1. Course description

National accounting and index numbers. Topics include: the measurement of output and income, capital and depreciation, productivity, employment and unemployment, poverty and inequality, household production, pollution and resource depletion, and the balance of payments; price indexes; standard-of-living indexes; and international comparisons.

The main purpose of the course is to provide a more in depth and detailed knowledge about the basic economic measurement concepts that are typically presented in the Principles of Macroeconomics and Intermediate Macroeconomics textbooks.

Measurement economics is a fascinating and growing field, although you may not know this right now, you will by the end of the semester (at least it is hoped). Many well-respected economists have made a name for themselves by focussing their research on ways of improving how economic activity and economic performance are measured. Here are but a few: Zvi Grilliches, Dale Jorgenson, Erwin Diewert, Robert Gordon, Jack, E. Triplett, and Sydney N. Afriat are but a few of those economists who have devoted their professional and academic careers exploring how best to measure the economy and who also appreciate the importance of doing it well. Without properly constructed economic indicators, all the economic models and all the policy tools will simply not work.

Emphasis during the course will be on Canadian economic statistics. CANSIM is by far the best source for consulting and accessing these data. For this reason, we will discuss CANSIM and its workings at the beginning of the course.

2. Required textbook
There is no required textbook for this class. Instead a series of recommended articles and book chapters to read will be provided for each section of the course. This information will be posted on the website.
3. Lecture Topics

1. General introduction to measurement economics

2. Price indices and the cost-of-living (12 - 18 hours)
   a. Basic index number theory
   b. The theory of the cost-of-living
   c. The consumer price index
      i. Review from of first principles
      ii. Exploring the Canadian CPI and others
      iii. The ABCs of compiling the CPI
   d. Other price indices (excluding implicit price indexes)
      i. Industrial product price indices
      ii. New House Price Index
      iii. Input price indices
      iv. Others
   e. Challenges and solutions facing index number compilers: The five biases of the CPI and what can be done about them.
      i. Quality bias
      ii. Substitution bias (Upper level)
      iii. Substitution bias (Lower level)
      iv. Outlet substitution bias
      v. New goods bias
      vi. Can there be any others?

3. The national accounts: Gross domestic product and productivity (12 - 15 hours)
   a. Exploring “current price” GDP and its components
      i. Expenditure approach
      ii. Incomes approach
   b. Measuring “constant” price GDP
   c. The implicit price indices of GDP
   d. Input-output tables in theory and practice
      i. Current price
      ii. Constant price
   e. Measuring productivity
   f. The balance of payments

4. Measuring employment and unemployment (3 hours)

5. Purchasing Power Parity Statistics (3 hours)

6. Topics of recent research in measurement economics (if time permits)
4. Evaluation

Assignments (2) 30 %
Term paper 25 %
Final Exam 45 %

This % grade will then be converted into the alphabetical grade system using the standard equivalences, as outlined in Section 2.3 of the Academic Regulations of the University in the 2007-2008 Undergraduate Calendar.

Failure to write the final examination will result in a grade of ABS. In order to write a deferred examination, students must contact the Registrar’s Office. (For further details, see Section 2.5 of the Academic Regulations of the University in the 2006-2007 Undergraduate Calendar.) In the event that a student writes a deferred examination, the deferred examination will carry the same weight as the Final Examination in determining the course grade.

Please note that: “Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by an instructor may be subject to revision. No grades are final until they have been approved by the Dean.”

5. Term paper
Students will be required to submit a term paper one week before the last class. There will a choice of topics that will be provided two weeks into the semester. The paper should be about 10-15 pages long. Additional details about the term paper will be forthcoming.

6. Other information
Accommodation Students with disabilities needing academic accommodation are required to contact a coordinator at the Paul Menton Centre to complete the necessary letters of accommodation. To ensure that sufficient time is available to make arrangements, the student must then make an appointment to discuss their needs with the instructor at least two weeks prior to any necessary accommodation.

Students requiring academic accommodation due to a religious obligation should also feel free to come and discuss their concerns with the instructor.

Finally, students who are pregnant or who become pregnant should feel free to come and discuss their concerns with the instructor. They are also strongly encouraged to contact Equity Services to obtain the necessary letters of accommodation as soon as possible.