Mathematics for College Liberal Arts (1207350) Year-at-a-Glance

Scope and Sequence 2022 - 2023

Please Note: All standards in the state course description are designed to be learned by the end of the course. This guide represents a recommended timeline and sequence to be used voluntarily by teachers for planning purposes. Specific question regarding when content will be addressed in a specific course are best answered by the individual teacher.

Course Resources

Publisher Resource:

Pearson "Mathematical Ideas" Miller, Heeren, Hornsby, Heeren

In Mathematics for College Liberal Arts, instructional time will emphasize five areas:

(1) analyzing and applying linear and exponential functions within a real-world context;

(2) utilizing geometric concepts to solve real-world problems;

(3) extending understanding of probability theory;

(4) representing and interpreting univariate and bivariate data and

(5) developing understanding of logic and set theory.

Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills.

All clarifications stated in the benchmarks, whether general or specific to Mathematics for College Liberal Arts, are expectations for instruction of that benchmark.

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Quarter 1 (August 10 – October 14)	Quarter 2 (October 18 – December 21)
Unit 1: Set Theory Students will explore basic ideas of set theory, representing their learning both verbally and symbolically. Students will apply properties of set theory to solve problems. **Unit 2: Logic and Discrete Theory** Students will develop an understanding of the fundamentals of propositional logic, arguments, and methods of proof. Students extend their understanding of equations to include inequalities. Instruction includes solving and graphing simple, compound, and absolute value inequalities.	**Unit 3: Geometric Reasoning** Students extend their geometric understanding of geometric theorems and proofs, congruence and similarity and dimensional analysis. **Unit 4: Trigonometry** Students define and use trigonometric ratios, identities or functions to solve problems.
Quarter 3 (January 5 – March 9)	**Quarter 4 (March 20 – May 25)**
Unit 5: Algebraic Reasoning and Functions Students extend their understanding of equations to include inequalities in one and two variables. Instruction also includes solving and graphing exponential and logarithmic equations and functions in one and two variables. Students will apply understanding of working with functions to financial literacy situations.	**Unit 6: Data Analysis and Probability** Students extend their understanding of data analysis and probability by working with categorical and numerical data with one and two variables. Students will solve problems involving univariate and bivariate numerical data and use and interpret independence and probability.