Certification Examinations for Oklahoma Educators (CEOE) Framework Development Correlation Table

The Framework Development Correlation Table provides information about possible alignment of some of the knowledge and skills contained within the CEOE framework for a test field with other conceptualizations of the knowledge and skills of a field. It was produced using Oklahoma and educator association standards documents that were publicly available at the time of framework development. In the preparation of the Correlation Table, the alignment of a CEOE test competency with standards documents was indicated if the content of a standard was covered, in whole or in part, by the CEOE test competency. For some CEOE test competencies, multiple standards from Oklahoma, or other documents were aligned with the content of a CEOE test competency. An indication of alignment in the Correlation Table does not necessarily imply complete congruence of the content of a CEOE test competency with the standard.

Matrix Showing Match between NCATE Curriculum Guidelines for Secondary Mathematics and CEOE Competencies

NCTM Standards	OK Full Subject Matter Competencies	CEOE	Subarea	Competency
1. Knowledge of Mathematical Problem Solving	5, 6, 7, 8, 9	OSAT: Adv Mathematics	l	0001, 0007, 0008, 0009, 0010,0011, 0012, 0013, 0016, 0018, 0019, 0020, 0021, 0022
2. Knowledge of Reasoning and Proof	5, 7, 8	OSAT: Adv Mathematics	1	0002 0012
3. Knowledge of Mathematical Communication	5, 6, 7, 8, 9	OSAT: Adv Mathematics	I II III IV V	0003 0007, 0008, 0009, 0010 0011, 0012, 0014 0017, 0018, 0019 0021

4. Knowledge of Mathematical Connections	5, 6, 7, 8, 9	OSAT: Adv Mathematics	I	0001, 003
			Ш	0007, 0008, 0009, 0010
			ш	0012, 0013, 0014
			IV	0015, 0016, 0017, 0018, 0019
			v	0020, 0021
5. Knowledge of Mathematical	5, 6, 7, 8, 9	OSAT: Adv Mathematics	I	0003
Representation		mathematics	П	0007, 0008, 0009, 0010
			ш	0014
			IV	0015, 0016, 0018, 0019
			v	0020, 0021, 0022
6. Knowledge of Technology	5, 6, 7, 8, 9	OSAT: Adv Mathematics	I	0001
			П	0007, 0008, 0009, 0010
			ш	0012, 0013, 0016
			IV	0015,0016,0017,0018,0019
			v	0020, 0021
9. Knowledge of Number	5, 6, 7, 8, 9	OSAT: Adv	1	0001, 0004
and Operation		iviathematics	н	0006, 0008

				0014
			111	0014
10. Knowledge of Different	5, 6, 7, 8, 9	OSAT: Adv	1	0001
Perspectives on Algebra		Mathematics		
i cropeetives on Algebra		mathematics		0005 0005 0007 0008 0000 0010
			11	0005, 0006, 0007, 0008, 0009, 0010
			IV	0015, 0016
11. Knowledge of	5, 6, 7, 8, 9	OSAT: Adv	1	0001
Geometrics		Mathematics		
			m	0012 0013 0014
			-	
12. Knowledge of Calculus	5, 6, 7, 8, 9	OSAT: Adv	1	0001
		Mathematics		
			IV	0017, 0018, 0019
13. Knowledge of Discrete	5, 6, 7, 8, 9	OSAT: Adv	1	0001
Mathematics		Mathematics		
			N	0020 0022
			V	0020, 0022
14. Knowledge of Data	5, 6, 7, 8, 9	OSAT: Adv	1	0001, 0002
Analysis, Statistics, and		Mathematics		
Probability			V	0020, 0021
15. Knowledge of	5, 6, 8, 9	OSAT: Adv	1	0001
Measurement		Mathematics		
		mathematics		0011
			111	0011

OSAT: Advanced Mathematics

Subareas: I – Mathematical Processes and Number Sense

0001 Understand the mathematical problem solving & the connections between and among the field of mathematics and other disciplines

0002 Understand the principles and processes of mathematical reasoning

0003 Understand and communicate mathematical concepts an symbols

0004 Understand number theory and the principles and properties of the real and complex number systems

II – Relations, Function, and Algebra

0005 Understand the principles and properties of algebraic relations and functions 0006 Understand the principles and properties of linear algebra 0007 Understand the properties of linear functions and relations 0008 Understand the properties of quadratic and higher-order polynomial relations and functions 0009 Understand the principles and properties of rational, radical, piecewise, and absolute value functions 0010 Understand the principles and properties of exponential and logarithmic functions

III – Measurement and Geometry

0011 Understand principles and procedures related to measurement
0012 Understand the principles and properties of Euclidean geometry in two and three dimensions
0013 Understand the principles and properties of coordinate geometry
0014 Understand the principles and properties of vector and transformational geometries

IV – Trigonometry and Calculus

0015 Understand the principles and properties of and relationships involving trigonometric functions and their graphic representations

0016 Understand and apply the principles and techniques of trigonometry to model an solve problems 0017 Understand the principles and properties of limits, continuity, and average rates of change 0018 Understand and apply the principles and techniques of differential calculus 0019 Understand and apply the principles and techniques of integral calculus

V – Probability, Statistics, and discrete Mathematics

0020 Understand the principles, properties, and techniques of probability 0021 Understand the principles, properties, and techniques of statistics 0022 Understand the principles of discrete mathematics