

**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 Oklahoma Subject Matter Competencies for Earth/Space Sciences 6–12 and CEOE Competencies

Oklahoma Subject Matter Competencies	CEOE Competencies
Unifying Concepts	
a. System, Order, and Organization	0001 Connections among science, mathematics and technology 0009 Interactions among the earth, moon, and sun 0010 Organization of the solar system, characteristics of celestial bodies, and models describing their relationships and motion 0011 Motions, life cycles, and methods of study of the stars 0012 Size, structure, and motions of the solar system, Milky Way, and universe 0013 Composition and properties of the earth's atmosphere, and mechanisms of energy transfer 0015 Characteristics of weather systems, methods and instruments for collecting meteorological data 0017 Characteristics of major climatic zones and the relationship between weather and climate

Oklahoma Subject Matter Competencies	CEOE Competencies
	<p>0018 Impact of human activity on the atmosphere and climate</p> <p>0021 Action of erosional-depositional processes in changing the earth's surface</p> <p>0023 The hydrologic system and its effects on local water budgets</p> <p>0025 Structure, composition, and properties of the earth's oceans</p>
<p>b. Evidence, Models, and Explanation</p>	<p>0001 Connections among science, mathematics, and technology</p> <p>0003 The process of scientific inquiry and experimentation</p> <p>0004 Processes of collecting and organizing scientific data in the investigation of earth sciences</p> <p>0006 Creation, use, and interpretation of models used in earth science</p> <p>0010 Organization of the solar system, characteristics of celestial bodies, and models describing their relationships and motion</p> <p>0016 Principles and technology of weather forecasting and the impact of weather on humans</p> <p>0018 Impact of human activity on the atmosphere and climate</p> <p>0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface</p>

Oklahoma Subject Matter Competencies	CEOE Competencies
<p>c. Constancy, Change, Equilibrium, and Measurement</p>	<p>0004 Processes of collecting and organizing scientific data in the investigation of earth sciences</p> <p>0006 Creation, use, and interpretation of models used in earth science</p> <p>0007 Proper use of equipment, materials, and procedures in earth science</p> <p>0010 Organization of the solar system, characteristics of celestial bodies, and models describing their relationships and motion</p> <p>0011 Motions, life cycles, and methods of study of the stars</p> <p>0012 Size, structure, and motions of the solar system, Milky Way, and universe</p> <p>0018 Impact of human activity on the atmosphere and climate</p> <p>0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface</p> <p>0021 Action of erosional-depositional processes in changing the earth's surface</p> <p>0025 Structure, composition, and properties of the earth's oceans</p>
<p>d. Form and Function</p>	<p>0011 Motions, life cycles, and methods of study of the stars</p> <p>0014 Properties of water and atmospheric phase changes, energy relationships among phase changes, clouds and precipitation</p> <p>0019 Processes of mineral and rock formation, characteristics and classification of minerals and rocks</p>

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<p>e. Abilities of Technological Design</p>	<p>0001 Connections among science, mathematics, and technology</p> <p>0007 Proper use of equipment, materials, and procedures in earth science</p> <p>0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study</p> <p>0011 Motions, life cycles, and methods of study of the stars</p> <p>0015 Characteristics of weather systems, methods and instruments for collecting meteorological data</p> <p>0016 Principles and technology of weather forecasting and the impact of weather on humans</p>
<p>f. Understanding about Science and Technology</p>	<p>0001 Connections among science, mathematics, and technology</p> <p>0002 Historical context of earth sciences and the application of earth sciences to everyday life</p> <p>0003 The process of scientific inquiry and experimentation</p> <p>0004 Processes of collecting and organizing scientific data in the investigation of earth sciences</p> <p>0006 Creation, use, and interpretation of models used in earth science</p> <p>0007 Proper use of equipment, materials, and procedures in earth science</p> <p>0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study</p> <p>0011 Motions, life cycles, and methods of</p>

Oklahoma Subject Matter Competencies	CEOE Competencies
	study of the stars
g. Science as a Human Endeavor	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study 0016 Principles and technology of weather forecasting and the impact of weather on humans 0018 Impact of human activity on the atmosphere and climate
h. Nature of Science	0001 Connections among science, mathematics, and technology 0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0004 Processes of collecting and organizing scientific data in the investigation of earth sciences 0007 Proper use of equipment, materials, and procedures in earth science

