COMMUNITY HEALTH SCIENCE STANDARDS

This document was prepared by:

Office of Career Readiness, Adult Learning & Education Options
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Adopted by the Nevada State Board of Education on
October 12, 2017

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MISSION

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence

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ACKNOWLEDGEMENTS

The development of Nevada career and technical standards and assessments is a collaborative effort sponsored by the Office of Career Readiness, Adult Learning & Education Options at the Department of Education and the Career and Technical Education Consortium of States. The Department of Education relies on teachers and industry representatives who have the technical expertise and teaching experience to develop standards and performance indicators that truly measure student skill attainment. Most important, however, is recognition of the time, expertise and great diligence provided by the writing team members in developing the career and technical standards for Community Health Science.

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BUSINESS AND INDUSTRY VALIDATION

All CTE standards developed through the Nevada Department of Education are validated by business and industry through one or more of the following processes: (1) the standards are developed by a team consisting of business and industry representatives; or (2) a separate review panel was coordinated with industry experts to ensure the standards include the proper content; or (3) the adoption of nationally-recognized standards endorsed by business and industry.

The Community Health Science standards were validated through active participation of business and industry representatives on the development team.

PROJECT COORDINATOR

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INTRODUCTION

The standards in this document are designed to clearly state what the student should know and be able to do upon completion of an advanced high school Community Health Science program. These standards are designed for a three-credit course sequence that prepares the student for a technical assessment directly aligned to the standards.

These exit-level standards are designed for the student to complete all standards through their completion of a program of study. These standards are intended to guide curriculum objectives for a program of study.

The standards are organized as follows:

Content Standards are general statements that identify major areas of knowledge, understanding, and the skills students are expected to learn in key subject and career areas by the end of the program.

Performance Standards follow each content standard. Performance standards identify the more specific components of each content standard and define the expected abilities of students within each content standard.

Performance Indicators are very specific criteria statements for determining whether a student meets the performance standard. Performance indicators may also be used as learning outcomes, which teachers can identify as they plan their program learning objectives.

The crosswalk and alignment section of the document shows where the performance indicators support the Nevada Academic Content Standards in Science (based on the Next Generation Science Standards) and in English Language Arts and Mathematics (based on the Common Core State Standards). Where correlation with an academic content standard exists, students in the Community Health Science program perform learning activities that support, either directly or indirectly, achievement of the academic content standards that are listed.

All students are encouraged to participate in the career and technical student organization (CTSO) that relates to the Community Health Science program. CTSOs are co-curricular national associations that directly enforce learning in the CTE classroom through curriculum resources, competitive events, and leadership development. CTSOs provide students the ability to apply academic and technical knowledge, develop communication and teamwork skills, and cultivate leadership skills to ensure college and career readiness.

The Employability Skills for Career Readiness identify the "soft skills" needed to be successful in all careers, and must be taught as an integrated component of all CTE course sequences. These standards are available in a separate document.

The **Standards Reference Code** is only used to identify or align performance indicators listed in the standards to daily lesson plans, curriculum documents, or national standards.

Program Name: Community Health Science Standards Reference Code: **CHS**

Example: CHS.2.3.4

Standards	Content Standard	Performance Standard	Performance Indicator
Community Health Science	2	3	4

CONTENT STANDARD 1.0 : DEVELOP PERSONAL HEALTH AND WELLNESS	
PERFORMANCE STANDARD 1.1 : CATEGORIZE DIMENSIONS OF WELLNESS	
1.1.1	Describe how individual health depends upon a complex interplay of physiological, emotional, social, financial, intellectual, and environmental factors
1.1.2	Identify specific examples of each of the six dimensions of wellness
PERFORMANCE STANDARD 1.2 : APPLY CONCEPTS OF PERSONAL HEALTH—ASSESSMENT, PROFESSIONALISM, AND SELF-CARE	
1.2.1	Evaluate personal risk factors for disease prevention and health promotion
1.2.2	Develop a plan to improve personal health that includes goals, activities, and expected outcomes
1.2.3	Classify different types of stress
1.2.4	Evaluate stress management techniques to improve coping skills
1.2.5	Formulate personal and professional boundaries to promote wellness
1.2.6	Define a healthy work and life balance as it relates to an individual's profession

