

Rules of Department of Elementary and Secondary Education

Division 50—Division of Instruction Chapter 375—Academic Standards

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Title 5—DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION

Division 50—Division of Instruction Chapter 375—Academic Standards

5 CSR 50-375.100 Academic Standards

PURPOSE: Section 160.514, RSMo requires the State Board of Education to adopt academic standards which establish the knowledge, skills and competencies necessary for students to successfully advance through the public elementary and secondary education system of this state. This rule establishes those academic standards.

- (1) The following academic standards establish the minimum knowledge base, skills and competencies necessary for students to successfully advance through the public elementary and secondary education system of this state; prepare students for post-secondary education or the workplace or both; and are necessary in this era to preserve the rights and liberties of the people. The standards incorporate both what students should know and be able to do.
- (A) Goal 1. Students in Missouri public schools will acquire the knowledge and skills to gather, analyze and apply information and ideas. Students will demonstrate within and integrate across all content areas the ability to—
- 1. Develop questions and ideas to initiate and refine research;
- 2. Conduct research to answer questions and evaluate information and ideas;
- Design and conduct field and laboratory investigations to study nature and society;
- 4. Use technological tools and other resources to locate, select and organize information;
- Comprehend and evaluate written, visual and oral presentations and works;
- Discover and evaluate patterns and relationships in information, ideas and structures;
- 7. Evaluate the accuracy of information and the reliability of its sources;
- 8. Organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation;
- 9. Identify, analyze and compare the institutions, traditions and art forms of past and present societies; and
- 10. Apply acquired information, ideas and skills to different contexts as students, workers, citizens and consumers.

- (B) Goal 2. Students in Missouri public schools will acquire the knowledge and skills to communicate effectively within and beyond the classroom. Students will demonstrate within and integrate across all content areas the ability to—
- 1. Plan and make written, oral and visual presentations for a variety of purposes and audiences:
- 2. Review and revise communications to improve accuracy and clarity;
- 3. Exchange information, questions and ideas while recognizing the perspectives of others;
- 4. Present perceptions and ideas regarding works of arts, humanities and sciences;
- 5. Perform or produce works in the fine and practical arts;
- 6. Apply communication techniques to the job search and to the workplace; and
- 7. Use technological tools to exchange information and ideas.
- (C) Goal 3. Students in Missouri public schools will acquire the knowledge and skills to recognize and solve problems. Students will demonstrate within and integrate across all content areas the ability to—
- 1. Identify problems and define their scope and elements;
- Develop and apply strategies based on ways others have prevented or solved problems;
- 3. Develop and apply strategies based on one's own experience in preventing or solving problems;
- 4. Evaluate the processes used in recognizing and solving problems;
- 5. Reason inductively from a set of specific facts and deductively from general premises;
- 6. Examine problems and proposed solutions from multiple perspectives;
- 7. Evaluate the extent to which a strategy addresses the problem; and
- 8. Assess costs, benefits and other consequences of proposed solutions.
- (D) Goal 4. Students in Missouri public schools will acquire the knowledge and skills to make decisions and act as responsible members of society. Students will demonstrate within and integrate across all content areas the ability to—
- 1. Explain reasoning and identify information used to support decisions;
- 2. Understand and apply the rights and responsibilities of citizenship in Missouri and the United States;
- 3. Analyze the duties and responsibilities of individuals in societies;
- Recognize and practice honesty and integrity in academic work and in the workplace;

