

# Health Sciences

Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career. **HL01**

- 1 Utilize knowledge of human structure and function to conduct health care role.** **HL01.01.01**

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- 2 Describe the basic structures and functions of cells, tissues, organs, and systems as they relate to homeostasis.** **HL01.01.02**

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- 3 Compare relationships among cells, tissues, organs, and systems.** **HL01.01.03**

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- 4 Explain body planes, directional terms, quadrants, and cavities.** **HL01.01.04**

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- 5 Analyze the interdependence of the body systems as they relate to wellness, disease, disorders, therapies, and care rehabilitation.** **HL01.01.05**

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- 6 Utilize knowledge of diseases and disorders to conduct health care role.** **HL01.02.01**

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- 7 Compare selected diseases/disorders including respective classification(s), causes, diagnoses, therapies, and care/rehabilitation to include biotechnological applications.** **HL01.02.02**

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- 8 Analyze methods to control the spread of pathogenic microorganisms.** **HL01.02.03**

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- 9 Contrast various types of immunities.** **HL01.02.04**

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- 10 Analyze body system changes in light of diseases, disorders, and wellness.** **HL01.02.05**

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- 11 Compare the aging process among the body systems.** **HL01.02.06**

Explain the healthcare worker's role within their department, their organization, and the overall healthcare system. **HL02**

- 1 Explain systems theory as it applies to the health care environment.** **HL02.01.01**

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- 2 Describe systems theory and its components.** **HL02.01.02**

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- 3 Construct a general systems model using inputs, throughputs, and a feedback loop.** **HL02.01.03**

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- 4 Explain the concept of system change as it applies to the health care environment.** **HL02.02.01**

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- 5 Analyze the cause and effect on health care system change based on the influence of technology, epidemiology, bio-ethics, socio-economics, and various forms of complimentary (non-traditional) medicine.** HL02.02.02

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  - 6 Understand the existing and potential hazards to clients, co-workers, and self.** HL02.03.01

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  - 7 Utilize safe work practices and follow health and safety policies and procedures.** HL02.03.02

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  - 8 Diagram the interdependence of health care professions within a given health care delivery system and pertaining to the delivery of quality health care.** HL02.03.03

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  - 9 Design a system analysis process that evaluates these outcomes: client satisfaction, productivity, cost effectiveness, and efficiency.** HL02.03.04

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  - 10 Evaluate the impact of enhanced technology on the health care delivery system.** HL02.03.05

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  - 11 Identify and explain key systems of the health care delivery system.** HL02.04.01

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  - 12 Construct a health care delivery system model.** HL02.04.02

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  - 13 Predict where and how factors such as cost, managed care, technology, an aging population, access to care, alternative therapies, and lifestyle/behavior changes may affect various health care delivery system models.** HL02.04.03

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  - 14 Project outcomes as interconnected components of a modified health care system.** HL02.04.04

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  - 15 Calculate the cost effectiveness of two separate health care delivery systems using the same client procedure.** HL02.04.05
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**Identify existing and potential hazards to clients, coworkers, visitors, and self in the healthcare workplace.** HL03

- 1 Explain infection control practices and procedures.** HL03.01.01

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- 2 Practice infection control procedures.** HL03.01.02

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- 3 Practice appropriate cleaning, disinfecting, and sterilizing processes.** HL03.01.03

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- 4 Contrast medical and surgical asepsis.** HL03.01.04

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- 5 Demonstrate personal safety practices.** HL03.02.01

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- 6 Manage a personal exposure incident in compliance with OSHA regulations.** HL03.02.02

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- 7 Apply principles of body mechanics and ergonomics.** HL03.02.03

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- 8 Use personal protective equipment (PPE) as appropriate to the environment.** HL03.02.04

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- 9 Use techniques to insure environmental safety. HL03.03.01

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  - 10 Modify the environment to create safe working conditions. HL03.03.02

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  - 11 Demonstrate methods of fire prevention in the health care setting. HL03.03.03

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  - 12 Prevent accidents by using proper safety techniques. HL03.03.04

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  - 13 Practice good housekeeping by maintaining a safe work environment. HL03.03.05

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  - 14 Identify common safety hazards. HL03.04.01

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  - 15 Use Materials Safety Data Sheets (MSDS). HL03.04.02

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  - 16 Recognize and adhere to hazardous labeling requirements. HL03.04.03

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  - 17 Comply with safety signs, symbols, and labels. HL03.04.04

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  - 18 Implement appropriate action when observing a hazardous material problem. HL03.04.05

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  - 19 Apply safety principles within given environment. HL03.04.06

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  - 20 Recognize hazardous chemicals commonly used in the health care environment and utilize in an appropriate manner. HL03.04.07

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  - 21 Describe healthy behaviors. HL03.05.01

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  - 22 Apply behaviors that promote health and wellness. HL03.05.02

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  - 23 Advocate available preventive health screening and examinations. HL03.05.03

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  - 24 Use practices that promote the prevention of disease and injury. HL03.05.04

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  - 25 Use appropriate safety practices as related to high-risk behaviors. HL03.05.05

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  - 26 Evaluate the validity of alternative health practices. HL03.05.06

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  - 27 Utilize emergency procedures and protocols. HL03.06.01

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  - 28 Interpret the evacuation plan for the health care setting. HL03.06.02

