

Quantitative Literacy

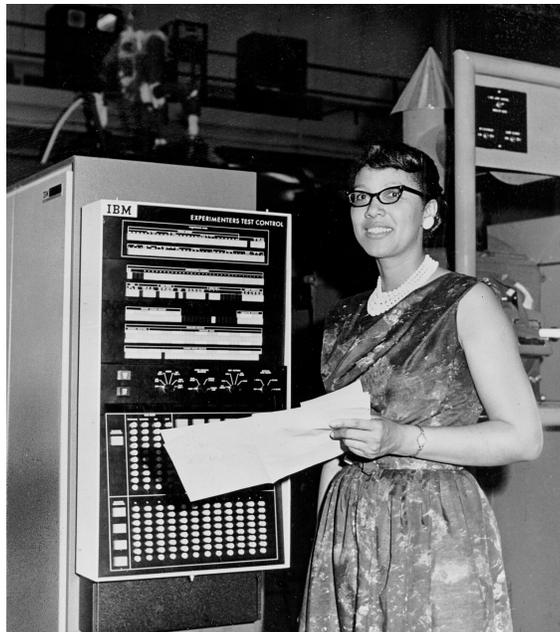
Salt Lake Community College | General Education

Quantitative Literacy (QL) at SLCC Includes:

- Quantitative Reasoning
- Intro to Statistics
- College Algebra
- Trigonometry
- Pre-calculus
- College Algebra for Business
- Calculus
- Algebraic Reasoning for Elementary Teachers

Why a QL Requirement?

Organizations such as the Association of American Colleges and Universities and large employers in the United States have long called for college graduates to possess quantitative literacy. Quantitative literacy is fundamental to your personal life (think about mortgages and car loans, investments, sports statistics, and planning your retirement) and to your life as a citizen in a democracy.



Melba Roy, mathematician on Echo satellite project, 1964. Public domain. NASA.

Quantitative Literacy

The College Entrance Examination Board defined **quantitative literacy** as “**five different dimensions of numeracy**: *practical*, for immediate use in the routine tasks of life; *civic*, to understand major public policy issues; *professional*, to provide skills necessary for employment; *recreational*, to appreciate and understand games, sports, and lotteries; and *cultural*, as part of the tapestry of civilization.” Salt Lake Community College (SLCC) emphasizes the importance of quantitative literacy by having a general education program requirement to take a three, four or five-credit QL-designated Math course and also by establishing quantitative literacy as a general education learning outcome that is woven through its general education courses. Thus, quantitative literacy is a primary responsibility of the Math department and it is also reinforced in other general education courses.

What Do You Think?

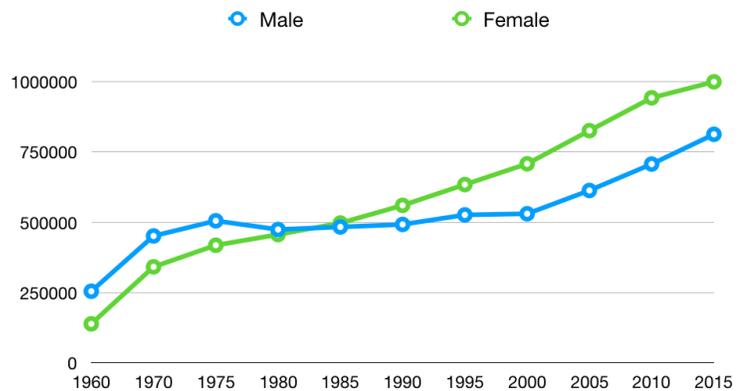
1. Look at the graph on the lower right of this page. Defend or argue against the following statement: “The graph represents one of the most consequential social shifts in modern American history.” What other data would shed light on this social shift?
2. How would quantitative literacy help you in your daily life and in your career? Provide specific examples.
3. Can people draw different conclusions from one set of data? Why or why not? Can you provide an example of a data set that can or cannot be subject to multiple interpretations?
4. What connections can you draw between what you are learning (or have learned) in Math courses with what you are learning or doing in other general education courses.
5. Find a news article about a social or political issue in which the author uses quantitative data. Bring it to class and discuss how the author assumes quantitative literacy on the part of the reader.

When we speak of quantitative literacy, we are simultaneously referring to the Math preparation for your specific career choice and the ability to understand and use mathematics in everyday life. Both are important.

SLCC has optimized its Math course offerings to match your major and career destination. For example, students pursuing Science, Technology, Engineering, and Mathematics (STEM) majors need to take MATH 1050 (College Algebra), MATH 1060 (Trigonometry) and MATH 1210 (Calculus), because they are required for a Bachelor’s degree in those fields. But different Math courses are required or recommended for other majors. Check the college catalog and talk with an advisor to ensure that you are taking the right Math sequence.

Aside from preparing you for your chosen major, SLCC is also concerned that basic quantitative literacy is reinforced throughout its general education curriculum. We want you to be knowledgeable consumers and citizens, able to differentiate between appropriate and inappropriate uses of data. It is vitally important that you have a strong number sense and the ability to interpret data in a variety of forms. We also want you to be able to engage in problem-solving with quantitative data, applying the best methods to arrive at well-grounded solutions.

U. S. Bachelor’s Degrees Earned
Each Year by Sex, 1970-2015



Data from the National Center for Educational Statistics