

006.29 Health Sciences Education

006.29A Grade Levels: 6-12

006.29B Endorsement Type: Field

006.29C Persons with this endorsement may teach Health Sciences courses and will be eligible for the Work-Based Learning endorsement.

006.29D Certification Endorsement Requirements: This field endorsement requires a minimum of fifty (50) semester hours with the following minimums:

006.29D1 A minimum of nine (9) semester hours in human growth and development which must include:

006.29D1a A minimum of three (3) semester hours of these nine hours must be in human anatomy and a minimum of three (3) semester hours in human physiology; and

006.29D2 A minimum of fifteen (15) semester hours in one or more additional Health Sciences areas: medical terminology, nutrition, public/community health, behavioral health, and health care in society; and

006.29D3 A minimum of six (6) semester hours in exercise physiology and kinesiology; and

006.29D4 A minimum of two (2) semester hours in CPR/First Aid certification; and

006.29D5 A minimum of three (3) semester hours in medical law, and ethics; and

006.29D6 A minimum of twelve (12) semester hours of professional education course work to include pedagogical content knowledge and principles of career and technical education; and

006.29D7 A minimum of three (3) semester hours of course work in coordination and supervision of work-based learning; and

006.29E Work Experience: The endorsement is available only to those persons who have either (A) 1,000 hours of paid work-based experience relevant to the career field or (B) at least 300 hours of supervised work experience relevant to the career field under the direction of the college or university recommending the endorsement.

006.29F Endorsement Program Requirements: Nebraska teacher education institutions offering this endorsement program must have on file, within the institution, a plan which identifies the courses and the course completion requirements which the institution utilizes to grant credit toward completion of this endorsement.

***THE FOLLOWING ARE RECOMMENDED GUIDELINES
FOR INCLUSION AS PART OF THE INSTITUTION'S PLAN
UNDER THIS ENDORSEMENT.***

Through the courses identified in its plan, the institution must provide candidates for this endorsement with opportunities to demonstrate the knowledge and competencies required by the following guidelines:

Pedagogical Content Knowledge

Standard 1. Health Science candidates will have the appropriate pedagogical knowledge and skills to develop and deliver an effective Health Science curriculum to prepare students for entry-level positions in Health Science career settings.

Health Science candidates will:

- Element 1. Plan and implement an effective Health Science program of study that aligns with the Nebraska Department of Education:
- 1a. Career and Technical Education Health Sciences Approved State Model Programs of Study;
 - 1b. Nebraska College and Career Ready Practices; and
 - 1c. Health Science Cluster and Pathway Standards.
- Element 2. Design instructional methods and assessment tools using current and research-based strategies to advance learning.
- Element 3. Plan, implement, assess, and reflect on instruction that promotes student engagement, builds sustained Health Science college and career readiness, and responds to diverse student needs.
- Element 4. Recognize current health care and Allied Health resources and technology to manage instruction and to support student learning in the Health Science field.

Health Sciences Content Knowledge

Standard 2. Health Science candidates will have the knowledge and skills to deliver appropriate Health Science content knowledge to all students.

Health Science candidates will:

- Element 1. Possess content knowledge upon which to build the Health Science curriculum.
- Element 2. Apply knowledge of core academic areas (English Language Arts, Mathematics, Science, and Social Studies) within the Health Science curriculum.
- Element 3. Incorporate an understanding of historical, current, and evolving domestic and global Health Science trends, including Health Science career possibilities and associated career preparation.
- Element 4. Demonstrate knowledge of, and the ability to develop student skills for successful employment in the Health Science industry.
- Element 5. Demonstrate knowledge of health and safety policies/

guidelines, regulatory standards, legal and ethical practices, and safety procedures related to Health Science occupations.

Communication and Collaboration

Standard 3. Health Science candidates will utilize effective communication and collaboration skills to enhance the Health Science curriculum by working with education and Health Science partners.

Health Science candidates will:

- Element 1. Collaborate with secondary educational systems, post-secondary educational institutions, and/or medical profession partners in the development of an articulated curriculum.
- Element 2. Collaborate with school personnel and Health Science industry representatives to provide instruction and field-based experiences in settings with qualified staff to support student learning.
- Element 3. Design a structure for community-based advisory committees to support and enhance the Health Science program.

Professional Knowledge and Skills

Standard 4. Health Science candidates will demonstrate attitudes, knowledge, skills and dispositions needed for success as a teacher in Health Science.

Health Science candidates will:

- Element 1. Model legal/ethical practices, guidelines and procedures for Health Science.
- Element 2. Identify concepts and strategies through Career Technical Student Organizations (CTSO), such as HOSA-Future Health Professionals that assist students to be college and career ready.

- Element 3. Facilitate collaborative learning by working together in groups that may include students, teachers, business and industry leaders, and others.