Oklahoma Subject Matter Competencies	CEOE Competencies
i. Nature of Scientific Knowledge	0001 Connections among science, mathematics, and technology 0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0004 Processes of collecting and organizing scientific data in the investigation of earth sciences 0006 Creation, use, and interpretation of models used in earth science 0007 Proper use of equipment, materials, and procedures in earth science
j. History of Science	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0012 Size, structure, and motions of the solar system, Milky Way, and universe
k. Historical Perspectives	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0012 Size, structure, and motions of the solar system, Milky Way, and universe 0018 Impact of human activity on the atmosphere and climate

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l. Personal Health	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate
m. Personal and Community Health	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate
n. Population, Resources, and Environments	0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate 0024 Processes by which water moves on and beneath the earth's surface 0025 Structure, composition, and properties of the earth's oceans
o. Population Growth	0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate

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p. Natural Hazards	<p>0002 Historical context of earth sciences and the application of earth sciences to everyday life</p> <p>0016 Principles and technology of weather forecasting and the impact of weather on humans</p> <p>0017 Characteristics of major climatic zones and the relationship between weather and climate</p> <p>0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface</p> <p>0025 Structure, composition, and properties of the earth's oceans</p>
q. Natural Resources	<p>0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems</p> <p>0018 Impact of human activity on the atmosphere and climate</p> <p>0019 Processes of mineral and rock formation, characteristics and classification of minerals and rocks</p> <p>0024 Processes by which water moves on and beneath the earth's surface</p> <p>0025 Structure, composition, and properties of the earth's oceans</p>

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r. Risk and Benefits	0001 Connections among science, mathematics, and technology 0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate
s. Environmental Quality	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0018 Impact of human activity on the atmosphere and climate 0024 Processes by which water moves on and beneath the earth's surface 0025 Structure, composition, and properties of the earth's oceans

Oklahoma Subject Matter Competencies	CEOE Competencies
t. Natural and Human Induced Hazards	<p>0002 Historical context of earth sciences and the application of earth sciences to everyday life</p> <p>0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems</p> <p>0016 Principles and technology of weather forecasting and the impact of weather on humans</p> <p>0018 Impact of human activity on the atmosphere and climate</p> <p>0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface</p> <p>0025 Structure, composition, and properties of the earth's oceans</p>
u. Science and Technology in Society	<p>0002 Historical context of earth sciences and the application of earth sciences to everyday life</p> <p>0003 The process of scientific inquiry and experimentation</p> <p>0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems</p> <p>0016 Principles and technology of weather forecasting and the impact of weather on humans</p> <p>0018 Impact of human activity on the atmosphere and climate</p>

Oklahoma Subject Matter Competencies	CEOE Competencies
v. Science and Technology in Local, National, and Global Challenges	0002 Historical context of earth sciences and the application of earth sciences to everyday life 0003 The process of scientific inquiry and experimentation 0005 Natural resources, the effects of human activities on the environment, and the preservation of the earth's ecosystems 0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study 0018 Impact of human activity on the atmosphere and climate
Earth/Space Science	
a. Structure of the Earth System	0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study 0013 Composition and properties of the earth's atmosphere, and mechanisms of energy transfer 0017 Characteristics of major climatic zones and the relationship between weather and climate 0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface 0021 Action of erosional-depositional processes in changing the earth's surface 0023 The hydrologic system and its effects on local water budgets 0025 Structure, composition, and properties of the earth's oceans

Oklahoma Subject Matter Competencies	CEOE Competencies
b. Earth's History	0012 Size, structure, and motions of the solar system, Milky Way, and universe 0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface 0021 Action of erosional-depositional processes in changing the earth's surface 0022 Geologic history of the earth and the major geologic time divisions
c. Earth in the Solar System	0008 Structure and features of the earth, moon, and sun, and the role of technology and exploration in their study 0009 Interactions among the earth, moon, and sun 0010 Organization of the solar system, characteristics of celestial bodies, and models describing their relationships and motion 0012 Size, structure, and motions of the solar system, Milky Way, and universe
d. Energy in the Earth System	0009 Interactions among the earth, moon, and sun 0013 Composition and properties of the earth's atmosphere, and mechanisms of energy transfer 0014 Properties of water and atmospheric phase changes, energy relationships among phase changes, clouds and precipitation 0015 Characteristics of weather systems, methods and instruments for collecting meteorological data
e. Geochemical Cycles	0019 Processes of mineral and rock formation, characteristics and

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	<p>classification of minerals and rocks</p> <p>0020 Structure of the earth, crustal movements, and other forces which shaped the earth's surface</p> <p>0021 Action of erosional-depositional processes in changing the earth's surface</p>
f. The Universe and Earth's System	<p>0011 Motions, life cycles, and methods of study of the stars</p> <p>0012 Size, structure, and motions of the solar system, Milky Way, and universe</p>