CONTENT STANDARD 2.0 : RESEARCH PUBLIC HEALTH BIOLOGY
PERFORMANCE STANDARD 2.1 : APPLY BIOLOGICAL PRINCIPLES AND PATHOPHYSIOLOGY
2.1.1 Identify common diseases and disorders of the human body related to public health
2.1.2 Distinguish between pathogenic and nonpathogenic diseases
2.1.3 Analyze the risk factors and etiology of pathogenic and nonpathogenic diseases of public health importance
PERFORMANCE STANDARD 2.2 : ASSESS THE PUBLIC HEALTH BURDEN
2.2.1 Describe the public health burden of common pathogenic and nonpathogenic diseases
PERFORMANCE STANDARD 2.3 : EVALUATE BIOLOGICAL BASIS OF DISEASE PREVENTION
2.3.1 Identify areas of public health where biological research is of particular importance
2.3.2 Apply biological principles to the development and implementation of disease prevention, control, or management programs
2.3.3 Describe screenings and therapies for diseases of public health importance
2.3.4 Explain how vaccinations prevent pathogenic diseases at both individual and population levels (herd immunity)

CONTENT STANDARD 3.0 : IDENTIFY PATTERNS OF SOCIAL AND BEHAVIORAL HEALTH

PERFORMANCE STANDARD 3.1 : UNDERSTAND THE PHYSICAL, EMOTIONAL, AND DEVELOPMENTAL STAGES OF THE LIFE CYCLE

- 3.1.1 Define the stages of life
- 3.1.2 Explain the importance of maternal and child health as a global indicator of society's health
- 3.1.3 Define prenatal care and its effects
- 3.1.4 Refute several common myths about life stage populations

PERFORMANCE STANDARD 3.2 : OUTLINE HEALTH PROFILES FOR AGE GROUPS—INFANT, CHILDREN, ADOLESCENTS, ADULTS, AND THE ELDERLY

- 3.2.1 List the major causes of morbidity, and risk factors for each group
- 3.2.2 Explain the importance of being aware of different health concerns of the various age groups in the United States
- 3.2.3 Outline populations most at risk for abuse and neglect in the United States
- 3.2.4 Demonstrate the process surrounding mandated reporting of child and elder abuse

PERFORMANCE STANDARD 3.3 : UNDERSTAND MENTAL HEALTH AND MENTAL DISORDERS

- 3.3.1 Research the history of mental healthcare and treatment
- 3.3.2 Analyze the variety of mental health disorders (i.e., schizophrenia, depression, attention deficit disorder, bipolar disorder)
- 3.3.3 Outline current treatment methods utilized for various mental health disorders
- 3.3.4 Discuss and dispel stigmas attached to mental health disorders

PERFORMANCE STANDARD 3.4 : EXAMINE ALCOHOL, TOBACCO, AND OTHER DRUGS OF ABUSE (ADDICTION)

- 3.4.1 Recognize legal and illegal substances of abuse
- 3.4.2 Identify the physical and psychological effects of substance abuse
- 3.4.3 Research available treatments, interventions, and other local, state and national resources
- 3.4.4 Analyze the financial and social impact of substance abuse on the community

CONTENT STANDARD 4.0 : EXPLORE ENVIRONMENTAL HEALTH

PERFORMANCE STANDARD 4.1 : UNDERSTAND ENVIRONMENTAL HEALTH AND JUSTICE

- 4.1.1 Describe methods used in epidemiology and toxicology to assess environmental exposures and hazards
- 4.1.2 Discuss ethical issues of environmental health and environmental justice that address the issues of poverty, racial/ethnic diversity
- 4.1.3 Investigate ways that society addresses environmental injustice and identify best practice intervention strategies at local, state, national, and global levels
- 4.1.4 Interpret the relationship among population growth, the environment and human health
- 4.1.5 Discuss community sensitivity to issues of environmental justice and equity

