Sul Ross State University Dual Credit BB-RISE/Carrizo Springs

College of Health Sciences Intro to Health Sciences (HSCI 1302)

Semester: Fall 2025 Credits: 3 SCH

Instructor Information

Alpine High School: Gayla Ward

Carrizo Springs: TBD

Sul Ross State University: Dean Culpepper

Course Description

This course introduces students to the health sciences profession within the Texas Career & Technical Education (CTE) Health Science Cluster framework. Students will explore career clusters, pathways, and opportunities in health sciences including direct patient care, diagnostic services, health informatics, support services, and biotechnology research and development. Emphasis is placed on workforce needs in Texas and the nation, professional roles and responsibilities, interprofessional collaboration, ethical/legal issues, and foundational skills for success in health careers.

Learning Outcomes (aligned with Texas CTE Health Science Cluster)

By the end of this course, students will be able to:

- 1. **Explore Career Pathways** Identify and describe the major health science career clusters and related education/training pathways.
- 2. **Demonstrate Foundational Knowledge** Define key medical terminology, health systems, and roles across care settings.

- 3. **Apply Professional Standards** Discuss safety, legal, and ethical considerations in healthcare practice.
- 4. **Analyze Workforce Trends** Evaluate current and projected workforce needs, including rural and underserved regions in Texas.
- 5. **Practice Interpersonal Skills** Demonstrate teamwork, communication, and professional behavior in simulated health care scenarios.
- 6. **Develop Career Readiness** Create a career exploration portfolio including resume, pathway plan, and reflection on long-term goals.

Texas CTE TEKS Alignment

This course addresses the following TEKS from the **Health Science Cluster**:

- 130.121(c)(1) Foundations of Health Science (A) Identify career opportunities; (B) Research education, certification, and licensure requirements.
- 130.122(c)(2) Health Science Theory (B) Apply health and safety standards; (C) Recognize ethical and legal standards.
- 130.124(c)(3) Practicum (E) Demonstrate employability skills including communication, leadership, and teamwork.

Required Text & Materials

- **Textbook:** Exploring Health Careers, latest edition, [publisher info].
- Supplemental Readings: Provided via Blackboard.
- Supplies: Notebook, access to computer and internet, SRSU email.

Course Topics & Weekly Outline: Suggested Alignment

- Week 1: Introduction to Health Sciences and CTE Health Cluster Overview
- Week 2: U.S. and Texas Health Care Systems Structure and Workforce Needs
- Week 3: Direct Patient Care Careers (Nursing, Medicine, Therapy)
- Week 4: Diagnostic & Laboratory Services
- Week 5: Health Informatics and Administration
- Week 6: Support Services (EMS, Surgical Tech, Public Safety Partnerships)
- Week 7: Biotechnology and Research Careers
- Week 8: Legal and Ethical Issues in Health Sciences
- Week 9: Professionalism, Safety, and HIPAA Basics
- Week 10: Communication and Teamwork in Health Care
- Week 11: Cultural Competence & Health Equity in Texas

- Week 12: Public Health and Community Wellness Careers
- Week 13: Trends in Rural Health & Workforce Shortages
- Week 14: Career Exploration Resume and Portfolio Development
- Week 15: Student Presentations Career Pathway Projects
- Week 16: Final Exam / Portfolio Submission

Assignments & Grading: Suggested

- Quizzes (20%) Weekly knowledge checks.
- Career Exploration Project (25%) Pathway research paper and presentation.
- Portfolio (20%) Resume, career plan, reflections.
- Midterm Exam (15%) Covers Weeks 1–8.
- **Final Exam (20%)** Covers Weeks 9–16.

Grading Scale:

 $A = 90-100 \mid B = 80-89 \mid C = 70-79 \mid D = 60-69 \mid F = 59 \& below$

Course Policies: Suggested

- Attendance and participation are required (CTE model emphasizes professionalism).
- Late assignments lose 10% per day unless prior arrangements are made.
- Academic honesty is expected; plagiarism will result in zero credit.

Career & Technical Education Connection

This course serves as an **entry point** into the Health Sciences Cluster, providing the foundation for advanced CTE-aligned courses in nursing, public health, allied health, and related professional tracks at Sul Ross State University. Students completing this course will have a roadmap for pursuing credentials and degrees that align with Texas workforce needs.