

# Introduction to Healthcare Science (25.521) (2022)

Adopted 2022

## Introduction to Healthcare Science (25.521)

### **HS-IHS-1. Demonstrate employability skills required by business and industry.** HS-

#### IHS-1

1. Communicate effectively through writing, speaking, listening, reading and interpersonal abilities. HS-IHS-1.1
2. Demonstrate creativity by asking challenging questions and applying innovative procedures and methods. HS-IHS-1.2
3. Exhibit critical thinking and problem solving skills to locate, analyze and apply information in career planning and employment situations. HS-IHS-1.3
4. Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity. HS-IHS-1.4
5. Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills. HS-IHS-1.5
6. Present a professional image through appearance, behavior and language. HS-IHS-1.6

---

**HS-IHS-2. Demonstrate standard safety practices for all classroom, laboratory, and field experiences. Understand the existing and potential hazards to clients, co-workers, and self, and prevent injury or illness through safe work practices by following current health and safety policies and procedures.** HS-IHS-2

1. Identify safety hazards and reduce risk associated with them. HS-IHS-2.1
2. Comply with safety signs, symbols and labels. HS-IHS-2.2
3. Analyze the role and the responsibilities of the healthcare provider (student) in the classroom, laboratory, and various workplace settings in an emergency situation. HS-IHS-2.3
4. Apply basic Emergency procedures and protocol in basic emergency situations and events. HS-IHS-2.4
5. Explain the following agencies' role in healthcare practice: OSHA, CDCP, CLIA, FDA, and ISO. HS-IHS-2.5
6. Apply principles of body mechanics. HS-IHS-2.6
7. Utilize personal protective equipment (PPE) and apply personal safety procedures based on OSHA (Occupational Health and Safety Administration and the Centers for Disease Control and Prevention (CDCP)). HS-IHS-2.7

---

**HS-IHS-3. Describe how various healthcare roles fit into the office/department, the organization and the overall health care environment. Identify how key systems affect services performed and quality of care.** HS-IHS-3

1. Analyze the healthcare delivery system (public, private, government, and non-profit). HS-IHS-3.1
2. Evaluate the factors influencing healthcare delivery systems. HS-IHS-3.2
3. Describe the responsibilities of consumers within the healthcare system and how to engage patients and families in their own healthcare. HS-IHS-3.3
4. Explain the impact of emerging issues such as technology, epidemiology, bioethics, and socio economics on healthcare delivery systems. HS-IHS-3.4
5. Discuss common methods of payment for healthcare. HS-IHS-3.5

---

**HS-IHS-4. Develop a Career Plan.** HS-IHS-4

1. Compare careers within the health science career pathways: therapeutic, diagnostic, health informatics, environmental support, and biotechnology research and development. HS-IHS-4.1
2. Discuss levels of education, credentialing requirements, and employment trends in healthcare. HS-IHS-4.2
3. Analyze personal career goals and develop a career plan. HS-IHS-4.3
4. Analyze the roles and responsibilities of individual members as part of the health care team, including their ability to promote the delivery of quality health care. HS-IHS-4.4
5. Discuss complementary health practices and career opportunities. HS-IHS-4.5
6. Recognize methods for building positive team relationships and communication. HS-IHS-4.6
7. Analyze attributes and attitudes of an effective leader. HS-IHS-4.7
8. Apply effective techniques for managing team conflict. HS-IHS-4.8
9. Identify and develop entrepreneurial opportunities in healthcare. HS-IHS-4.9

---

**HS-IHS-5. Evaluate the impact of diversity and ethics on healthcare delivery.** HS-IHS-5

1. Evaluate how diversity affects healthcare delivery. HS-IHS-5.1
2. Compare and contrast personal and workplace ethics. HS-IHS-5.2
3. Recognize ethical issues and their implications related to healthcare. HS-IHS-5.3
4. Examine ethical dilemmas that may occur in healthcare. HS-IHS-5.4
5. Demonstrate respectful and empathetic treatment of ALL patients/clients (patient/customer service). HS-IHS-5.5

---

**HS-IHS-6. Demonstrate an understanding of the legal responsibilities, limitations, and implications of actions within the healthcare delivery setting. Evaluate the importance of duties according to regulations, policies, laws, and legislated rights of clients.** HS-IHS-6

1. Analyze the basic legal responsibilities of healthcare workers in regards to torts, malpractice, and negligence, invasion of privacy, privileged communication, patient/client confidentiality, and informed consent. HS-IHS-6.1
2. Discuss patients' rights and responsibilities. HS-IHS-6.2
3. Explain standards for Health Insurance Portability and Accountability Act (HIPAA). HS-IHS-6.3
5. Evaluate the importance of institutional policies and procedures. HS-IHS-6.5

---

**HS-IHS-7. Identify and demonstrate the various methods of providing and obtaining information from patients, family members, other agencies, and other members of the healthcare team.** HS-IHS-7

1. Interpret verbal and nonverbal communication. HS-IHS-7.1
2. Recognize barriers to communication. HS-IHS-7.2
3. Report subjective and objective information. HS-IHS-7.3
4. Recognize the elements of communication using a sender-receiver model. HS-IHS-7.4
5. Apply speaking and active listening skills. HS-IHS-7.5
6. Recognize elements of written and electronic communication (spelling, grammar, and formatting). HS-IHS-7.6
7. Use roots, prefixes, and suffixes to communication information. HS-IHS-7.7
8. Utilize current and acceptable medical abbreviations and terminology with the electronic medical record and in other forms of medical communication. HS-IHS-7.8
9. Recognize legal and ethical implications of electronic communications. HS-IHS-7.9

