

Readopt with amendment Ed 507.30, effective 10/16/09 (Doc #9566), to read as follows:

Ed 507.30 Earth and Space Science Teacher For Grades 7-12.

(a) To be certified as an earth and space science teacher for grades 7-12, the candidate shall:

- (1) Meet the qualifications for certification as a science teacher as provided in Ed 507.29; and
- (2) Meet the requirements of (c) below.

(b) For candidates seeking certification under an alternative 3, 4, or 5 pathway, the department of education shall assess the skills, competencies, and knowledge of candidates for certification as earth and space science teachers by reviewing evidence, such as, but not limited to, college course work, documented professional experience, letters of recommendation, professional development hours or CEU's, and artifacts of professional practice.

(c) A candidate for certification as an earth and space science teacher for grades 7-12 shall have skills, competencies, and knowledge in the following areas:

(1) In the area of fundamental content knowledge, the candidate shall have the ability to:

a. Comprehend, apply, evaluate, analyze, and synthesize knowledge of:

1. Structure of earth systems, such as the geosphere, atmosphere, hydrosphere, and biosphere, including the properties, measurements, and classification of their constituent materials and structures;
2. Changes in earth systems to include the geosphere, atmosphere, hydrosphere, and biosphere, including the gradual and catastrophic changes that occur in those systems at different spatial and temporal ranges, such as tectonic activity, weather and climate, population dynamics, and the evolution of life;
3. Relationships between earth systems to include the geosphere, atmosphere, hydrosphere, and biosphere, including, but not limited to the flow of energy and matter between and among those systems;
4. The origin, evolution, properties, and behavior of planetary and geologic structures, including the use of relative and absolute dating techniques to derive systems of chronological dating such as the geologic time scale;
5. The origin, evolution, properties and behavior of the universe, including energy, matter, and astronomical objects;
6. Fundamentals of investigating and interrelating the fields of study within earth space sciences, including geology, oceanography, meteorology, and astronomy;
7. The impact of human activity on earth systems, including the geosphere, atmosphere, hydrosphere, and biosphere;
8. The application of earth space sciences relating to societal issues such as environmental quality, personal and community health and welfare, and business and industry; and

- 9. The application of earth space sciences relating to the sources, limits, and management of renewable and nonrenewable natural resources;
- b. Apply knowledge of Earth space sciences through inquiry, field experiences, laboratory investigations, and the use of scientific models and scientific research; and
- c. Understand and be able to apply mathematical concepts and techniques, including, but not limited to data analysis and modeling as they relate to earth and space systems, at least through the level of college statistics.

Readopt with amendment Ed 612.24, effective 10/16/09 (Doc #9566), to read as follows:

Ed 612.24 Earth and Space Science For Grades 7-12. In addition to meeting the program requirements under Ed 612.23, the earth and space science program for grades 7-12 shall provide the teaching candidate with the skills, competencies, and knowledge gained through a combination of academic and supervised practical experience as outlined in Ed 507.30(c).

Appendix I

RULE	STATUTE
Ed 507.30	RSA 186:8, III- IV, RSA 186:11,X(a)
Ed 612.24	RSA 186:8, IV; RSA 186:11, X(c)