will engage in the following types of graded activities: In-class participation, in-class quizzes, problem sets, Policy Brief and Final Exam.

### LEARNING MATERIALS

Available at Canvas: <a href="http://www.canvas.ubc.ca">http://www.canvas.ubc.ca</a>. You are required to regularly login to your course page for FRE 505. Your syllabus, course-lecture slides, additional material, announcements, assignments, and grades will be available there.

#### **ASSESSMENT & DATES**

Your grade shall be determined as follows

Requirements	Date	Percent of Grade
Problem sets (2): 7%, 12%	(1) Jan20; (2) Jan 27	19 %
Class Quizzes (2) @ 7%	(1) due Feb 2; (2) due Feb 9	14 %
Final Exam	February 18 (TBD)	45 %
Policy Brief (1)	February 18	10 %
Participation	Throughout course	12%

# **In-class Quizzes and Problem Sets**

The quizzes and problem sets will allow you to use the PAM (policy analysis matrix) and CBA (cost benefit analysis) with real world information. The quizzes focus on the PAM, the problem sets on CBA. These applications will help everyone understand the types of data that are required and to learn key features



of local factor markets that can guide one in collecting the appropriate data. Total 19 marks for 2 problem sets (CBA), 14 marks for 2 class quizzes (PAM). Details above.

### **Policy Brief**

The policy brief will be a 1-2 page summary of the results of PAM and CBA analyses/problem sets or policy options of your choice. They will provide practice in communicating results of your analyses to help policy makers understand your analysis and then choose better policies. Total 10 marks.

### **Final Exam**

The final exam will be comprehensive (it shall cover all material taught in class), and will last two hours. It will take the form of short answer and longer answer questions. This could include calculations, written explanations, and the manipulation of supply and demand models. Exams must be taken at the scheduled times unless there is a time conflict with another exam, serious illness, or an emergency. You must validate with documentation the reason(s) why you will be unable to take any exam. Total 45 marks.

### Participation

Marks awarded for comments and questions asked during class, and for questions asked in emails out of class. Maximum 2 marks awarded for questions pertaining to each lecture. Total 12 marks.

### **UNIVERSITY POLICIES**

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions.

Details of the policies and how to access support are available on the UBC Senate website.

# Academic Accommodation for Students

The University accommodates students with disabilities who have registered with the Disability Resource Centre. The University also accommodates students whose religious obligations conflict with attendance or scheduled tests or exams. Other absences for varsity athletics, family obligations or other similar commitments are not part of University policy and students should not assume that they would be accommodated. Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with Access & Diversity. A&D will determine that student's eligibility for accommodations in accordance with Policy 73: Academic Accommodation for Students with Disabilities. Your instructors do not determine academic accommodations, however, your instructor may consult with Access and Diversity should the accommodations affect the essential learning outcomes of a course. If you have a pressing issue those conflicts with an exam, you should discuss this with your instructor as soon as possible. Refer to the UBC Calendar for details of 'academic concession'.



### **Academic Integrity**

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity.

At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work.

Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

# For International Students - Issue of controversial topics in online learning

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0</a> for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom).

Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: <a href="http://academic.ubc.ca/supportresources/freedom-expression">http://academic.ubc.ca/supportresources/freedom-expression</a>

COVID-19 concerns and Exam Writing: The Final exam is expected to be written in-person. If COVID-19 concerns prevent the exam from being written in person, either for an individual student or for the entire class, then Plan "C" will be used. An individual who wants to opt out of the in-person exam because of concerns over COVID-19 must have written approval from the Director of the MFRE program.

Plan C with 3 or fewer students not writing the in-person midterm or final exam: Each student who chooses to not write the in-person exam will have an individual Zoom oral exam, which covers the same material as the in-class written version of the exam.

Plan C with more than 3 students not writing the in-person midterm or final exam: Each student who has written approval from the MFRE Director will write an essay-based at-home version of the exam.

Plan C with in-person exam not allowed by UBC: All students will write an at-home exam with personalized questions.



# **COPYRIGHT**

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the Course Instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline.

I permit students to record my classes. Where possible, I will also post recordings of the lectures via Canvas. However, technologies sometime fail, so existence of a videorecording is not guaranteed. Posting or distributing recordings of FRE 502 lectures by anyone other than the instructor or TA is strictly prohibited.

Version: January 10, 2022