

Principles of Health Science YAG

One Credit | Single-Blocked | Full Year | 36 Weeks | Recommended Grades 9–10

Course Information: PHS = §127.461 Principles of Health Science. The course provides an overview of therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development within the health care industry. Students apply academic knowledge, communication, leadership, career exploration, teamwork, ethical/legal responsibilities, individual rights, safety, and technology to health science contexts. §127.15(d)(1) CTE Employability Skills are integrated throughout. ACCESS supports career awareness, pathway planning, education/credential research, and connections to future Health Science coursework.

GP	Wks	Unit & Focus	Major Learning Tasks & Assessments	Integrated TEKS	Extension Activities
1	1–2	Unit 1 – Health Science Industry, History & Career Systems	• Introduce the Health Science Career Cluster and five health care systems/pathways • Research historical developments that shaped health care • Analyze the economic impact of health services and government influence on the industry • Explore career options, employment information and changing employment situations • Launch a Health Science career portfolio	• PHS1(M–O) • PHS4(A–B) • PHS6(A) • §127.15(d)(1)	• ACCESS: Health Science career exploration • Career pathway profile • Historical health care timeline
1	3–5	Unit 2 – Career Preparation, Credentials & Health Care Teams	• Compare careers across diagnostic, therapeutic, health informatics, support services and biotechnology R&D • Research certification, licensure, registration, continuing education and advanced-degree requirements • Explain collaboration among health care systems and multidisciplinary team members • Examine professional organizations and their role in credentialing/certification • Develop an individualized Health Science pathway plan	• PHS5 • PHS6(A–B) • PHS7(A–B) • PHS4(A–B)	• ACCESS: education/credential requirements • Health career team map • Professional organization research
1	6–8	Unit 3 – Medical Communication, Terminology & Professional Interaction	• Identify effective and ineffective verbal/nonverbal communication • Demonstrate communication that responds to individuals in a diverse society • Evaluate conflict-resolution techniques in health care situations • Interpret, transcribe and communicate introductory medical vocabulary using technology • Practice precise written/oral communication through reports, summaries and presentations	• PHS2(A–D) • PHS1(C–F) • §127.15(d)(1)	• Patient/team communication scenarios • Medical vocabulary practice • Professional presentation
1	9	Unit 4 – Leadership & Health Care Team Meetings	• Identify leadership traits and responsibilities • Practice goal setting, team building and shared decision making • Conduct and participate in a structured health care team meeting • Reflect on leadership, teamwork and professional behavior	• PHS3(A–C) • PHS7(A) • §127.15(d)(1)	• HOSA/CTSO connection • Team meeting simulation • Leadership reflection
2	10–12	Unit 5 – Human Needs, Life Span, Health & Wellness	• Identify human needs using Maslow's Hierarchy of Human Needs • Describe stages of development across the life span • Identify health and wellness concepts throughout the life span • Analyze communication skills for maintaining healthy relationships • Evaluate relationships and wellness strategies that promote physical/emotional health	• PHS1(I–L) • PHS9(B–C)	• Life-span case studies • Wellness plan • Health relationship scenarios
2	13–14	Unit 6 – Homeostasis, Body Mechanics & Applied Health Science	• Describe biological and chemical processes that maintain homeostasis • Identify and analyze body mechanics, forces, movement, torque, tension and elasticity • Convert units between systems of measurement • Apply tables, charts and graphs to solve health-related problems • Connect academic concepts to health occupations and patient-care situations	• PHS1(A–B,G–H)	• Measurement/conversion lab • Body mechanics activity • Health data analysis
2	15–17	Unit 7 – Culture, Diversity & Health Care Delivery	• Identify diverse and cultural influences on contemporary health care delivery • Research and compare health practices across cultures and societies • Demonstrate culturally responsive communication • Analyze diversity/cultural practices influencing individual health care choices • Present findings using accurate research and professional communication	• PHS1(P–Q) • PHS2(B) • PHS9(E) • PHS1(C–F)	• Cultural health practices research • ACCESS/community career connection • Cultural competence case
2	18	Semester 1 Exam – Principles of Health Science	• Cumulative assessment of careers, teams, credentials, communication, leadership, life span, wellness, academic applications and culture • Health Science career portfolio review • Pathway-plan reflection	• Cumulative: PHS1–7; PHS9(B–C,E) • §127.15(d)(1)	• Targeted review/remediation

