

## QUANTITATIVE LITERACY RUBRIC

<b>6</b>	In addition to demonstrating the quantitative reasoning skills from level 5, evidence of the ability to analyze the results of independent research and to integrate these results with pre-existing studies and data. The meaning of statistical significance and a comprehensive understanding of causality and correlation is displayed.
<b>5</b>	<p><b>Portfolio evidence of demonstrates <i>one or both of</i>:</b></p> <p><u>Mathematical reasoning</u> - ability to critically evaluate quantitative information <i>and</i> use detailed calculation to solve problems and draw conclusions involving quantitative information.</p> <p><u>Statistical reasoning</u> - ability to make appropriate use of inferential statistics (e.g., correlation, t-test, chi-square, regression) and draw appropriate conclusions regarding statistical significance.</p>
<b>4</b>	<p><b>Portfolio demonstrates evidence of <i>one or both of</i>:</b></p> <p><u>Mathematical reasoning</u> - ability to critically evaluate quantitative information; good use of estimation skills.</p> <p><u>Statistical reasoning</u> - ability to apply descriptive statistics (mean, median, mode, frequency, standard deviation) to the analysis of quantitative information; assignments in the portfolio may contain well-designed graphs and charts that are integrated with data analysis.</p>
<b>3</b>	<p><b>Portfolio demonstrates evidence of <i>one or both of</i>:</b></p> <p><u>Mathematical reasoning</u> - ability to describe and interpret quantitative information.</p> <p><u>Statistical reasoning</u> - ability to interpret descriptive statistics (mean, median, mode, frequency, standard deviation); assignments in the portfolio may contain well-labeled and appropriate graphs and charts that are largely used for data display.</p>
<b>2</b>	<p><b>Portfolio demonstrates evidence of <i>one or both of</i>:</b></p> <p><u>Mathematical reasoning</u> - ability to refer to or reproduce basic quantitative information, perhaps by simply citing some numerical "facts".</p> <p><u>Statistical reasoning</u> - ability to refer to or reproduce descriptive statistics (mean, median, mode, frequency, standard deviation); assignments in the portfolio may display data using incomplete or poorly-designed graphs and charts.</p>
<b>1</b>	Portfolio demonstrates no evidence of an ability to refer to or evaluate mathematical or statistical information, including no knowledge of basic descriptive statistics.