COURSE OUTLINE

THE UNIVERSITY OF THE WEST INDIES
ST. AUGUSTINE
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF ECONOMICS

SEMESTER 1
Year 2015-2016

COURSE OUTLINE

COURSE TITLE: ECON 6003
LEVEL: GRADUATE
SEMESTER: 1
NO. OF CREDIT: 3
PRE-REQUISITE:

COURSE DESCRIPTION/RATIONALE

ECON6003 consists of two modules, the aim of which is to provide students with the theoretical, practical, and technical foundations for undertaking survey-based data-driven research that addresses social and economic problems. The course seeks to impart an appreciation for a seamless process in the conduct of economic research, from the inception and data gathering design through to econometric modelling and estimation. The focus of module 1 is on survey research. Module 2 is based on microeconomics.

COURSE CONTENT

MODULE 1: SURVEY RESEARCH AND SURVEY SAMPLING

LECTURER: Ms. Linda Hewitt
Email: hewittlinda38@gmail.com
Objectives

1. To acquaint students with the theoretical foundations, methods and procedures of the survey practice such that they develop competencies in the use of these as tools for understanding economic and social phenomena, through research.

2. To distinguish between various types of survey methods and designs. Also, distinguishing between experimental and non-experimental approaches that seek to investigate problems of an economic and social nature that may also be linked to other fields and disciplines.

3. To understand the importance of data and ways by which they may be derived, used and managed in the pursuit of research, employing a problem-based and solution oriented approach.

4. To develop competencies in the use of robust analytical methods in working with data from social and economic surveys as well as other types of related auxiliary datasets.

5. To develop an appreciation for and engage skills in the application of computational methods and tools for the generation and manipulation of data and interpretation of results.

6. To gain an understanding of finite and super-populations and the sampling method and processes by which segments are derived for study, estimation and measurement of their attributes.

7. To provide some hands-on exposure to actual survey situations that aim to address problems in the local context.

GENERAL COURSE OUTLINE

Session 1: Overview of the survey research method, focusing on: its underlying theory; quantitative and qualitative approach; design-based and model-based dimensions and inference from the sample survey about the finite population. Principles of the design-based method and utility of the modelling approach will be covered with examples.

Session 2: Distinction between various types of survey methods and designs including experimental and non-experimental approaches, which may be used to investigate problems of an economic and social nature that may also be linked to other fields and disciplines. Focus on methods from and economic perspective and translating survey procedures to the socio-economic context.

Session 3: The importance and attributes of data, their sources, and principal collection methods. Analytical tools.

Session 4: Function and use of sampling in its various dimensions and its application in a selected number of contexts.
Session 5: Methods for the analysis of sample surveys and time-series data.

Session 6-9: Lecture Review and Discussion regarding research project assignment requirements.

Session Details

Session (1) will focus on types of survey research methods and their associated designs. Distinction will be made between design-based and model-based approaches, given that modelling has increasingly become an integral part of the research tradition, serving to extend boundaries beyond conventional domains and into areas which earlier posed extreme challenges. The session will seek to awaken sensitivity to statistical thinking and reasoning about economic and social phenomena, making reference to theories regarding causal inference and to the objective/subjective challenges that are posed by the nature of social and economic phenomena. The availability of computer technology and a wide array of software packages have now rendered survey research well beyond the exploratory domain into confirmatory and predictive outcomes. In the session, several concrete examples of the survey methods will be discussed and reference to and explanation of actual datasets that are available for further study will be covered. Example will be: selected types of survey conducted by the Central Statistical Offices, locally and within the region as well as some notable international surveys. It will be shown how a selected number of social and economic problems have been approached using survey research, utilizing the various types of designs.

