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STANDARDS	PROPOSED CHANGES TO RULES	COMMENTS
Draft 2014		
<u>10.58.522 SCIENCE</u>		
(1) The science program ensures that successful candidates follow the subject major and/or minor program of study or the broad field major program of study. Subject major and/or minor teaching endorsement programs are limited to biology, earth science, chemistry, and physics. The broad field major includes a concentration in one of the endorsable disciplines, coupled with balanced study in three other endorsable science disciplines. Science disciplines selected adhere to a scope and sequence which ensures a thorough grounding in the basic concepts, skills, and dispositions associated with Montana and national K-12 content standards.	(1) The science program ensures that successful candidates follow the subject major and/or minor program of study, <u>or both</u> , or the broad-field major program of study. Subject major and/or minor teaching endorsement programs, <u>or both</u> , are limited to earth science, biology, chemistry, and physics. <u>The physical science endorsement is a balanced combination of physics and chemistry.</u> The broad-field major includes a concentration in one of the endorsable disciplines, coupled with balanced study in three other endorsable science disciplines. Science disciplines selected adhere to a scope and sequence which ensures a thorough grounding in the basic concepts, skills, and dispositions associated with Montana and national K-12 content standards.	
(2) The science endorsement requires that successful candidates:	(2) The science endorsement requires that successful candidates:	
(a) demonstrate a thorough understanding of inquiry-based learning across the sciences. This preparation includes:	(a) demonstrate a thorough understanding of inquiry-based learning across the sciences <u>the nature of science and essential science and engineering practices,</u> including <u>This preparation includes:</u>	
(i) both breadth and depth of knowledge in science, including recent significant changes in the field, as reflected by national standards; the science framework and their impact on the content knowledge necessary for teaching P-12 students;	(i) both breadth and depth of knowledge in science, including recent significant changes in the field, as reflected by national standards <u>MT Content Standards</u> , the science framework and their impact on the content knowledge necessary for teaching P-12 students;	



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	<u>(ii) understanding and articulating the knowledge and practices of contemporary science and engineering;</u>	
(ii) competency in basic mathematics, statistics, and current and emerging technological applications to science teaching;	(ii) <u>(iii) competency in basic mathematics, statistics, and current and emerging technological applications to science teaching;</u>	
(iii) preparation and experience in environmental science, including Montana American Indian traditional relationships to the environment; and	(iii) <u>(iv) preparation and experience in environmental science, including Montana-American Indians and other tribes in MT and their traditional relationships to the environment; and</u>	
(iv) methods to engage in inquiry in a variety of ways;	(iv) <u>(v) methods to engage in active inquiry lessons where students ask questions, develop and use models, plan and carry out investigations, analyze and interpret data using applicable science – specific technology, mathematics and computational thinking, in order to construct explanations and solutions and communicate concepts by engaging in argument from evidence in a variety of ways;</u>	
(b) demonstrate knowledge and skills in the methods of guided and facilitated learning in order to interpret and communicate science research to others;	(b) demonstrate knowledge and skills in the methods of guided and facilitated learning in order to interpret and communicate science research <u>obtaining, evaluating, and communicating information using multiple sources in order to communicate claims, methods and designs to others;</u>	
(c) apply instructional strategies which model learning environments with extended time, appropriate space, and resources with equipment and technology found in the contemporary secondary classroom;	(c) apply instructional strategies which model learning environments with extended time, appropriate space, and resources with equipment and technology found in the contemporary secondary classroom;	