PERFORMANCE STANDARD 4.2 : CLASSIFY AIR QUALITY, WATER, SANITATION, AND HYGIENE

- 4.2.1 List the sources and types of indoor and outdoor air pollutants, and explain the difference between primary and secondary pollutants
- 4.2.2 Describe interventions, policies, and best practices to address indoor and outdoor air pollution
- 4.2.3 Investigate the risk factors associated with water, sanitation, and hygiene that affect human health
- 4.2.4 Describe interventions, policies, and best practices to address water, sanitation, and hygiene

CONTENT STANDARD 5.0 : APPLY CONCEPTS OF EPIDEMIOLOGY

PERFORMANCE STANDARD 5.1 : CLASSIFY AND DESCRIBE EPIDEMIOLOGICAL TERMS

- 5.1.1 Describe the basic epidemiological concepts of rates and public health surveillance
- 5.1.2 Define the terms outbreak, epidemic, endemic, and pandemic
- 5.1.3 Describe the importance of having a case definition, and the factors to consider in developing a case definition
- 5.1.4 Define the primary difference between descriptive studies and analytical studies
- 5.1.5 Describe the historical roots of epidemiological thinking and its contribution to the evolution of the scientific method
- 5.1.6 Distinguish between correlation and causation
- 5.1.7 Define each of Hill's Criteria for Causality

PERFORMANCE STANDARD 5.2 : INVESTIGATE DISEASE OUTBREAKS

- 5.2.1 List the seven steps, per Centers for Disease Control (CDC) definition, in the investigation of an outbreak
- 5.2.2 Given initial information of a possible disease outbreak, apply outbreak investigation techniques to determine whether an outbreak exists
- 5.2.3 Generate hypothesis of patterns of disease and injuries regarding person, place, and time

PERFORMANCE STANDARD 5.3 : CALCULATE, ANALYZE, AND INTERPRET EPIDEMIOLOGICAL DATA

- 5.3.1 Define the primary difference between descriptive studies and analytical studies
- 5.3.2 Create a "line listing" using a spreadsheet
- 5.3.3 Calculate prevalence and incidence
- 5.3.4 Calculate a) mortality rate, b) morbidity rate, c) attack rate, and d) case-fatality rate. Identify the following types of epidemic curves: a) point source epidemic, b) continuous source epidemic, and c) propagated source epidemic
- 5.3.5 Distinguish between cross-sectional, cohort studies, and case-control studies

CONTENT STANDARD 6.0 : EXPLORE BIOSTATISTICS
PERFORMANCE STANDARD 6.1 : DEFINE AND DEMONSTRATE MEASUREMENT SCALES AND ERRORS
6.1.1 Distinguish between categorical, ordinal, and quantitative variables
6.1.2 Demonstrate the differences between imprecision and bias
PERFORMANCE STANDARD 6.2 : DISCUSS AND APPLY STUDY DESIGN CONCEPTS
6.2.1 Distinguish between surveys and comparative studies (experimental and non-experimental studies)
6.2.2 Define the terms explanatory (independent) and response (dependent) variables
6.2.3 Explain the concepts of random assignment and blinding
PERFORMANCE STANDARD 6.3 : VISUALLY EXPLORE AND SUMMARIZE DATA
6.3.1 Explore the shape, location, and spread of variable distribution
6.3.2 Calculate a) mean, b) median, c) mode, d) variance, and e) standard deviation
6.3.3 Explain the relationship between standard deviation and data with outliers
PERFORMANCE STANDARD 6.4 : EXPLORE THE COMPONENTS OF DISTRIBUTIONS
6.4.1 Explain the properties of continuous random variables
6.4.2 Explain the characteristics of normal distributions
6.4.3 Practice standardizing values
6.4.4 Distinguish between parameters and statistics
6.4.5 Explain the relationship between sample size and distribution
PERFORMANCE STANDARD 6.5 : CONDUCT AND INTERPRET HYPOTHESES TESTS
6.5.1 Discuss the various steps involved in a hypothesis test
6.5.2 Determine null and alternative hypotheses
6.5.3 Calculate test statistics and *P*-values
6.5.4 Interpret the significance of *P*-values
6.5.5 Given a *P*-value, state an appropriate conclusion that relates back to the hypothesis tested
6.5.6 Practice conducting one-sample z-tests
6.5.7 Explain the difference between type I errors and type II errors