3	19–21	Unit 8 – Ethics, Confidentiality & Professional Scope	• Compare professional codes of ethics and scopes of practice • Explain ethical behavior and confidentiality and consequences of breaches • Analyze ethical issues related to health care and technological advances • Apply ethical decision-making to realistic health care scenarios • Connect professional limits and accountability to patient safety	• PHS8(A–C) • PHS9(A,D) • §127.15(d)(1)	• Ethics case conference • Confidentiality scenarios • Professional code comparison
3	22–23	Unit 9 – Health Care Law, Liability & Individual Rights	• Examine malpractice, negligence and liability • Research laws governing the health science industry • Identify situations related to patient autonomy • Review documentation related to individual rights and choices • Distinguish legal responsibilities from ethical responsibilities	• PHS8(D–E) • PHS9(A,D)	• Legal case analysis • Patient rights documentation • Scope/liability scenario
3	24–26	Unit 10 – Safety, Infection Prevention & Regulatory Agencies	• Identify major regulatory/governing agencies in health care • Identify industry safety standards including standard precautions and fire prevention • Determine appropriate actions in emergency situations • Relate safety practices to multiple health science settings • Apply professional communication and teamwork during safety simulations	• PHS10(A–C) • PHS2(A–C) • PHS7(A)	• Safety/regulatory agency project • Standard precautions lab/simulation • Emergency response scenarios
3	27	Unit 11 – Disease Prevention & Healthy Communities	• Identify wellness strategies for disease prevention • Analyze how relationships influence physical and emotional health • Connect prevention, health education and community health to Health Science careers • Develop a concise health-promotion message for a defined audience	• PHS9(B–C) • PHS1(E–F,K–L)	• Health promotion product • Community wellness connection • Prevention campaign
4	28–30	Unit 12 – Technology Across Health Science Systems	• Research technological equipment used across all five Health Science systems • Compare how technology supports diagnosis, treatment, information, support and biotechnology work • Identify potential equipment/technology malfunctions • Explain processes for reporting equipment or technology malfunctions • Analyze ethical implications of selected technological advances	• PHS11(A–C) • PHS8(C) • PHS6(A)	• Health technology gallery • Equipment malfunction scenario • Emerging technology research
4	31–33	Unit 13 – Integrated Health Science Case Studies	• Interpret technical health science material and patient/workplace information • Apply measurement, health data, communication, teamwork, ethics, rights and safety to integrated cases • Identify appropriate professionals and systems involved in a case • Use precise language to prepare a written summary and oral case presentation • Reflect on how collaborative care contributes to quality outcomes	• PHS1(A–H) • PHS2(A–D) • PHS6–11 reinforcement	• Interdisciplinary case conference • Team care plan simulation • Professional case presentation
4	34–35	Unit 14 – Health Science Career Capstone & Pathway Transition	• Select and research a Health Science career aligned to personal interests • Document education, credentials, professional organizations, technology and workplace expectations • Explain the career's role within the multidisciplinary health care system • Integrate ethical/legal, safety, communication and cultural considerations • Present a final career/pathway portfolio and next-step plan	• PHS4–8 • PHS10–11 • PHS1(C–F) • §127.15(d)(1)	• ACCESS: final pathway/postsecondary planning • Career capstone • Portfolio presentation
4	36	Semester 2 Exam & Health Science Showcase	• Cumulative assessment of ethics/law, individual rights, safety, prevention, technology and integrated Health Science applications • Final career portfolio and capstone presentation • Reflection on next Health Science course/pathway steps	• Cumulative: PHS1–11 • §127.15(d)(1)	• ACCESS: pathway review • Family/community showcase

Principles of Health Science TEKS Coverage Checklist

Coverage verification: All 11 Principles of Health Science strands and all 47 student expectations in §127.461 are intentionally addressed. §127.15(d)(1) CTE Employability Skills are integrated throughout.

Strand	SEs	Knowledge & Skills Focus	YAG Placement	Coverage
PHS1	A–Q	Academic applications: measurement/data, technical communication, homeostasis/body mechanics, life span/wellness, history/economics/government, culture	Units 1, 3, 5–7, 11, 13–14	100%
PHS2	A–D	Verbal/nonverbal communication, diversity, conflict resolution, medical vocabulary	Units 3, 7, 10, 13	100%
PHS3	A–C	Leadership traits, team building, meetings	Unit 4; reinforced throughout	100%
PHS4	A–B	Career options, employment information and changing employment situations	Units 1–2, 14	100%
PHS5	—	Academic/credential requirements for professional advancement	Units 2, 14	100%
PHS6	A–B	Five Health Science systems and collaborative roles	Units 1–2, 12–14	100%
PHS7	A–B	Multidisciplinary teams and professional organizations	Units 2, 4, 10, 13–14	100%
PHS8	A–E	Codes/scope, confidentiality, ethics/technology, malpractice/negligence/liability, laws	Units 8–9, 12, 14	100%
PHS9	A–E	Autonomy, prevention, relationships/health, rights documentation, diversity/culture	Units 5, 7–9, 11	100%
PHS10	A–C	Regulatory agencies, safety standards, emergencies and health-industry safety	Unit 10; Units 13–14 reinforcement	100%
PHS11	A–C	Health Science technology, malfunctions and reporting processes	Unit 12; Units 13–14 reinforcement	100%
Employability	§127.15(d)(1)	Level 1/2 CTE employability skills	Integrated throughout	100%

Implementation Notes

- Principles of Health Science should remain a broad introductory course. Students should experience all five Health Science systems before later specialization in the district's Health Science pathways.
- Use hands-on demonstrations, simulations, case studies, career speakers, laboratory-style activities and collaborative problem solving where appropriate while maintaining age-appropriate safety and scope.
- Medical vocabulary should be introduced in context throughout the year so students become comfortable accurately interpreting and communicating common health science terms before later Health Science coursework.
- ACCESS should support career exploration, education and credential research, postsecondary planning, and connections between student interests and future Health Science courses and occupations.
- Extended learning through HOSA/CTSO activities, professional associations, health care professionals and community partners is encouraged where available.
- Weeks 18 and 36 are reserved for cumulative semester exams. No instructional unit crosses the semester boundary.