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	<u>(c) use a variety of strategies that demonstrate the candidates' knowledge of the appropriate teaching and learning activities including laboratory or field settings, and applicable instruments and technology, or both;</u>	
(d) demonstrate understanding and experience of how to develop and maintain the highest levels of safety in classrooms, stockrooms, laboratories, and other areas related to instruction in science.	(d) demonstrate understanding and experience of how to develop and maintain the highest levels of safety in classrooms, stockrooms, laboratories, and other areas related to instruction in science. <u>safe laboratory management skills;</u>	
	<u>(e) practice ethical treatment of living organisms in the classroom; and</u>	
(e) demonstrate knowledge of formative and summative assessment techniques which model a variety of authentic and equitable assessment strategies that ensure the continuous intellectual, social, and personal development of the learner in all aspects of science.	(e) demonstrate knowledge of formative and summative assessment techniques which model a variety of authentic and equitable assessment strategies that ensure the continuous intellectual, social, and personal development of the learner in all aspects of science.	
(f) apply and evaluate models of interdisciplinary approaches to provide experiences in understanding science;	(f) apply and evaluate models of interdisciplinary approaches to provide experiences in understanding science; <u>interrelate and interpret important concepts, ideas, and applications in their field of endorsement and supporting disciplines.</u>	
(g) articulate a well-defined rationale for instructional goals, materials, and actions in relation to state and national education standards and student achievement.	(g) articulate a well-defined rationale for instructional goals, materials, and actions in relation to state and national education standards and student achievement.	
<u>(3) The candidate for an endorsement in earth science has the following knowledge and skills, including:</u>	(3) The candidate for an endorsement in earth science has the following knowledge and skills, including The candidate for an endorsement in earth science demonstrates the following core competencies;	



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(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change, constancy, measurement, evolution and equilibrium, form and function;	(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change, constancy, measurement, evolution and equilibrium, form and function;	
(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment, and knows how to apply and teach these methods when instructing students;	(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment, and knows how to apply and teach these methods when instructing students;	
(c) systematic and quantitative study of the fundamental topics in earth science interrelated and illustrated with descriptive and historical perspectives, as well as the applications of earth science in society;	(c) (b) systematic and quantitative study of the fundamental topics in earth science interrelated and illustrated with descriptive and historical perspectives, as well as the applications of earth science in society;	
(d) conceptual understanding of astronomy, geology, paleontology, meteorology, and oceanography, and their relations with each other;	(d) (c) conceptual understanding of astronomy, geology, paleontology, meteorology, and oceanography, and their relations with each other;	
(e) conceptual understanding of biology, chemistry, or physics, emphasizing the interrelationships among the sciences and their relations to earth science;	(e) (d) conceptual understanding of biology, chemistry, or physics, emphasizing the interrelationships among the sciences and their relations to earth science;	
(f) conceptual understanding of mathematics, including a working knowledge of trigonometry and statistics;	(f) (e) conceptual understanding of mathematics, including a working knowledge of trigonometry and statistics;	
(g) conceptual understanding of ethical and human implications of such contemporary issues as the impact of technologies on earth systems;	(g) (f) conceptual understanding of ethical and human implications of such contemporary issues as the impact of technologies on earth systems; <u>and</u>	
(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment,	(h) (g) <u>ability to</u> designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with	

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technologies, and facilities which support and enhance curricula and instruction in earth science and especially techniques and strategies for using the local environment as a teaching/learning laboratory; and	equipment, technologies, and facilities which support and enhance curricula and instruction in earth science and especially techniques and strategies for using the local environment as a teaching/learning laboratory; and	
(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself and especially using questions to define problems and potential solutions.	(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself and especially using questions to define problems and potential solutions.	
(4) The candidate for an endorsement in biology demonstrates the following knowledge and skills, including:	(4) The candidate for an endorsement in biology demonstrates the following knowledge and skills, including <u>core competencies</u> :	
(a) understanding of the unifying concepts of biological systems: cellular organization, order, sensitivity, growth/development/reproduction, energy utilization, evolutionary adaptation, and homeostasis;	(a) <u>conceptual</u> understanding of the unifying concepts of biological systems: cellular organization, order, sensitivity, growth/development/reproduction, energy utilization, evolutionary adaptation, and homeostasis <u>life processes in living systems including organization of matter and energy</u> ;	
(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment and knows experimental design and how to apply and teach these methods;	(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment and knows experimental design and how to apply and teach these methods <u>conceptual understanding of the similarities and differences among animals, plants, fungi, microorganisms, and viruses</u> ;	
(c) conceptual understanding of living organisms, ethical laboratory and field studies promoting scientific inquiry, applications of biology in social and historical perspectives;	(c) understanding of living organisms, ethical laboratory and field studies promoting scientific inquiry, applications of biology in social and historical perspectives;	