---

**HS-IHS-8. Practice preventive health behaviors personally and professionally.** HS-IHS-8

1. Apply behaviors that promote health and wellness. HS-IHS-8.1
2. Describe strategies to maintain a healthy lifestyle. HS-IHS-8.2
3. Create a stress management plan. HS-IHS-8.3

---

**HS-IHS-9. Analyze different types of microorganisms and their defining characteristics to reduce the risk of infection or illness. Demonstrate physicochemical methods and the use of PPE in preventing and controlling the spread of microbial growth.** HS-IHS-9

1. Define and describe the need for asepsis and infection prevention in the classroom, laboratory, and in the healthcare environment. HS-IHS-9.1
2. Compare and demonstrate various physical (hand washing and PPE) and chemical methods (cleaning, disinfection, and sterilization) used to control or prevent microbial growth. HS-IHS-9.2
3. Examine the evaluation and spread of antibiotic resistant pathogens. HS-IHS-9.3
4. Analyze ways microorganisms are spread using the chain of infection model. HS-IHS-9.4
5. Utilize personal protective equipment (PPE) and apply personal safety procedures based on OSHA (Occupational Health and Safety Administration) and the Centers for Disease Control and Prevention (CDCP). HS-IHS-9.5
6. Describe methods of controlling the spread and growth of microorganisms. HS-IHS-9.6
7. Discuss Hospital Acquired Infection (HAI), the HAI standards and reporting of HAI. HS-IHS-9.7
8. Discuss immunizations and the schedule for vaccinations. HS-IHS-9.8

---

**HS-IHS-10. Demonstrate CPR, First Aid, and the AED utilizing current standards.** HS-IHS-10

---

**HS-IHS-10-1. Analyze differences in pulse and respiratory rates in adult, child, and infant.** HS-IHS-10-1

---

**HS-IHS-10-2. Discuss the function of the respiratory and circulatory systems and what happens with these systems during cardiac arrest and then during cardiopulmonary resuscitation.** HS-IHS-10-2

3. Demonstrate how to locate pulse points and how to check pulse and respiratory rates. HS-IHS-10.3
4. Successfully complete CPR, AED, and First Aid training according to American Heart Association or American Red Cross, or other nationally recognized certifying agency. HS-IHS-10.4

---

**HS-IHS-11. Describe the stages of development from birth to adulthood (i.e. neonatal period, infancy, childhood, adolescence and puberty, adulthood, and geriatrics).** HS-IHS-11

1. Compare and contrast life stages as it relates to growth and developmental needs. HS-IHS-11.1
2. Examine the common theories of growth and development (Erickson, Maslow). HS-IHS-11.2
3. Discuss the social, physical, mental, and spiritual needs throughout the different life stages. HS-IHS-11.3
4. Discuss age-appropriate healthcare needs. HS-IHS-11.4

---

**HS-IHS-12. Utilize information technology applications required within all career specialties. Demonstrate use as appropriate to healthcare applications.** HS-IHS-12

1. Identify methods and types of data collected in healthcare. HS-IHS-12.1
3. Differentiate between types and content of health records (patient, pharmacy, and laboratory). HS-IHS-12.3
4. Ensure that documentation in the health record reflects timeliness, completeness, and accuracy. HS-IHS-12.4
5. Adhere to information systems policies and procedures as required by national, state, local, and organizational levels. HS-IHS-12.5
6. Apply the fundamentals of privacy and confidentiality policies and procedures. HS-IHS-12.6
7. Identify legal and regulatory requirements related to the use of personal health information. HS-IHS-12.7
8. Identify and apply policies and procedures for access and disclosure of personal health information. HS-IHS-12.8
9. Describe the consequences of inappropriate use of health data in terms of disciplinary action. HS-IHS-12.9
10. Describe appropriate methods to correct inaccurate information/errors personally entered into an electronic medical record (EMR). HS-IHS-12.10
11. Apply basic computer concepts and terminology in order to use computers and other mobile devices. HS-IHS-12.11
13. Demonstrate basic computer operating skills. HS-IHS-12.13
14. Demonstrate use of basic file organization and information storage. HS-IHS-12.14
15. Use basic word processing, spreadsheet, and database applications. HS-IHS-12.15
16. Evaluate the validity of web-based resources. HS-IHS-12.16
17. Demonstrate use of appropriate email and social media. HS-IHS-12.17
2. Use health record data collection tools (such as input screens, document templates). HS-IHS-12.2

---

**HS-IHS-13. Apply mathematical computations related to healthcare procedures.** HS-IHS-13

2. Analyze diagrams, charts, graphs, and tables to interpret healthcare results. HS-IHS-13.2
1. Utilize metric and household, conversions and measurements as related to healthcare procedures and treatments. HS-IHS-13.1
3. Record time using the 24-hour clock. HS-IHS-13.3

---

**HS-IHS-14. Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.** [HS-IHS-14](#)

1. Research the history of HOSA-Future Health Professionals. [HS-IHS-14.1](#)
2. Discuss the mission, purpose, motto, colors, official dress and other distinguishing characteristic of HOSA. [HS-IHS-14.2](#)
3. Explain how participation in HOSA can promote lifelong responsibility for community service and professional growth and development. [HS-IHS-14.3](#)
4. Create a personal leadership plan to participate in programs, conferences, community service and competitive events on the local, region, state, and national level that align with the competencies, skills, and knowledge of this course. [HS-IHS-14.4](#)