Principles of Career and Technical Education

Standard 5. Deliver a standards-based curriculum in appropriate career fields through programs of study that incorporate classroom and laboratory instruction; experiential, project and work-based learning, and leadership and personal development through CTSO such as HOSA-Future Health Professionals.

- Element 1. Develop programs of study that reflect the needs of the community and have been developed in accordance with state requirements.
- Element 2. Design courses in the program of study that are organized logically and sequentially from introductory to advanced levels.

Standard 6. Design facilities and equipment plans that support the implementation of the program and curriculum by providing all students with opportunities for the development and application of knowledge and skills.

- Element 1. Develop facility plans that provide for the effective delivery of all programs of study offered.
- Element 2. Demonstrate knowledge of existing local, state, and federal safety and health standards.
- Element 3. Develop training and evaluation so those using the facility engage in a safe working environment.
- Element 4. Demonstrate the ability to maintain a clean and organized environment conducive to learning.
- Element 5. Demonstrate knowledge of facility design that is accessible and accommodating to all students.
- Element 6. Demonstrate the ability to organize storage space for both student and teacher materials, supplies, and equipment.

- Element 7. Maintain an inventory of equipment, tools, consumable items, and instructional technology and is able to develop a plan for new purchases and replacements.
- Element 8. Maintain equipment, tools, and instruction technology adequate to current industry standards.
- Element 9. Plan for adequate quantities of tools, equipment, and consumable supplies for equipping students at all times.
- Element 10. Maintain equipment, tools, and instructional technology that is current, available, and used effectively for delivering instruction.

Standard 7. Enhance student learning through continuous experiential, project, and work-based learning experiences.

- Element 1. Integrate work-based learning with the appropriate career field program for all students.
- Element 2. Align work-based learning to appropriate career field curriculum standards.
- Element 3. Assess work-based learning by measuring students' growth against a relevant set of career-based skills, knowledge, and competencies.
- Element 4. Promote student-planned, personalized work-based learning experiences.
- Element 5. Engage students to maintain accurate work-based learning documentation to meet state and local requirements.
- Element 6. Provide direct supervision and guidance for each student's work-based learning experience.
- Element 7. Document work-based learning experiences between the student and adult supervisors.

Standard 8. Demonstrate knowledge of leadership and personal development. Engage student participation in intra-curricular leadership and personal development experiences through CTSO such as HOSA-Future Health Professionals.

- Element 1. Provide the opportunity for all students to be a member of a CTSO such as HOSA-Future Health Professionals.
- Element 2. Engage students to build a progressive leadership and

- personal development plan.
- Element 3. Engage students in meaningful leadership and personal development activities related to Health Sciences.
 - Element 4. Provide leadership to create and ensure the HOSA-Future Health Professionals constitution and bylaws are up-to-date and approved by chapter members.
 - Element 5. Engage students in the planning and implementation of a program of activities.
 - Element 6. Facilitate the conduct of regularly scheduled chapter meetings.
 - Element 7. Implement an awards recognition program planned and conducted by student members.
 - Element 8. Provide leadership to ensure the HOSA-Future Health Professionals chapter has a current budget, which provides the financial resources to support the program of work.

Standard 9. Demonstrate knowledge of school and community partnerships. Engage school and community partners in developing and supporting a quality program.

- Element 1. Demonstrate knowledge of how to regularly inform key stakeholders regarding the goals, objectives, and accomplishment of the Health Sciences program.
- Element 2. Demonstrate knowledge of how to initiate engagement of key stakeholders with the Health Sciences program.
- Element 3. Demonstrate knowledge of how to recognize key stakeholders for their support of the Health Sciences program.
- Element 4. Participate in key stakeholder activities.

Standard 10. Demonstrate knowledge of program marketing. Engage key stakeholders through involvement, recognition, and the sharing of information about all components of the program.

- Element 1. Design and implement strategic marketing efforts with pieces implemented by the appropriate key stakeholders.

- Element 2. Design and implement a recruitment and retention plan that yields steady or increasing student enrollment.
- Element 3. Utilize relevant Health Sciences program data for marketing and communication purposes.

Standard 11. Demonstrate knowledge of program planning and evaluation. Design and implement a system of needs assessment and evaluation for continual program development and improvement.

- Element 1. Collect and report relevant Health Sciences program data to key stakeholders and other entities as determined by local and state requirements.
- Element 2. Survey key stakeholders to determine their expectations and current assessment of program quality and the success of students.
- Element 3. Provide leadership for a representative Health Sciences advisory committee, authorized by the local board of education, to meet regularly to advise program direction and development.
- Element 4. Create and implement a programmatic strategic plan that is based on performance data, key stakeholder surveys, and advisory committee input.
- Element 5. Develop and implement a Health Sciences budget that provides the financial resources to support the current and planned needs of the program.

Guidelines are based, in part, on National Quality Program Standards for Agriculture, Food and Natural Resources Education and informed by other Career and Technical professional standards (2016).