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(d) course work in the diversity of life including zoology, botany, and microbiology, encompassing the sub disciplines and noting the interrelationships of physiology, genetics, ecology, and evolution;	(d) course work in the diversity of life including zoology, botany, and microbiology, encompassing the sub disciplines and noting the interrelationships of physiology, genetics, ecology, and evolution <u>conceptual understanding of the principles and practices of biological classification and the theory and principles of biological evolution;</u>	
(e) conceptual understanding of mathematics including a working knowledge of probability and statistics;	(e) conceptual understanding of mathematics including a working knowledge of probability and statistics <u>the ecological systems including the interrelationships and dependencies of organisms with each other and their environments;</u>	
(f) conceptual understanding of two out of three areas of physics, chemistry, or earth science emphasizing the interrelationships among the sciences;	(f) conceptual understanding of two out of three areas of physics, chemistry, or earth science emphasizing the interrelationships among the sciences <u>population dynamics and the impact of population on its environment;</u>	
(g) conceptual understanding of the relationships between biology and molecular genetics and the impacts of biotechnology upon humans and their environment including ethical and legal implications;	(g) conceptual understanding of the relationships between biology and molecular genetics and the impacts of biotechnology upon humans and their environment including ethical and legal implications <u>general concepts of genetics and heredity;</u>	
(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, facilities, and specimens which support and enhance curricula and instruction in biology; and	(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, facilities, and specimens which support and enhance curricula and instruction in biology; <u>and conceptual understanding of organizations and functions of cells and</u>	



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	<u>multi-cellular systems;</u>	
(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself, and especially using questions to define problems and potential solutions.	(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself, and especially using questions to define problems and potential solutions <u>understanding of the regulation of biological systems including homeostatic mechanisms;</u>	
	<u>(j) conceptual understanding of the fundamental processes of modeling and investigating in the biological sciences;</u>	
	<u>(k) understanding of the applications of biology in environmental quality and in personal and community health;</u>	
	<u>(l) conceptual understanding of bioenergetics including major biochemical pathways;</u>	
	<u>(m) understanding of biochemical interactions of organisms and their environments;</u>	
	<u>(n) conceptual understanding of molecular genetics and heredity and mechanisms of genetic modification;</u>	
	<u>(o) understanding of molecular basis for evolutionary theory and classification;</u>	
	<u>(p) conceptual understanding of the causes, characteristics, and avoidance of viral, bacterial, and parasitic diseases;</u>	
	<u>(q) understanding of the issues related to living systems such as genetic modification, uses of biotechnology,</u>	



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	<u>cloning, and pollution from farming; and</u>	
	<u>(r) conceptual understanding of applications of biology and biotechnology in society, business, industry, and health fields.</u>	
(5) The candidate for an endorsement in chemistry demonstrates the following knowledge and skills, including:	(5) The candidate for an endorsement in chemistry demonstrates the following knowledge and skills, <u>including core competencies:</u>	
(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function;	(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function;	
(b) exploration and inquiry as tools in investigating all aspects of the natural environment and knows how to apply and teach these methods when instructing students;	(b) <u>understanding of</u> exploration and inquiry as tools in investigating all aspects of the natural environment and <u>demonstrates knowledge of application and instruction,</u> using knows how to apply and teach these methods when instructing students;	
(c) systemic and quantitative study of the fundamental topics of chemistry, interrelated and illustrated with descriptive and historical perspectives, as well as the applications of chemistry in society;	(c) systemic and quantitative study of the fundamental topics of chemistry, interrelated and illustrated with descriptive and historical perspectives, as well as the applications of chemistry in society <u>conceptual understanding of the fundamental structures of atoms and molecules;</u>	
(d) conceptual understanding of organic, inorganic, analytical, physical, and biochemistry, and their relationships with each other;	(d) conceptual understanding of organic, inorganic, analytical, physical, and biochemistry, and their relationships with each other understanding of the basic principles of ionic, covalent, and metallic bonding;	



