**Arts and Science**

**Associate Degree:**

**Agriculture:**

Southern Utah University

* Students will demonstrate knowledge of scientific principles related to agriculture.
* Students will demonstrate knowledge of agricultural industries including structure, production practices, and management principles.
* Students will demonstrate effective application of agricultural knowledge and resources to solve problems and perform relevant activities.
* Students will demonstrate effective communication appropriate to the discipline.

**Behavioral Science:**

Santa Fe Community College (Psychology)

* Demonstrate familiarity with major concepts, theoretical perspectives, empirical findings and historical trends in psychology.
* Understand and apply basic research methods in psychology, including basic research design, data analysis and interpretation.
* Use critical thinking, skeptical inquiry and, when possible, the scientific approach to solve problems related to behavior and mental processes.
* Understand and apply psychological principles to personal, social and organizational issues.
* Weigh evidence, appreciate ambiguity, act ethically and reflect other values that are the underpinnings of psychology as a science.

**Child Development: (ASC)**

Santa Fe Community College (Early Childhood Education)

* Describe the processes of and influences on development in young children.
* Identify the adult’s role in supporting each child’s growth, development and learning.
* Create and promote supportive environments that engage parents, guardians, families and the community to meet the needs of each child.
* Select and use diverse assessment tools to monitor child development.
* Select and use diverse assessment tools to monitor the quality of early childhood programs.
* Design, implement and evaluate curricula and instruction that promote optimal development and learning for all children.
* Make appropriate and ethical decisions to positively influence children’s development.
* Analyze safe environments and appropriate nutrition that promote positive physical and mental health for young children

**Teacher Education: (ASC)**

ENMU Ruidoso (Elementary/Special Education and Secondary Education)

* Analyze and discuss educational issues, theories, and research
* Examine and evaluate effective teaching strategies and techniques, effective planning approaches, motivation strategies, and classroom management
* Observe, create and execute a lesson using current research strategies
* Evaluate students’ diversities and individual learning differences
* Demonstrate how the proper integration of technology facilitates student learning
* Analyze ones’ own qualifications and commitment to becoming a teacher

CNM

* Apply knowledge of the code of conduct and ethics of their profession.
* Demonstrate professional behaviors in the field setting.
* Apply knowledge of working with diverse populations to their professional practice.
* Analyze how multicultural perspectives shape their interactions with community, parents, and children
* Demonstrate collaboration skills needed to engage in effective and authentic collaborative relationships with colleagues, children, families, and communities.

**University Studies: (ASC)**

ENMU Ruidoso (General Studies and University Studies)

* Demonstrate the ability to use critical thinking
* Use effective communication skills both in speaking and writing
* Participate responsibly in the social and political environment

**Biology: (ASC)**

Santa Fe Community College (Biological Sciences)

* Formulate hypotheses used in scientific inquiry.
* Solve scientific problems experimentally, conceptually and quantitatively.
* Demonstrate knowledge of concepts and information in the life sciences.
* Interpret and explain processes in living organisms from the molecular to the ecological scale.
* Apply evolutionary theory to biological problems.

**Mathematics: (ASC)**

Community College of Baltimore County

* evaluate limits of one-variable functions and of multi-variable functions; definite, indefinite, and improper integrals; double integrals in rectangular and in polar coordinates; triple integrals in rectangular, cylindrical, and spherical coordinates; line and surface integrals; and solve first order differential equations;
* determine continuity and differentiability of one-variable functions and of multi-variable functions; the derivative of a one-variable function by the definition and by rules; partial derivatives of multi-variable functions by the definitions and by rules; optimal values (extrema) of one-variable functions and of multivariable functions; the convergence/divergence of a sequence and of a series;
* apply theorems (including: Mean Value Theorem, Intermediate Value Theorem, Rolle's Theorem, Fundamental Theorem of Calculus, L'Hôpital's Rule, Green's Theorem, and Stokes' Theorem) and mathematical processes to solve real-world application problems;
* compute eigenvalues, eigenvectors, and eigenspaces; verify that a structure is a vector space by checking the axioms; that a subset is a subspace; and that a set of vectors is a basis;
* graph and analyze polar coordinates, parametric equations, and vectors and vector fields; and
* analyze algebraic and geometric properties of the dot product and of the cross product.

**Certificates:**