Quantitative Research Methods Comprehensive Exam

READING LIST

UNIVERSITY OF TORONTO,

DEPARTMENT OF SOCIOLOGY

Last update: April 2014

Area’s Standing Committee, 2014-15: Brent Berry (chair), Bob Andersen, Blair Wheaton

Other faculty in the area (alphabetical order): David Brownfield, Eric Fong, John Kervin, Scott Schieman, Markus Schafer, Geoffrey Wodtke

REQUIRED READINGS

Total number of reading units (excluding supplemental): 145 units

The reading list includes required readings and supplementary readings. Supplementary readings include references to works that will facilitate further study of a particular topic. Supplementary sections also include related work by faculty in the Department of Sociology at the University of Toronto. Students must read all 140 required reading units plus 10 supplementary reading units selected from any two topics, for a total of 150 reading units. Although there are some exceptions, units typically determined as follows:

- 1 large book > 100 pages = 5 reading units
- Small books and parts of larger books = 2-3 reading units, depending on amount of pages assigned
- 1 journal article or book chapter = 1 reading unit

MODULES

1. Background Readings (15 units)
2. Generalized Linear Models and Related Methods (30 units)
3. Loglinear Models, Latent Class Models and Related Methods (15 units)
4. Causal Models, Graphical Chains, and Structural Equations (25 units)
5. Multilevel Models and Contextual Effects (15 units)
6. Methods for Longitudinal Data (25 units)
7. Inference and Data Issues (20 units)
8. Software Considerations (Supplementary)
1. **Background Readings (15 units)**


Tukey, John W. 1977. *Exploratory Data Analysis.* Addison-Wesley. (5)

---

**Supplemental Readings:**


2. Generalized Linear Models and Related Methods (30 units)

2(a). Linear and Generalized Linear Models (16 units)


2(b). Interpretation and Presentation of Statistical Models (3 units)


2(c). Nonparametric Regression (11 units)


**Supplementary Readings**


### 3. Loglinear Models, Latent Class Models and Related Methods (15 units)


**Supplemental Readings**


4. Causal Models, Graphical Chains, and Structural Equations (20 units)

4(a). Causal Models (12 units)


4(b). Structural Equations with Latent Variables (13 units)


**Supplementary Readings**


Spirtes, Peter; Richardson, Thomas; Meek, Christopher; Scheines, Richard; Glymour, Clark. 1998. Using Path Diagrams as a Structural Equation Modeling Tool, Sociological Methods and Research, 27(2): 182-225.


5. Multilevel Models and Contextual Effects (15 units)


Supplemental Readings


6. Methods for Longitudinal Data (25 units)


Supplemental Readings


7. Inference and Data Issues (20 units)

7(a) Causal Inference (11 units)


7(b) Sampling and Design Effects (5 units)


7(c) Inference and Model Selection (4 units)


7(d) Other Issues with Inference (5 units)


**Supplemental Readings**


Marini, Margaret Mooney; Singer, Burton, “Causality in the Social Sciences”. Sociological Methodology, 1988, 18, 347-409


8. **Software Considerations (Supplementary)**