PERFORMANCE STANDARD 6.6 : INVESTIGATE CONFIDENCE INTERVALS
6.6.1 Interpret confidence intervals
6.6.2 Explain the relationship between hypothesis testing and confidence intervals
PERFORMANCE STANDARD 6.7 : CALCULATE AND INTERPRET RELATIVE RISKS AND ODDS RATIOS
6.7.1 Interpret relative risks and odds ratios
6.7.2 Calculate relative risks and odds ratios
6.7.3 Interpret confidence intervals for relative risk and odds ratios

CONTENT STANDARD 7.0 : UNDERSTAND THE PRINCIPLES OF ADMINISTRATION AND POLICY	
PERFORMANCE STANDARD 7.1 : RECOGNIZE ETHICAL RESPONSIBILITIES	
7.1.1	Identify ethical dilemmas in the fields of public health and healthcare
7.1.2	Analyze ethical case studies in public health using theories and principles
7.1.3	Evaluate how diverse populations influence ethical analysis and decision making
PERFORMANCE STANDARD 7.2 : ANALYZE THE ROLE OF HEALTH ADMINISTRATION AND MANAGEMENT	
7.2.1	Interpret concepts, theories and values in healthcare management
7.2.2	Integrate healthcare management theory with real world situations
7.2.3	Identify the unique management skills needed in a public health environment
7.2.4	Detail the role of the manager in respect to the following five managerial functions: planning, organizing, staffing, coordinating, and controlling
7.2.5	Develop the ability to work with and manage groups of diverse people
7.2.6	Articulate strategic problems and challenges facing health services organizations
7.2.7	Identify the major stakeholders in health service organizations
7.2.8	Determine the linkage of mission, vision, and values to strategic direction
PERFORMANCE STANDARD 7.3 : DEMONSTRATE AND UNDERSTAND PROGRAM PLANNING, IMPLEMENTATION, AND EVALUATION	
7.3.1	Describe the basic elements of program planning in public health: needs assessment, goals, objectives, activities, timeline, budget, and evaluation
7.3.2	Identify barriers to successful implementation of program plans
7.3.3	Identify methods for overcoming barriers to program implementation
7.3.4	Describe methods for process, effect, and impact evaluation of public health programs
7.3.5	Demonstrate the ability to plan, implement, and constructively evaluate public health programs

PERFORMANCE STANDARD 7.4 : INVESTIGATE POLICY AND HEALTHCARE SYSTEMS	
7.4.1	Outline the different kinds of healthcare, including population-based public health practice, preventative care, medical practice, long-term practice, and end-of-life practice
7.4.2	Describe how federal, state, and local health policy is created with engaged interest groups
7.4.3	Explore policy decisions which supersede individual rights for public good (i.e., quarantine, immunizations, Clean Air Act)
7.4.4	Critique healthcare systems, health policies, and healthcare financing in the U.S. and other selected countries
7.4.5	Explain the relationship between the cost of health services and quality of care
7.4.6	Describe the key principles of U.S. healthcare reform for individuals and the population
7.4.7	Describe the policy process that includes community assessment, policy development, advocacy/lobbying, legislation, and policy analysis

CONTENT STANDARD 8.0 : EXPLORE SOCIAL JUSTICE

PERFORMANCE STANDARD 8.1 : RECOGNIZE DIVERSITY AND CULTURE

- 8.1.1 Define social justice
- 8.1.2 Describe how the distribution of wealth and social privilege impacts community health
- 8.1.3 Recognize the Culturally and Linguistically Appropriate Services (CLAS) Standards
- 8.1.4 Evaluate how cultural generalizations and stereotyping impact community health