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(e) conceptual understanding of physics, biology, or earth science emphasizing the interrelationships among the sciences;	(e) conceptual understanding of physics, biology, or earth science emphasizing the interrelationships among the sciences <u>conceptual understanding of the physical and chemical properties and classification of elements including periodicity;</u>	
(f) conceptual understanding of mathematics including a working knowledge of calculus;	(f) conceptual understanding of mathematics including a working knowledge of calculus <u>chemical kinetics and thermodynamics;</u>	
(g) conceptual understanding of the interaction of chemistry and technology in contemporary health, ethical, legal, and human issues (e.g., the effects of synthetic molecules and food additives on life systems and the disposal of toxic chemical wastes);	(g) conceptual understanding of the interaction of chemistry and technology in contemporary health, ethical, legal, and human issues (e.g., the effects of synthetic molecules and food additives on life systems and the disposal of toxic chemical wastes) <u>principles of electrochemistry;</u>	
(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, facilities, and chemicals which support and enhance curricula and instruction in chemistry; and	(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, facilities, and chemicals which support and enhance curricula and instruction in chemistry; and <u>understanding of the Mole concept, stoichiometry, and laws of composition;</u>	
(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself and especially using questions to define problems and potential solutions.	(i) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself and especially using questions to define problems and potential solutions. <u>conceptual understanding of solutions, colloids, and colligative properties;</u>	



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	<u>(j) understanding of transition elements and coordination compounds;</u>	
	<u>(k) conceptual understanding of acids and bases, oxidation-reduction chemistry, and solutions;</u>	
	<u>(l) understanding of fundamental biochemistry;</u>	
	<u>(m) conceptual understanding of the applications of chemistry in personal and community health and environmental quality</u>	
	<u>(n) understanding of the molecular orbital theory, aromaticity, metallic and ionic structures, and correlation to properties of matter;</u>	
	<u>(o) conceptual understanding of the advanced concepts of chemical kinetics, and thermodynamics;</u>	
	<u>(p) understanding of Lewis structures and molecular geometry;</u>	
	<u>(q) conceptual understanding of major biological compounds and natural products;</u>	
	<u>(r) understanding of solvent system concepts;</u>	
	<u>(s) conceptual understanding of chemical reactivity and molecular structure including electronic and steric effects; and</u>	
	<u>(t) understanding of organic chemistry including syntheses, reactions, mechanisms, and aromaticity.</u>	
(6) The candidate for an endorsement in physics demonstrates the following knowledge and skills, including:	(6) The candidate for an endorsement in physics demonstrates the following knowledge and skills, including <u>core competencies</u> :	



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(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function;	(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function of <u>energy, work, and power;</u>	
(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment, and knows how to apply and teach these methods when instructing students;	(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment, and knows how to apply and teach these methods when instructing students <u>understanding of motion, major forces, and momentum;</u>	
(c) systematic and quantitative study of the fundamental topics in physics, interrelated and illustrated with descriptive and historical perspectives, as well as the applications of physics in society;	(c) systematic and quantitative study of the fundamental topics in physics, interrelated and illustrated with descriptive and historical perspectives, as well as the applications of physics in society <u>conceptual understanding of Newtonian physics with engineering applications;</u>	
(d) conceptual understanding of classical mechanics, electricity and magnetism, heat and thermodynamics, waves, optics, atomic and nuclear physics, radiation and radioactivity, relativity, quantum mechanics, and other fields of modern physics, and their relationships with each other;	(d) conceptual understanding of classical mechanics, electricity and magnetism, heat and thermodynamics, waves, optics, atomic and nuclear physics, radiation and radioactivity, relativity, quantum mechanics, and other fields of modern physics, and their relationships with each other <u>conservation, mass, momentum, energy, and charge;</u>	
(e) conceptual understanding of biology, chemistry, or earth science emphasizing interrelationships among the sciences;	(e) conceptual understanding of biology, chemistry, or earth science emphasizing interrelationships among the sciences <u>the physical properties of matter;</u>	



