COLLEGE OF BUSINESS AND ECONOMICS

UNIVERSITY of RWANDA

COURSE TITLE : … QUANTITATIVE TRADE POLICY ANALYSIS ……………………..

COURSE DESCRIPTION FORM:

October, 2023

1. **Course Title: Quantitative Trade Policy Analysis**

2. **Credits: 10**

3. **First year of presentation: 2024   Administering -CBE**

4. **Core course (Yes or No):   Yes**
5. **Elective course (Yes or No): No**
6. **Pre-requisite course(s):   Foundational courses**
7. **Co-requisite course(s):**
8. **Prohibited combinations:**

(See definitions in the General Academic Regulations)

9. **Allocation of study and teaching hours** (See Notes of Guidance)

Total participants Hours:	Participants Hours
Lectures	50
Seminars/Workshops	10
Structured Exercises	10
Set Reading etc.	10
Self-directed study	10
Assignments-Preparation& writing	3
Summative Assessment	7
Total	**100**

10. Brief description of aims and content

The objective of the course is to introduce the participant to key tools of analysis in common use among trade economists. This will cover hands on exercises with some partial equilibrium models and various trade indicators. The participants will have the chance to extract data from UN COMTRADE and the UNCTAD/World Bank WITS/TRAINS databases and to compute the indicators. They will also learn how to interpret the results of their work.

11. Graduate Attributes & Learning Outcomes
Knowledge and Understanding
Having successfully completed this course, participants should be able to demonstrate knowledge and understanding of:

1. Quantitative trade policy analysis,
2. The tools for basic trade analysis,
3. International trade analysis and policy issues with a focus on LDCs,
4. The role and nature of the various trade analysis policy tools,
5. The analysis on key issues such bilateral, regional, and multilateral international trade negotiations, agreements, institutions, and related processes.

Cognitive/Intellectual skills/Application of Knowledge

Having successfully completed this course participants should be able to:

6. Reflect independently and critically on a number of arguments concerning international trade policy analysis,
7. Practice innovation and creativity in trade policy design, administration, and management, manage diversity in various domestic and international trade institutions, recognize trends in international trade analysis tools and to effectively engage in its development,
8. Analyse international trade, trade policy, trade law and trade negotiations on a bilateral and multilateral level.

Communication/ICT/Numeracy/Analytic Techniques/Practical Skills/Information Literacy

Having successfully completed this course, participants should be able to:

9. Communicate and explain, in writing and speeches, their analyses and conclusions clearly and concisely for colleagues, politicians and a wider audience,
10. Pursue practical work in trade policy and government organisations dealing with trade issues,
11. Individually write, present, and defend a thesis at the relevant master level.

General Transferable Skills
- *Personal, Intellectual, and Professional Autonomy*

Having successfully completed the course, participants should be able to:

12. Demonstrate adaptability in addressing changing global trade dynamics and their impact on service sectors,
13. Pursue further studies in the subject and should be able to search for and evaluate information with a high degree of independence and integrity.

12. Indicative Content

- Overview: objectives, materials, websites; role of trade. Experiences with trade reforms
- Introduction to concepts: trade, tariffs, non-tariff measures
- Introductions to basic statistical & other indicators, includes averages, SD/CV, indices, growth rates, weighting world Development Indicators
- Review of Excel, inc. Pivot Table, Data Analysis Pack, Regression, Correlation (for use in hands-on sessions)
- Uses of trade, tariff data: Partial equilibrium modelling – SMART
- Uses of trade, tariff, NTM data: Intro to trade modelling (Inc. gravity models)
- Trade Facilitation analysis

- Revealed Comparative Advantage Intra-industry trade, Trade openness, trade composition, growth orientation & poverty.
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- Regional Trade Agreements and Trade Facilitation: Using WITS/SMART model to evaluate RTAs.
- Data types used in econometric analysis Considerations in choosing a trade policy analysis tool.
- The partial correlation coefficient
- Introduction to econometric analysis
- The intuition of panel data and cross sectional regression
- Introductions to matrix algebra (matrix manipulation
- The concept of the circular flow of income

13. Learning and Teaching Strategy

- Lectures
- Case studies and simulations to practically apply negotiation strategies.
- Group discussions and workshops for interactive learning.
- Guest lectures by experts in international trade and diplomacy.
- Multimedia resources and online forums for supplemental learning.

14. Assessment Pattern

Component	Weighting (%)	Graduate Attributes &Learning outcomes to be covered
In-course assessment:	50	1-8
Final assessment:	50	1-13

15. Strategy for feedback and participant support during course

- Timely and constructive feedback from the course tutor
- Peer-to-peer learning and support

16. Indicative Resources (recent ones)
Core texts:

- Peng Liu (2023). Quantitative Trading Strategies Using Python: Technical Analysis, Statistical Testing, and Machine Learning 1st Edition, Apress, ISBN-10 : 1484296745
- Dollar, David and Aart Kraay (2002) Trade, Growth, and Poverty, Development Research Group, The World Bank

- Grubel, H. G. and Lloyd, P. J. (1975) Intra-Industry Trade, London, Macmillan, Chapters 1 and 2 only. Harberger, Arnold C. (2004) The Real Exchange Rate: Issues of Concept And Measurement, Paper Prepared for a Conference In Honor Of Michael Mussa, University of California, Los Angeles.

- IMF (2005) Review of the IMF's Trade Restrictiveness Index, IMF Policy Development and Review Department.

- Kandiero, Tonia and Margaret Chitiga (2003) Trade Openness and Foreign Direct Investment in Africa, Department of Economics, University of Pretoria Laird, S. (2010), Trade and Development - Notes, mimeo . (February).

- Laird, S. (2005), Modelling changes in Trade Policy, mimeo. Laird, S. and A.

- Yeats (1986) The UNCTAD Trade Policy Simulation Model: A Note On The Methodology, Data And Uses, UNCTAD Working paper No. 19 – see especially the description of the model in the annex.

- Mikic, Mia (2005) Commonly Used Trade Indicators : A Note, ARTNeT Capacity Building Workshop on Trade Research 22-25 March, 2005.

- Ng'ang'a, Wanjiru (2006) The "New" East African Community: Effects on Trade, Welfare and Productive Activities in East Africa.

- Rodríguez, Francisco and Dani Rodrik (2000) Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence, University of Maryland, Harvard University. (Read the introduction and conclusions).