

# Liberal Studies Program

## Learning Outcomes and Writing Expectations

### QUANTITATIVE REASONING

Approved by the Liberal Studies Council, Spring 2006

The purpose of the Quantitative Reasoning requirement in the Liberal Studies Program at DePaul is to help students to become confident, critical, and capable users of quantitative information of all kinds. Quantitative Reasoning provides a foundation in quantitative skills for students for their other Liberal Studies courses, for their disciplinary courses at DePaul, for their careers, and for their personal lives.

#### Learning Outcomes

Students will be able to:

1. Use proportional reasoning and percent change to analyze data in context.
2. Make appropriate and effective graphs to communicate and visualize quantitative information.
3. Critique graphs and charts in the media.
4. Recognize disaggregation as a factor in interpreting data.
5. Use and interpret linear and exponential models.
6. Make algebraic calculations within a spreadsheet using cell addresses and formulas and use statistical, logical, and financial functions.
7. Critically assess the sources, importance and factual accuracy of quantitative information.
8. Make effective quantitative analyses in written form with supporting graphs and/or tables.

## **Writing Expectations:**

The Quantitative Reasoning courses are strongly committed to developing students' writing skills. The effective use of quantitative information requires excellent written communication skills, and writing and quantitative analysis are inextricably linked. Furthermore, as part of the Liberal Studies Program, the QR courses provide students the unique opportunity to develop skills in writing analytical papers that include numbers, tables, and graphs. The minimal expectations for writing in a section of an QR course are:

1. Five written activities each of which has a final product in the form of a Word document with five to ten short paragraph responses (each 2 pages on average).
2. Five out of class assignments with approximately 10 short paragraph responses (4 pages on average).
3. An 8-page written report analyzing data related to a public policy issue.