Session (2) will detail various types of survey research methods across many subject matter domains, but principally those pertaining to the economic and social context. Examples of types of surveys are: household sample survey; survey of business establishment; telephone and web surveys. Reference will be made to other sources of data including those that constitute administrative records, economic time series and longitudinal studies, national economic and environmental accounts. Survey designs and questionnaire items for: the Household Budgetary Survey; the Survey of Business Establishments and the Survey of Living Conditions and their uses will be examined. Ethical issues regarding data collection, interpretation, dissemination and conversion to policy instrument will be covered in the session. We will examine several basic questionnaire designs as these pertain to economic and social investigation as well as multidimensional designs incorporating different modules as in the case of the population and housing census and surveys for poverty determination.

Session (3) will focus on the importance of economic and household surveys that provide valuable information about economic and social phenomena. The matter of data quality, principles for the collection of data and their desirable attributes will be covered in the session.
Types of data, their mode of collection and particular use of the data for computational purposes, for example, various types of economic indexes such as: the Consumer Price Index (CPI), the Producers Price Index (PPI) and the Price Parity Index will be discussed and demonstrated.

Session (4) will focus on sampling methods and their application in a variety of contexts. Seeing that it is not always affordable or feasible to undertake total coverage of an entire population, as frequently as one would wish to do, the sample provides a representation of a part of the population that is selected by means of sample surveys. We will examine various types of sampling procedures (probability, simple random, one, two and multiple phase sampling, cluster and stratified sampling), as well as consider cost and give consideration to optimal designs in the contexts in which these are applied. Also, problems posed by very well areas and the absence of sampling frames will be considered. Since a sample is a representative part of a finite population, estimations have to be carried out as well as computations have to be undertaken, before one can draw inference from the results that have be obtained. Thus estimation procedures and computational methods as applied to sample data will also be covered during this session.

Session (5) will be concerned with methods for analysis of survey and time-series data. Conventional types of measures including ordinal, nominal, interval/ratio scales; types of measurement models used for observed and unobserved (latent) phenomena will be discussed. We will examine various sources of data, generated from surveys as well as those used in the compilation of national accounts, production and consumption behaviours and from agriculture censuses and surveys. These will be examined in terms of analytical methods that are being used in working with such data and the use to which the results are generally put. The aim will primarily be to gain an understanding and interpretation of social and economic phenomena in a problem-based and policy oriented context.

Session (6) will be devoted to a general review of the work that has been covered in previous sessions and to translate these into practice that will be demonstrated in the assignments to be undertaken as part of the course requirements. The specific topics that will be the subject of the assignments will of course be decided well in advance during earlier sessions, such that research work can begin in a timely manner towards completion of the projects by the finishing dates required.

**Recommended Texts and Journals**

Abdulah, Norma (1986), Designing Social Surveys in the Caribbean, Institute of Social and Economic Research, The University of the West Indies, St. Augustine, Trinidad.


Survey Methodology – A Journal of Statistics Canada, Ottawa


Treatment of Data from Sample Surveys


Online References

Statistical Journals from IOS Press

www.iospress.com and www.booksonline.com

Journal of Economic and Social Measurement-ISSN: 1875-8932 (online)
Risk and Decision Analysis-ISSN 1571-4128 (online)

CRC Press Taylor and Francis Group, (online) at www.crcpress.com

Bell, (2011), Economic Time Series
Cunningham, (2011), Experimental Designs
Leekley, (2010), Applied Statistics for Business and Economics
Myers, (2010), Research Design and Statistical Analysis
Panter, (2011), Handbook of Ethics in Quantitative Methodology

Cambridge University Press – www.cambridge.org

Frees, Longitudinal and Panel Data
Couper, Mick Designing Effective Web Surveys
Coleman, Statistical Practice in Business and Industry
Fuller, Wayne, (2009), Measurement Error Models
Fuller, Wayne, (2009), Sample Statistics
Groves, (2009), 2nd (ed.), Survey Methodology
Hahn, (2009), The Role of Statistics in Business and Industry

John Wiley and Sons, Inc. www.wiley.com

Aday, (2006), Designing and Conducting Health Surveys: A comprehensive guide (3rd) (ed.)
Bethlehem Handbook of Web Surveys
Biemer, Measurement Errors in Surveys
Biemer, Introduction to Survey Quality
Lepkowski, (2007), Advances in Telephone Survey Methodology
Lynn, Peter (2009), Methodology of Longitudinal Surveys
MODULE 2: MICROECONOMETRIC MODELS AND METHODS
Lecturer: Kevin Williams, Ph.D.

