

QUANTITATIVE LITERACY (QL)

QL-022 Quantitative Literacy in Modern World (0 credits)

Quantitative Literacy in the Modern World focuses on the mathematical and algebraic methods needed to describe, analyze, and then respond to our world. Students will work with concept models including percents, ratios, formulas, variables, linear equations, and graphs set within the context of contemporary issues. The course will strengthen students' ability to read about, write about, and question health, societal, and economic issues. They will do this through solving application based problems, understanding the use of symbols, and applying various mathematical techniques needed to effectively use and manipulate quantitative information.

Prerequisite(s): Additional information Summer 2018: no class July 4

QL-110 Applying Mathematical Thinking (3 credits)

The student develops her ability to use mathematics through the exploration of applications using numerical information. These applications, which use whole numbers, fractions, decimals, percents, signed numbers, powers, roots, ratios, and proportions, enable her to better understand, describe, and analyze her world.

Prerequisite(s): Other information Fall 2018: this class is for AAS students only

QL-120 Applying Algebraic Thinking (3 credits)

The student integrates problem-solving strategies with her development of techniques for solving linear equations, inequalities, and systems of equations. She uses applications based on current data to highlight the power of algebra as a tool to compare and analyze meaningful information.

Prerequisite(s): QL-110 completed.

QL-120L Quantative Literacy Lab (1 credit)

QL-122 Quantitative Literacy in Modern World (4 credits)

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Prerequisite(s): Additional information Summer 2018: no class July 4

QL-123 Modeling Algebraic Relationships (1 credit)

In Modeling Algebraic Relationships, algebraic solving skills are used to determine relationships within data and to analyze these relationships. Techniques are developed intuitively by building on previous algebraic skills. The data and the algebraic relationships that represent the data have a geometric nature. This geometric nature is explored through experimentation with graphs.

Prerequisite(s): QL-120 completed.

QL-156 Mathematical Connections (3 credits)

Mathematical Connections focuses on strengthening the quantitative skills that the student needs to be an effective receiver and producer of information. She explores current issues in society, financial topics including managing debt, establishing credit and budgeting, and concerns from specific disciplines such as business and nursing. The course includes three major content areas: (1)representing data, which engages topics from graphing and statistics to describe data; (2)predicting data, which uses models from probability and statistics to make predictions about the likelihood of events; and (3)measurement, which combines topics from geometry and measurement systems to understand two- and three-dimensional space. Through exploration of these concepts, the student increases her understanding of the power of mathematics as a communication tool.

Prerequisite(s): QL-122 completed. Additional Information Summer 2018: This course is taught as a hybrid learning course with on campus & online components. On campus dates are Monday June 25, July 9 & 23 5-8 p.m. Fall 2018: Section 09 is taught as a hybrid learning course with on campus meetings and online components. Section 01: Preference to AAS students

QL-156C Mathematical Connections (3 credits)

Mathematical Connections focuses on strengthening the quantitative skills that the student needs to be an effective receiver and producer of information. She explores current issues in society, financial topics including managing debt, establishing credit and budgeting, and concerns from specific disciplines such as business and nursing. The course includes three major content areas: (1)representing data, which engages topics from graphing and statistics to describe data; (2)predicting data, which uses models from probability and statistics to make predictions about the likelihood of events; and (3)measurement, which combines topics from geometry and measurement systems to understand two- and three-dimensional space. Through exploration of these concepts, the student increases her understanding of the power of mathematics as a communication tool.

QL-156L Mathematical Connections Lab (0 credits)

Mathematical Connections Lab session

Prerequisite(s): Concurrent registration in QL-156 for AAS Students only

QL-301 Applying Quantitative Strategies (0 credits)

Applying Quantitative Strategies, a quantitative literacy course for students enrolled in the Alverno Advantage Program, focuses on the mathematical and algebraic methods necessary for Probability & Statistics and other upper division coursework. The student works with concept models including percents, ratios, formulas, descriptive statistics, linear equations, and graphs set within the context of contemporary issues. The curriculum aims to strengthen a student's ability to solve application based problems, understand the use of symbols, and apply various mathematical techniques needed to effectively use and manipulate quantitative information.

Prerequisite(s): Fully online with optional synchronous classes on Thursdays 5:30-6:30 p.m.