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(f) conceptual understanding of mathematics, including an introduction to calculus;	(f) understanding of mathematics, including an introduction to calculus <u>kinetic-molecular motion and atomic models</u> ;	
(g) conceptual understanding of interaction of physics and technology in contemporary health, ethical, legal, and human issues (e.g., power plant siting and waste disposal, long-range energy policies, and the effects of radiation on living systems);	(g) conceptual understanding of interaction of physics and technology in contemporary health, ethical, legal, and human issues (e.g., power plant siting and waste disposal, long-range energy policies, and the effects of radiation on living systems) <u>radioactivity, nuclear reactors, fission, and fusion</u> ;	
(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, and facilities which support and enhance curricula and instruction in physics; and	(h) designing, developing, and evaluating field, demonstration, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, and facilities which support and enhance curricula and instruction in physics; and <u>understanding of wave theory, sound, light, the electromagnetic spectrum and optics</u> ;	
(i) facilitating classroom discourse through questions, reflecting on, and critically analyzing ideas leading students toward a deeper understanding of the inquiry process itself, especially using questions to define problems and potential solutions.	(i) facilitating classroom discourse through questions, reflecting on, and critically analyzing ideas leading students toward a deeper understanding of the inquiry process itself, especially using questions to define problems and potential solutions. <u>conceptual understanding of electricity and magnetism</u> ;	
	<u>(j) understanding of the fundamental processes of investigating in physics</u> ;	
	<u>(k) conceptual understanding of the applications of physics in environmental quality and to personal and community health</u> ;	



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	<u>(l) understanding of thermodynamics and energy-matter relationships;</u>	
	<u>(m) conceptual understanding of nuclear physics including matter-energy duality and reactivity;</u>	
	<u>(n) understanding of angular rotation and momentum, centripetal forces, and vector analysis;</u>	
	<u>(o) conceptual understanding of quantum mechanics, space-time relationships, and special relativity;</u>	
	<u>(p) understanding of models of nuclear and subatomic structures and behavior;</u>	
	<u>(q) conceptual understanding of light behavior, including wave-particle duality and models;</u>	
	<u>(r) understanding of electrical phenomena including electric fields, vector analysis, energy, potential, capacitance, and inductance;</u>	
	<u>(s) conceptual understanding of issues related to physics such as disposal of nuclear waste, light pollution, shielding communication systems and weapons development;</u>	
	<u>(t) understanding of historical development and cosmological perspectives in physics including contributions of significant figures and underrepresented groups, and evolution of theories in physics; and</u>	
	<u>(u) conceptual understanding of the applications of physics and engineering in society, business, industry, and health fields.</u>	



