WS 399-4: Numeracy, gender and cultures.

Marilyn MacDonald
marilynm@sfu.ca
Office: AQ 5105A
(604) 291-5688

Numeracy, like literacy, is a term which has much larger implications than any one definition would seem to capture. So, for example, the Concise Oxford Dictionary (1990) entry reads simply, “acquainted with the basic principles of mathematics”, while for Statistics Canada, numerate behaviour is considered to involve “managing a situation or solving a problem in a real context by responding to information about mathematical ideas that is represented in a range of ways and requires activation of a range of enabling knowledge, behaviours, and processes” (Gal, et al., 1999).

To consider these concepts as merely knowing one’s numbers and letters – understanding the basics of mathematics and of reading and writing – fails to address the cultural contexts within which particular skills and knowledges are determined to be foundational, and particular practitioners considered privileged. In this course, we will use an examination of the social construction of numeracy in Canada in the late 1900s and early 2000s as a vehicle through which to introduce students to the structure of deductive and inductive argument, descriptive and inferential treatments of data, probability and systems analysis.

By the end of this course, students should be familiar with the introductory concepts and methods of argument and statistical analysis (examples indicated in bold print in the outline of lecture topics), as well as some of the critical issues related to a social constructivist analysis of numeracy, and will be expected to demonstrate their understanding of these concepts and methods in a number of different assignments and contexts.

**Required readings**

**Assignments and grading structure**
- 40% - Block quizzes (2 at 20% each)
- 20% - Portfolio (2 assignments at 10% each)
- 20% - Case History (2,000 to 2,200 words)
- 10% - Dictionary/workbook
- 10% - Journal (2 exercises at 5% each)

Prerequisites: 30 credit hours.

The Department of Women’s Studies encourages clarity of thought and expression and good writing. Students will be evaluated on these skills in all courses given by the Department.