LIST OF FASS GRADUATE-LEVEL METHODOLOGY MODULES

<u>Asian Studies Division</u>

SN6102 SOUTH ASIAN RESEARCH METHODOLOGIES II
Prerequisites: NIL
Preclusions: NIL
This module aims at further enhancing the understanding of the most important research methodologies available in the multidisciplinary field of South Asian Studies. The material on different disciplinary methods (covering, e.g. historical, economic, geographical, sociological, anthropological, or philological approaches) will be presented in the form of theoretical descriptions and relevant case-studies. Student will be expected to develop a knowledge of different approaches, and they will make an in-depth study of the methodologies most relevant to their own field of research.

<u>Social Sciences Division</u>

PL5221 ANALYSIS OF PSYCHOLOGICAL DATA USING GLM
Prerequisites: PL2101Y/PL2131 and PL2102Y/PL2132 or consent of Instructor
Preclusions: PL5102/PL6102
This module addresses the use of the general linear for the analysis of psychological data including multiple regression and various forms of analysis of variance. Among the topics that may be covered are correlation and multiple regressions, randomized groups analysis of variance, repeated measures analysis of variance, and mixed models. Emphasis will be placed on the development of skills through hands-on data analysis and interpretation.

PL5222 MULTIVARIATE STATISTICS IN PSYCHOLOGY
Prerequisites: PL2101Y/PL2131 and PL2102Y/PL2132 or consent of Instructor
Preclusions: PL4204
This module introduces students to the use of multivariate methods for the analysis of psychological data. Included among the methods to be covered may be canonical correlation, discriminant function analysis, multivariate analysis of variance, exploratory and confirmatory factor analysis, and structural equation modeling. Emphasis will be placed on the development of skills for multivariate data analysis through hands-on analysis and interpretation of datasets.

PL5225 STRUCTURAL EQUATION MODELING
Prerequisites: PL2101Y/PL2131, PL2102Y/PL2132 and PL5221, or consent of instructor.
Preclusions: NIL
This module with introduce the ideas of structural equation modeling and its relationship to other current statistical models. Specifically, regression analysis, path analysis, confirmatory factor analysis will be formulated within the general framework of structural equation modeling. Advanced topics, such as ordinal data analysis, missing data, multiple-group analysis and latent growth models, will also be covered. After the course, students are expected to know how to conduct the analysis and interpret the results themselves.

PS5111 RESEARCH DESIGN IN POLITICAL SCIENCE
Prerequisites: NIL
Preclusions PS5101, PS6101
This module is an introduction to some of the research methods used in the empirical study of politics and public policy. The objective is to familiarize students with (1) concepts in research design, and (2) practices in analytical methods. Topics covered include the logic of empirical research, sampling methods, descriptive statistics, probability distributions, statistical estimation and inference, and hypothesis testing in group comparisons and regression analysis. Besides regular homework assignments, there will also be a mid-term test, a project, and a final examination.

PS5602 INTRODUCTION TO QUANTITATIVE METHODS
Prerequisites: NIL
Preclusions: NIL
This module covers basic inferential statistics and its application to the systematic study of politics. Topics covered will include descriptive statistics, sampling and probability, simple and multiple regression, interpretation of regression coefficients, regression diagnostics, visualisation of data, and computation of quantities of substantive interest. The focus is on the statistical underpinnings of the ordinary least square regression model and on developing practical data analysis skills.

PS5603 INTRODUCTION TO QUALITATIVE METHODS
Prerequisites: NIL
Preclusions: NIL
This module is an introduction to qualitative methods in political science. After a review of the main competing epistemological approaches we concentrate on the most prevalent qualitative method in political science: the comparative case-study. We then turn to interpretivism, ethnography, and discourse analysis, and their respective applications in political science.

PS6601 ADVANCED QUANTITATIVE METHODS
Prerequisites: This module is open only to graduate students who have completed PS5111 and PS5602 or equivalent modules. Admission and enrolment are subject to the Department's approval.
Preclusions: NIL
This module covers regression analysis beyond the linear regression model. It emphasizes applications of advanced methods to the analysis of political data rather than mathematical derivations and proofs. Topics covered include a review of linear models, an introduction to maximum likelihood estimation, and various types of discrete choice, event count, truncation and sample selection, and event history analysis.

PS6602 GAME THEORY FOR POLITICAL SCIENCE
Prerequisites: NIL
Preclusions: NIL
Introduces students to the rudiments of game theory within political science. Provides all students with the ability to solve simple games. Students evaluate "applied theory" articles in the major journals. Readings draw from basic texts on game theoretic modeling and applied articles in various subfields of political science.

SC5101 GRADUATE RESEARCH METHODS
Prerequisites: NIL
Preclusions SC6101
This module is designed as an intermediate level of research methods in Sociology. The module covers the following key areas (a) theorising and conceptualization, (b) measurement (c) sampling approaches (d) quantitative research methods (including survey research, nonreactive research, and experimental research); (e) qualitative research methods (including interviewing and observational techniques); (f) qualitative analysis (grounded theory); (g) quantitative analysis.

SC5102 QUANTITATIVE DATA ANALYSIS
Prerequisites: NIL
Preclusions: SC6101
This module provides a systematic exposition of general linear models in social science research. Topics include relative frequencies, probability distribution, model specification, estimation, hypothesis testing, and remedies for violations of statistical assumptions. The main emphasis is on the hands-on application of statistical techniques to social research. Research articles in sociology are used to illustrate the application of these models and techniques. Extensions to nonlinear models and panel data analysis are introduced in the latter part of the module. The course aims to help students to strengthen their understanding of statistical concepts and modelling techniques, and enrich their capacity to interpret statistical findings.

SC5103 QUALITATIVE DATA ANALYSIS
Prerequisites: NIL
Preclusions: NIL
Increasingly, more qualitative research work is being under-taken in its own right rather than as preliminary research for subsequent quantitative surveys. This explains the broadening of the range of qualitative research techniques. In addition to dealing with the traditional fieldwork and participant observation methods, the module will examine a number of qualitative approaches. These include techniques of analyzing data generated by laypersons (as in life-documents: diaries, journals, travelogues) communications materials, material artifacts, and visual information. This course is open to postgraduate students with an interest in qualitative research methods.