

MATH 102 Section 002

Quantitative Literacy

Catalog Course Description

A foundational course in quantitative reasoning. Topics include understanding and applying ratios, descriptive statistics and data analysis, financial applications, and probability applications, with an emphasis on making, presenting, and interpreting quantitative arguments in context. 3 credits.

Faculty Information

Name: Devon Kinne

Email: devon.kinne@indstate.edu

Department: Mathematical Science

Office Hours: MTWR 12:00 - 1:00pm

Course Learning Objectives

Foundational Studies Learning Outcomes (FSLO):

- (1) Locate, critically read, and evaluate information to solve problems
- (2) Critically evaluate the ideas of others
- (3) Apply knowledge and skills within and across the fundamental ways of knowing (particularly mathematics);
- (10) Express yourself effectively, professionally, and persuasively both orally and in writing.

In addition, this course meets the specific Learning Outcomes for the Quantitative Literacy Category (QLLO) of Foundational Studies:

- (1) Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words, geometric figures), including appropriate critique of the information or conclusions provided;
- (2) Convert relevant quantitative information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words, geometric figures) and carry out mathematical procedures and processes fluently and accurately
- (3) Make judgments and draw appropriate conclusions based on a quantitative analysis, while recognizing and describing the limits of this analysis
- (4) Make and evaluate important assumptions in estimation, modeling, and data analysis
- (5) Communicate the results of a quantitative argument, citing the representation of the math problem, explanation of the solution, and the interpretation of the solution.

Finally, this course meets the Applied Skill Learning Outcomes (ASLO) that are embedded in all Foundational Studies Courses:

- (1) Develop critical thinking skills
- (2) Develop information literacy skills
- (3) Submit graded writing assignments

Required Textbooks and Materials

- * Scientific calculator – preference of TI-30X IIS
- Laptop with Excel
- XYZ Homework All Access Pass

Graded Elements of the Course

Projects, Unit Assessments, Final Assessment, In-Class Written Work, Online Homework, Quizzes