



Course Competency Report by Code

Code: AOA2

Number Sense and Functions (AOA2)

Course of Study: AOA2 - Number Sense and Functions
 Course Level: Graduate
 Course Division: First Year Master's
 Discipline: Mathematics
 Course Type:
 Department: Capstone

COMPETENCY #	COMPETENCY NAME	COMPETENCY TEXT
201.1.1	Number Sense Knowledge	The graduate understands whole numbers and performs the four basic arithmetic operations of addition, subtraction, multiplication and division, including mental calculations and estimation using whole numbers.
201.1.2	Number Sense Instructional Strategies	The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning number sense, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning number sense.
201.2.1	Patterns and Functions Knowledge	The graduate understands the nature of both growing and repeating patterns; and understands functions, tables, rules and equations and how they are related.
201.2.2	Patterns and Functions Instructional Strategies	The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning patterns and functions, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning patterns and functions.
201.3.1	Integers and Order of Operations Knowledge	The graduate understands integers and the order of operations, and performs the four basic operations of addition, subtraction, multiplication and division, including mental arithmetic and estimation, using integers.
201.3.2	Integers and Order of Operations Instructional Strategies	The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning integers and order of operations, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning integers and order of operations.
201.4.1	Fractions, Decimals, and Percentages Knowledge	The graduate understands fractions, decimals and percentages and uses this knowledge to perform the basic arithmetic algorithms, estimate, and decide upon the equivalence of rational numbers.



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201.4.2

Fractions, Decimals, and Percentages Instructional Strategies

The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning fractions, decimals and percentages, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning fractions, decimals and percentages.