PERFORMANCE STANDARD 8.2 : UNDERSTAND DISPARITIES

- 8.2.1 Differentiate between health disparities and incidence of disease
- 8.2.2 Identify causes of health disparities
- 8.2.3 Synthesize how historical realities create and impact health disparities
- 8.2.4 Demonstrate understanding of key data points of racial and ethnic disparities that impact healthcare
- 8.2.5 Describe how the social determinants of health impact the overall health status of under-served communities
- 8.2.6 Explain the relevance of health disparities and social determinants within community health

PERFORMANCE STANDARD 8.3 : IDENTIFY RISK, PROTECTIVE FACTORS, AND DETERMINANTS

- 8.3.1 Outline various models that examine risk and protective factors
- 8.3.2 Discuss interventions for a specific population

PERFORMANCE STANDARD 8.4 : EVALUATE SELF-SUFFICIENCY AND ADVOCACY

- 8.4.1 Define advocacy
- 8.4.2 Research state or local resources that would promote individual and group self-sufficiency

PERFORMANCE STANDARD 8.5 : SYNTHESIZE COMMUNITY AND INDIVIDUAL ASSESSMENTS

- 8.5.1 Discuss the validity of a variety of assessment tools
- 8.5.2 Implement community or individual assessments
- 8.5.3 Interpret results of community or individual assessments
- 8.5.4 Distinguish between assessments and diagnosis

PERFORMANCE STANDARD 8.6 : EXAMINE EQUITY AND INCLUSION
8.6.1 Examine the barriers that impact specific population's access to: services, resources, goods, and events
8.6.2 Research various laws, regulations, and agencies that impact equity and inclusion
PERFORMANCE STANDARD 8.7 : EXPLORE COMMUNITY MOBILIZATION
8.7.1 Define community mobilization
8.7.2 Evaluate examples of community mobilization and discuss the impact
8.7.3 Identify current local, regional, or state community mobilization efforts

CONTENT STANDARD 9.0 : CHARACTERIZE COMMUNITIES	
PERFORMANCE STANDARD 9.1 : RECOGNIZE UNDERSERVED POPULATIONS	
9.1.1	Identify characteristics of an underserved population
9.1.2	Compare and contrast barriers which impact access to care and community health in rural, urban, immigrant, refugee, and other populations (i.e., food, medicine, healthcare)
PERFORMANCE STANDARD 9.2 : IDENTIFY RESOURCES	
9.2.1	Research a community needs evaluation
9.2.2	Demonstrate the ability to identify local community health resources
9.2.3	Recognize the various barriers that prevent individuals from accessing locally available resources
9.2.4	Research local partnerships available to students and other members of the community

CONTENT STANDARD 10.0 : RECOGNIZE THE IMPORTANCE OF COMMUNICATIONS AND PROFESSIONALISM	
PERFORMANCE STANDARD 10.1 : DEVELOP HEALTH LITERACY SKILLS	
10.1.1	Define health literacy
10.1.2	Identify reasons health literacy is a serious and costly issue in the United States
10.1.3	Describe ways to communicate health information
10.1.4	Utilize Suitability Assessment of Materials (SAM) Standards to identify the suitability of a written health document
PERFORMANCE STANDARD 10.2 : SUMMARIZE PROVIDER AND CLIENT COMMUNICATIONS	
10.2.1	Demonstrate effective engagement and group facilitation
10.2.2	Describe the factors that influence the facilitation process
10.2.3	Examine how to engage participants throughout the process
10.2.4	Distinguish between the different fields of practices' confidentiality agreements to include, Health Insurance Portability and Accountability Act of 1996 (HIPAA), Family Educational Rights and Privacy Act (FERPA), 42 Code of Federal Regulations (CFR)
PERFORMANCE STANDARD 10.3 : OUTLINE ETHICS IN COMMUNICATIONS AND PROFESSIONALISM	
10.3.1	Recognize the guiding ethical standards for Community Health Sciences program pathways
10.3.2	Understand how the scope of work dictates professional boundaries and ethical standards
PERFORMANCE STANDARD 10.4 : INTERPRET PSYCHOLOGICAL SOCIAL ASSESSMENT	
10.4.1	Research a psychological social assessment
PERFORMANCE STANDARD 10.5 : EXAMINE COMMUNITY ENGAGEMENT	
10.5.1	Identify traditional and nontraditional methods of communication to engage the target population
10.5.2	Recognize the importance of establishing collaborations and partnerships when addressing individual and community needs
10.5.3	Determine routes for developing partnerships in local communities