- Develop, monitor and revise plans of action to meet deadlines and accomplish goals;
- Identify tasks that require a coordinated effort and work with others to complete those tasks;
- 7. Identify and apply practices that preserve and enhance the safety and health of self and others; and
- 8. Explore, prepare for and seek educational and job opportunities.
- (E) Communication Arts. In communication arts, students in Missouri public schools will acquire a solid foundation which includes proficiency in—
- 1. Speaking and writing standard English (including grammar, usage, punctuation, spelling, capitalization);
- 2. Reading and evaluating fiction, poetry and drama;
- 3. Reading and evaluating nonfiction works and material (such as biographies, newspapers, technical manuals);
- 4. Writing formally (such as reports, narratives, essays) and informally (such as outlines, notes);
- 5. Comprehending and evaluating the content and artistic aspects of oral and visual presentations (such as story-telling, debates, lectures, multimedia presentations);
- Participating in formal and informal presentations and discussions of issues and ideas; and
- 7. Identifying and evaluating relationships between language and culture.
- (F) Fine Arts. In fine arts, students in Missouri public schools will acquire a solid foundation which includes knowledge of—
- 1. Process and techniques for the production, exhibition or performance of one (1) or more of the visual or performed arts;
- 2. The principles and elements of different art forms;
- 3. The vocabulary to explain perceptions about and evaluations of works in dance, music, theater and visual arts:
- 4. Interrelationships of visual and performing arts and the relationships of the arts to other disciplines; and
- 5. Visual and performing arts in historical and cultural contexts.
- (G) Health/Physical Education. In health/ physical education, students in Missouri public schools will acquire a solid foundation which includes knowledge of—
- 1. Structures of, functions of, and relationships among human body systems;
- 2. Principles and practices of physical and mental health (such as personal health habits, nutrition, stress management);
- 3. Diseases and methods for prevention, treatment and control;

- 4. Principles of movement and physical fitness;
- 5. Methods used to assess health, reduce risk factors, and avoid high risk behaviors (such as violence, tobacco, alcohol and other drug use);
- 6. Consumer health issues (such as the effects of mass media and technology on safety and health); and
 - 7. Responses to emergency situations.
- (H) Mathematics. In mathematics, students in Missouri public schools will acquire a solid foundation which includes knowledge of—
- 1. Addition, subtraction, multiplication and division; other number sense, including numeration and estimation; and the application of these operations and concepts in the workplace and other situations;
- 2. Geometric and spatial sense involving measurement (including length, area, volume), trigonometry, and similarity and transformations of shapes;
- 3. Data analysis, probability and statistics;
- 4. Patterns and relationships within and among functions and algebraic, geometric and trigonometric concepts;
- 5. Mathematical systems (including real numbers, whole numbers, integers, fractions), geometry, and number theory (including primes, factors, multiples); and
- 6. Discrete mathematics (such as graph theory, counting techniques, matrices).
- (I) Science. In science, students in Missouri public schools will acquire a solid foundation which includes knowledge of—
- 1. Properties and principles of matter and energy;
- 2. Properties and principles of force and motion;
- 3. Characteristics and interactions of living organisms;
- 4. Changes in ecosystems and interactions of organisms with their environments;
- 5. Processes (such as plate movement, water cycle, air flow) and interactions of earth's biosphere, atmosphere, lithosphere and hydrosphere;
- 6. Composition and structure of the universe and the motions of the objects within it;
- 7. Processes of scientific inquiry (such as formulating and testing hypothesis); and
- 8. Impact of science, technology and human activity on resources and the environment.
- (J) Social Studies. In social studies, students in Missouri public schools will acquire a solid foundation which includes knowledge of—

- 1. Principles expressed in the documents shaping constitutional democracy in the United States;
- 2. Continuity and change in the history of Missouri, the United States and the world;
- 3. Principles and process of governance systems;
- 4. Economic concepts (including productivity and the market system) and principles (including the laws of supply and demand);
- 5. The major elements of geographical study and analysis (such as location, place, movement, regions) and their relationships to changes in society and environment;
- Relationships of the individual and groups to institutions and cultural traditions; and
- 7. The use of tools of social science inquiry (such as surveys, statistics, maps, documents).

AUTHORITY: section 160.514, RSMo (1994).* Original rule filed Oct. 25, 1995, effective May 30, 1996.

*Original authority 1993.