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  - 29 Construct an emergency plan for a health care setting in response to a natural disaster or other emergency. HL03.06.03

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  - 30 Follow the facility procedure when a fire is discovered. HL03.06.04
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Evaluate the roles and responsibilities of individual members as

- 1 Describe team member participation. HL04.01.01

part of the healthcare team and explain their role in promoting the delivery of quality health care. HL04

- 2 Communicate verbally and nonverbally with team colleagues to assure a best result for the client. HL04.01.02
- 3 Collaborate with others to formulate team objectives. HL04.01.03
- 4 Identify responsible actions of team members to complete assigned tasks in a timely and effective manner HL04.01.04
- 5 Recognize the importance of active listening to other team members. HL04.01.05
- 6 Exercise leadership skills as appropriate. HL04.01.06
- 7 Respect and value the expertise and contributions of all team members. HL04.01.07
- 8 Recognize the importance of working collaboratively with persons from diverse backgrounds to accomplish a common goal. HL04.01.08
- 9 Apply corrective action to an acknowledged conflict situation. HL04.01.09
- 10 Exhibit a strong sense of team identity and commitment to purpose. HL04.01.10
- 11 Identify and describe health care teams. HL04.02.01
- 12 Apply the team concept in providing quality patient/client care. HL04.02.02
- 13 Recognize characteristics of effective teams. HL04.02.03
- 14 Analyze roles of various team participants. HL04.02.04
- 15 Formulate appropriate response to critical situations as a team member and/or leader. HL04.02.05
- 16 Recognize the necessity of compromise to ensure the appropriate outcome. HL04.02.06
- 17 Employ communication strategies used in the delivery of quality health care. HL04.03.01
- 18 Identify social media technologies, electronic conferencing, Web pages and e-mail systems to communicate information to team members and colleagues. HL04.03.02
- 19 Develop and implement security requirements for storage and transmission of electronic health records. HL04.03.03
- 20 Train personnel on technologies, written communications and security measures for documenting, retrieval, storage and communication of health records. HL04.03.04

**Analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace.** HL05

- 1 Describe legal implications affecting health care workers.** HL05.01.01

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- 2 Analyze legal responsibilities, limitations, and implications of actions.** HL05.01.02

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- 3 Use problem-solving techniques when confronted with legal dilemmas or issues.** HL05.01.03

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- 4 Compare and contrast behaviors and practices that could result in malpractice, liability, or negligence.** HL05.01.04

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- 5 Identify and comply with policies and requirements for documentation and record keeping.** HL05.01.05

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- 6 Identify and comply with established risk management criteria and procedures.** HL05.01.06

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- 7 Evaluate if an incident is reportable.** HL05.01.07

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- 8 Identify and comply with non-discriminatory laws.** HL05.01.08

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- 9 Identify and comply with institutional policy and procedures.** HL05.01.09

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- 10 Describe legal practices employed by health care workers.** HL05.02.01

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- 11 Perform duties according to regulations, policies, laws, and legislated rights of clients.** HL05.02.02

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- 12 Manage clients' rights according to the Patients' Bill of Rights.** HL05.02.03

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- 13 Manage confidentiality according to Health Information Portability Access Act (HIPAA).** HL05.02.04

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- 14 Employ practices that adhere to licensure, certification, registration, and legislated scope of practice.** HL05.02.05

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- 15 Apply the doctrine of informed consent.** HL05.02.06

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- 16 Evaluate technological threats to confidentiality.** HL05.02.07

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- 17 Employ mandated standards for workplace safety, i.e., OSHA, CDC, CLIA.** HL05.02.08

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- 18 Apply mandated standards for harassment, labor, and employment laws.** HL05.02.09

**Evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the**

- 1 Describe legal and ethical boundaries in health care delivery.** HL06.01.01

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- 2 Differentiate between morality and ethics and the relationship of each to health care outcomes.** HL06.01.02

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- 3 Differentiate between ethical and legal issues impacting health care.** HL06.01.03
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- 4 Employ personal, professional, and organizational ethics.** HL06.01.04
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- 5 Analyze legal and ethical aspects of confidentiality.** HL06.01.05
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- 6 Discuss bio-ethical issues related to health care.** HL06.01.06
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- 7 Analyze and evaluate the implications of medical ethics.** HL06.01.07
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- 8 Describe ethical practice as it applies to health care delivery.** HL06.02.01
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- 9 Demonstrate professionalism when interacting with fellow students, patients/clients, co-workers, and the organization.** HL06.02.02
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- 10 Recognize and respect interdisciplinary roles of team members.** HL06.02.03
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- 11 Report activities and behaviors by self and others that adversely affect the health, safety, or welfare of students, patients/clients, or co-workers.** HL06.02.04
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- 12 Demonstrate fairness and equal treatment of all persons.** HL06.02.05
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- 13 Practice responsibly within the ethical framework of the Patients' Bill of Rights.** HL06.02.06
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- 14 Employ clients' independence and determination in their health care.** HL06.02.07
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- 15 Explain cultural, social, and ethnic diversity as it applies to health care delivery.** HL06.03.01
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- 16 Discuss the impact of religions and cultures on those giving and receiving health care with an understanding of past and present events.** HL06.03.02
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- 17 Demonstrate respect of individual cultural, social, and ethnic diversity within the health care environment.** HL06.03.03