CONTENT STANDARD 11.0 : EXPLORE CAREER DEVELOPMENT	
PERFORMANCE STANDARD 11.1 : INVESTIGATE CAREER CHOICES AND OPPORTUNITIES	
11.1.1	Critique the roles and responsibilities of various community health professions
PERFORMANCE STANDARD 11.2 : DETERMINE WORKFORCE NEEDS AND PATHWAYS	
11.2.1	Compare and contrast vocational training and educational requirements
11.2.2	Research the scope of career opportunities available, and the requirements for education, training, certification, and licensure
11.2.3	Explore various financial opportunities to support career pathways
PERFORMANCE STANDARD 11.3 : IMPLEMENT CAREER ENHANCEMENTS	
11.3.1	Create a resume or portfolio that is tailored to a specific health career pathway
11.3.2	Recognize the role and function of professional organizations, industry associations, and organized labor

Note: Mental Health Training is suggested for this program of study.

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CROSSWALKS AND ALIGNMENTS

CROSSWALKS (ACADEMIC STANDARDS)

The crosswalk of the Community Health Science Standards shows links to the Nevada Academic Content Standards in Science (based on the Next Generation Science Standards – Disciplinary Core Ideas Arrangement) and in English Language Arts and Mathematics (based on the Common Core State Standards). The crosswalk identifies the performance indicators in which the learning objectives in the Community Health Science program support academic learning. The performance indicators are grouped according to their content standard and are crosswalked to the Nevada Academic Content Standards in Science, English Language Arts, and Mathematics.

ALIGNMENTS (MATHEMATICAL PRACTICES)

In addition to correlation with the Nevada Academic Content Standards for Mathematics, many performance indicators support the Mathematical Practices. The following table illustrates the alignment of the Community Health Science Standards Performance Indicators and the Mathematical Practices. This alignment identifies the performance indicators in which the learning objectives in the Community Health Science program support academic learning.

ALIGNMENTS (SCIENCE AND ENGINEERING PRACTICES)

In addition to correlation with the Nevada Academic Content Standards for Science, many performance indicators support the Science and Engineering Practices. The following table illustrates the alignment of the Community Health Science Standards Performance Indicators and the Science and Engineering Practices. This alignment identifies the performance indicators in which the learning objectives in the Community Health Science program support academic learning.

CROSSWALKS (COMMON CAREER TECHNICAL CORE)

The crosswalk of the Community Health Science Standards shows links to the Common Career Technical Core. The crosswalk identifies the performance indicators in which the learning objectives in the Community Health Science program support the Common Career Technical Core. The Common Career Technical Core defines what students should know and be able to do after completing instruction in a program of study. The Community Health Science Standards are crosswalked to the Health Science Career Cluster™ and the Biotechnology Research and Development Career Pathway.

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CROSSWALK OF COMMUNITY HEALTH SCIENCE STANDARDS AND THE NEVADA ACADEMIC CONTENT STANDARDS

CONTENT STANDARD 1.0: DEVELOP PERSONAL HEALTH AND WELLNESS

Performance Indicators	Nevada Academic Content Standards
1.1.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information. **English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
1.2.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
1.2.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

CONTENT STANDARD 2.0: RESEARCH PUBLIC HEALTH BIOLOGY

Performance Indicators	Nevada Academic Content Standards
2.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible. **English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
2.1.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
2.2.1	**English Language Arts: Speaking and Listening Standards** SL.11-12.1a Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
2.3.4	**English Language Arts: Language Standards** L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