Email: Kevin.Williams@sta.uwi.edu
Tel: 662-2002, ext. 82696

Objectives

This module will provide graduate students with a sound foundation in the application of advance statistical methods to problems in microeconomics. As such, it will build on students’ knowledge of probability and distribution theory and basic econometrics. Students are expected to have some basic competence with some econometric/statistical software packages such as Eviews, SPSS or TSP.

Recommended Texts


Syllabus:

Week 1: Review
1. Probability and distribution theory
2. Basic Econometric Theory
   Greene, Chap. 3, 4, 6 or any good Introductory Statistics/Econometric text

Week 2: Models with Discrete Dependent Variables
1. Introduction: Discrete Choice Models
2. Estimation and Inference in Binary Choice Models
3. Multiple Choice Models
   Greene Chap. 19; Maddala Chap. 2

Week 3: Limited Dependent Variables Models
1. Introduction
2. Truncated Regression Models
3. Censored Regression Models
4. Sample Selection
Week 4: Estimation of Demand and Production Function

1. Demand Systems – Function forms and Estimation
2. Production Functions – Functional forms and Estimation
3. Flexible functional forms


ASSESSMENT
Coursework // Final Exam: 25% // 75%

Overall assessment of the course will be split between the 2 modules.

Coursework assessment for module 1 will be on the basis on in-class group presentations worth 15% of the overall course assessment. Group shall consist of a maximum of three persons, though in exceptional cases, individuals can present subject to the approval of the lecturer. All members of the group are awarded the score obtained by the group.

The coursework for module 2 will account for 10% of the overall course assessment and will take the form of in-class group presentations on each topic.

The final exam will be 3 hours and usually consists of 4 questions from both modules.
ADDITIONAL INFORMATION

University Policy on Cheating/Plagiarism

Students are reminded of the University’s Regulation for Graduate Diplomas and Degrees No. 85 which states:

85. Cheating is any attempt to benefit oneself or another by deceit or fraud. Plagiarism is a form of cheating. Plagiarism is the unauthorized and unacknowledged use of another person’s intellectual efforts, ideas and creations under one’s own name howsoever recorded, including whether formally published or in manuscript or in typescript or other printed or electronically presented form. Plagiarism includes taking passages, ideas or structures from another work or author without attribution of such source(s), using the conventions for attributions or citing used in this University. Since any piece of work submitted by a student must be that student’s own work, all forms of cheating, including plagiarism, are forbidden.

86. (a) If any candidate is suspected of plagiarism in a thesis, research paper, project report or coursework assignment, the circumstances shall be reported in writing to the Campus Registrar. The Campus Registrar shall refer the matter to the Board for Graduate Studies and Research. If the Chair so decides, the Board shall invite the candidate for an interview and shall conduct an investigation. If the candidate fails to attend the interview, and does not offer a satisfactory excuse, the Board may hear the case in the candidate’s absence. If the candidate is found guilty of plagiarism, the Board for Graduate Studies and Research shall fail the candidate and may, subject to the candidate’s right of appeal to Senate, exclude him or her from all further examinations of the University.

Grading System

<table>
<thead>
<tr>
<th>Grade</th>
<th>Marks %</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>70-100%</td>
</tr>
<tr>
<td>B+</td>
<td>60-69%</td>
</tr>
<tr>
<td>B</td>
<td>50-59</td>
</tr>
<tr>
<td>F</td>
<td>0-49%</td>
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</tbody>
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Department of Economics Activities

1. Post-National Budget Forum 2015. The Department will provide details on venue and time