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(7) The candidate for an endorsement in broad field science demonstrates the following knowledge and skills, including:	(7) The candidate for an endorsement in broad-field science demonstrates the following knowledge and skills <u>including core competencies</u> :	
(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function;	(a) conceptual understanding in the unifying concepts and processes of systems order and organization, evidence models and explanation, change constancy, measurement, evolution and equilibrium, form and function;	
(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment and knows how to apply and teach these methods when instructing students;	(b) exploration and inquiry learning as tools in investigating all aspects of the natural environment and knows how to apply and teach these methods when instructing students ability to collect and interpret empirical data using applicable science-specific technology to develop science and engineering practices, understand the cross-cutting concepts and processes, relationships and natural patterns ;	
(c) systematic and quantitative study of the fundamental topics in biology, chemistry, physics, and earth science including descriptive and historical perspectives, as well as the applications of these sciences in society;	(c) systematic and quantitative <u>interdisciplinary</u> study of the fundamental topics in biology, chemistry, physics, and earth science including descriptive and historical perspectives, as well as the applications of these sciences in society;	
(d) study and experiences emphasizing interrelationships among all the sciences, as well as between the sciences and other areas of study such as mathematics;	(d) study and experiences emphasizing interrelationships among all the sciences, as well as between <u>cross-cutting concepts of</u> the sciences and <u>with</u> other areas of study such as mathematics, <u>technology, and engineering</u> ;	
(e) conceptual understanding of mathematics, including a working knowledge of calculus and statistics;	(e) understanding of mathematics, including a working knowledge of calculus and statistics;	



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(f) conceptual understanding of the relationships among science technologies, and the study of environmental education;	(f) conceptual understanding of the relationships among science, <u>science</u> technologies, and the study of environmental education;	
(g) designing, developing, and evaluating field, demonstrations, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, facilities, and specimens which support and enhance curricula and instruction in all sciences including laboratory and field studies that promote investigation and inquiry, and the use of experimental methods;	(g) designing, developing, and evaluating field <u>experiences</u> , demonstrations, and laboratory instructional activities, and in using special skills and techniques with equipment, technologies, facilities, and specimens which support and enhance curricula and instruction in all sciences including laboratory and field studies that promote <u>the science and engineering practices</u> , investigation and inquiry, and the use of experimental methods;	
(h) conceptual understanding of earth sciences including course work in astronomy, geology, paleontology, meteorology and oceanography, and their relationships with each other;	(h) conceptual understanding of earth sciences including <u>course work content</u> in astronomy, geology, paleontology, meteorology and oceanography, and their relationships with each other;	
(i) conceptual understanding of biology including course work in zoology, botany, physiology, genetics, ecology, microbiology, cell biology/biochemistry, and evolution, and their relationships with each other. This preparation must include study and experiences emphasizing living organisms;	(i) conceptual understanding of biology including <u>course work content</u> in zoology, botany, physiology, genetics, ecology, microbiology, cell biology/biochemistry, and evolution, and their relationships with each other. This preparation must include study and experiences	
(j) conceptual understanding of chemistry including course work in organic, inorganic, analytical, physical and biochemistry and their relationships with each other;	(j) conceptual understanding of chemistry including <u>course work content</u> in organic, inorganic, analytical, physical and biochemistry and their relationships with each other;	
(k) conceptual understanding of physics including course work in classical mechanics, electricity and magnetism,	(k) conceptual understanding of physics including <u>course work content</u> in classical mechanics, electricity and	



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heat and thermodynamics, waves, optics, atomic and nuclear physics, radiation and radioactivity, relativity, quantum mechanics, and other fields of modern physics and their relationships with each other; and	magnetism, heat and thermodynamics, waves, optics, atomic and nuclear physics, radiation and radioactivity, relativity, quantum mechanics, and other fields of modern physics and their relationships with each other; and	
(l) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself, and especially, using questions to define problems and potential solutions.	(l) facilitating classroom discourse through questioning, reflecting on, and critically analyzing ideas, leading students toward a deeper understanding of the inquiry process itself, and especially, using questions to define problems and potential solutions.	
(History: 20-2-114, MCA; <u>IMP</u> , 20-1-501, 20-2-121, MCA; <u>NEW</u> , 1979 MAR p. 492, Eff. 5/25/79; <u>AMD</u> , 1984 MAR p. 831, Eff. 5/18/84; <u>AMD</u> , 1989 MAR p. 397, Eff. 3/31/89; <u>AMD</u> , 2000 MAR p. 2406, Eff. 9/8/00; <u>AMD</u> , 2007 MAR p. 190, Eff. 2/9/07.)		