CONTENT STANDARD 3.0: IDENTIFY PATTERNS OF SOCIAL AND BEHAVIORAL HEALTH

Performance Indicators	Nevada Academic Content Standards
3.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
3.3.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem. **English Language Arts: Speaking and Listening Standards** SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
3.3.2	**Science: HS-Heredity: Inheritance and Variation of Traits** HS-LS3-1 Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring. **English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CONTENT STANDARD 4.0: EXPLORE ENVIRONMENTAL HEALTH

Performance Indicators	Nevada Academic Content Standards
4.1.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
4.1.2	**English Language Arts: Speaking and Listening Standards** SL.11-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
4.1.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
4.1.4	**Science: HS-Engineering Design** HS-ETS1-3 Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. **English Language Arts: Speaking and Listening Standards** SL.11-12.2 Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.
4.2.1	**Science: HS-Earth and Human Activity** HS-ESS3-6 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity.
4.2.2	**Science: HS-Engineering Design** HS-ETS1-3 Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.

CONTENT STANDARD 5.0: APPLY CONCEPTS OF EPIDEMIOLOGY

Performance Indicators	Nevada Academic Content Standards
5.1.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
5.3.2	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CONTENT STANDARD 6.0: EXPLORE BIOSTATISTICS

Performance Indicators	Nevada Academic Content Standards
6.1.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
6.2.1	**Math: Functions – Linear, Quadratic, and Exponential Models** FLE.A.1 Distinguish between situations that can be modeled with linear functions and with exponential functions.
6.2.3	**English Language Arts: Language Standards** L.11-12.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.
6.3.1	**English Language Arts: Reading Standards for Informational Text** RI.11-12.3 Analyze a complex set of ideas or sequence of events and explain how specific individuals, ideas, or events interact and develop over the course of the text. **Math: Statistics and Probability – Interpreting Categorical and Quantitative Data** SID.A.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
6.3.2	**Math: Number & Quantity – The Complex Number System** NCN.B.6 (+) Calculate the distance between numbers in the complex plane as the modulus of the difference, and the midpoint of a segment as the average of the numbers at its endpoints. **Math: Statistics and Probability – Interpreting Categorical and Quantitative Data** SID.A.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.
6.4.3	**Math: Statistics and Probability – Interpreting Categorical and Quantitative Data** SID.A.4 Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.
6.5.1	**English Language Arts: Speaking and Listening Standards** SL.11-12.1a Come to discussions prepared, having read and researched material under study; explicitly draw on that preparation by referring to evidence from texts and other research on the topic or issue to stimulate a thoughtful, well-reasoned exchange of ideas.
6.5.6	**Math: Number & Quantity – The Complex Number System** NCN.A.1 Know there is a complex number i such that i2 = -1, and every complex number has the form a + bi with a and b real.

Performance Indicators	Nevada Academic Content Standards
6.6.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
6.7.1	**Math: Statistics and Probability – Interpreting Categorical and Quantitative Data** SID.B.5 Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data.

CONTENT STANDARD 7.0: UNDERSTAND THE PRINCIPLES OF ADMINISTRATION AND POLICY

Performance Indicators	Nevada Academic Content Standards
7.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.8 Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
7.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
7.2.1	**English Language Arts: Speaking and Listening Standards** SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
7.3.5	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
7.4.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CONTENT STANDARD 8.0: EXPLORE SOCIAL JUSTICE

Performance Indicators	Nevada Academic Content Standards
8.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
8.1.3	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.
8.2.6	**English Language Arts: Speaking and Listening Standards** SL.11-12.6 Adapt speech to a variety of contexts and tasks, demonstrating a command of formal English when indicated or appropriate. (See grades 11–12 Language standards 1 and 3 on page 54 for specific expectations.)
8.4.2	**English Language Arts: Speaking and Listening Standards** SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
8.5.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.

CONTENT STANDARD 9.0: CHARACTERIZE COMMUNITIES

Performance Indicators	Nevada Academic Content Standards
9.1.2	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
9.2.2	**English Language Arts: Speaking and Listening Standards** SL.11-12.1d Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the task.

CONTENT STANDARD 10.0: RECOGNIZE THE IMPORTANCE OF COMMUNICATIONS AND PROFESSIONALISM

Performance Indicators	Nevada Academic Content Standards
10.1.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
10.1.4	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.3 Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.
10.2.3	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
10.3.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.

CONTENT STANDARD 11.0: EXPLORE CAREER DEVELOPMENT

Performance Indicators	Nevada Academic Content Standards
11.1.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
11.2.1	**English Language Arts: Reading Standards for Literacy in Science and Technical Subjects** RST.11-12.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.
11.2.3	**English Language Arts: Speaking and Listening Standards** SL.11-12.4 Present information, findings, and supporting evidence, conveying a clear and distinct perspective, such that listeners can follow the line of reasoning, alternative or opposing perspectives are addressed, and the organization, development, substance, and style are appropriate to purpose, audience, and a range of formal and informal tasks.
11.3.1	**English Language Arts: Writing Standards for Literacy in Science and Technical Subjects** WHST.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

ALIGNMENT OF COMMUNITY HEALTH SCIENCE STANDARDS AND THE MATHEMATICAL PRACTICES

Mathematical Practices	Community Health Science Performance Indicators
1. Make sense of problems and persevere in solving them.	*6.3.2*
2. Reason abstractly and quantitatively.	*6.1.2*
3. Construct viable arguments and critique the reasoning of others.	*6.5.6*
4. Model with mathematics.	*6.5.1, 6.5.2, 6.5.3, 6.5.4, 6.5.5, 6.5.6*
5. Use appropriate tools strategically.	*6.3.2*
6. Attend to precision.	*6.5.3, 6.7.2*
7. Look for and make use of structure.	*6.2.1*
8. Look for and express regularity in repeated reasoning.	*6.3.3, 6.6.2*

ALIGNMENT OF COMMUNITY HEALTH SCIENCE STANDARDS AND THE SCIENCE AND ENGINEERING PRACTICES

Science and Engineering Practices	Community Health Science Performance Indicators
1. Asking questions (for science) and defining problems (for engineering).	*2.1.2*
2. Developing and using models.	*5.2.1, 10.1.4*
3. Planning and carrying out investigations.	*5.2.1, 5.2.2*
4. Analyzing and interpreting data.	*5.2.2*
5. Using mathematics and computational thinking.	*6.1.1, 6.3.1, 6.5.3, 6.7.1*
6. Constructing explanations (for science) and designing solutions (for engineering).	*2.3.2, 8.5.3*
7. Engaging in argument from evidence.	*2.3.4, 5.2.3*
8. Obtaining, evaluating, and communicating information.	*9.2.1, 9.2.4, 10.1.3*

CROSSWALKS OF COMMUNITY HEALTH SCIENCE STANDARDS AND THE COMMON CAREER TECHNICAL CORE

Health Science Career Cluster™ (HL)	*Performance Indicators*
1. Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.	*11.1.1, 11.2.1, 11.2.2*
2. Explain the healthcare worker's role within their department, their organization, and the overall healthcare system.	*7.2.1, 7.2.2, 7.2.3, 7.2.4, 7.2.5, 7.2.6, 7.2.7, 7.2.8*
3. Identify existing and potential hazards to clients, coworkers, visitors, and self in the healthcare workplace.	*1.2.1, 1.2.5*
4. Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.	*10.2.1*
5. Analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace.	*7.1.1, 10.2.4*
6. Evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the healthcare workplace.	*8.1.2, 8.1.3, 8.1.4*

Support Services Career Pathway (HL-SUP)	*Performance Indicators*
1. Describe, differentiate and safely perform the responsibilities of healthcare support services roles	*1.2.1, 7.4.2*
2. Demonstrate work practices that maintain a clean and healthy healthcare facility to reduce or eliminate pathogenic organisms.	*2.3.2, 4.1.1*
3. Follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility.	*1.2.5, 7.4.1*
4. Maximize available resources for proper care and use of healthcare equipment and materials.	*7.4.4, 7.4.5, 11.2.1*
5. Implement healthcare facility standards in order to maintain high-quality healthcare facilities.	*7.1.1, 10.3.1*