

Professional Technical Studies: Health Science Cluster
Therapeutic Services Pathway

STRAND

PT-TS1

Health Care Foundations

Students investigate health care concepts through the study of anatomy and physiology.

Standard:

PT-TS1a The student will know the academic subject matter required for proficiency within therapeutic services and use this knowledge as needed in their role, so as to:

Components:

PT-TS1a.1 analyze medical and dental terminology:

- interpret medical word roots, prefixes, and suffixes;
- analyze words commonly used in medical/dental care;

PT-TS1a.2 analyze the relationship of tissues, organs, and body systems

- explain the structural units of the body;
- analyzes body tissues and membranes;

PT-TS1a.3 analyze the anatomy and physiology of the integumentary system:

- explain the structure of the integumentary system;
- analyze the function of the integumentary system;
- discuss characteristics and treatment of common skin disorders;

PT-TS1a.4 analyze the anatomy and physiology of the skeleton:

- explain the structure of the bones;
- analyze the function of the skeletal system; discuss characteristics and treatment of common skeletal disorders;

PT-TS1a.5 analyze the anatomy and physiology of the muscles:

- explain the structure of the muscles;
- analyze the function of the muscular system;
- discuss characteristics and treatment of common muscular disorders;

PT-TS1a.6 analyze the anatomy and physiology of the blood:

- explain the structure of the blood;
- analyze the function of the blood; discuss characteristics and treatment of common blood disorders;
- apply OTSA standards for blood borne pathogens;

PT-TS1a.7 analyze the anatomy and physiology of the circulatory system:

- explain the structure of the heart;
- analyze the function of the heart;
- analyze circulation and the blood vessels;
- discuss characteristics and treatment of common cardiac circulatory disorders;

PT-TS1a.8 analyze the anatomy and physiology of the lymphatic system:

- explain the structure of the lymphatic system;

- analyze the function of the lymphatic system;
 - discuss characteristics and treatment of common lymphatic disorders;
 - apply standard OSHA standards for blood borne pathogens;
- PT-TS1a.9** analyze the anatomy and physiology of the respiratory system:
- explain the structure of the respiratory system;
 - analyze the function of the respiratory system;
 - discuss characteristics and treatment of common respiratory disorders;
- PT-TS1a.10** analyze the anatomy and physiology of the nervous system:
- explain the structure of the brain, spinal cord, and nerves;
 - analyze the function of the nervous system;
 - discuss characteristics and treatment of common nervous system disorders;
- PT-TS1a.11** analyze the anatomy and physiology of the special senses:
- explain the structure of the eye;
 - analyze the function of the eye;
 - explain the structure and function of the ear, nose and tongue;
 - discuss characteristics and treatment of common sensory disorders;
- PT-TS1a.12** analyze the anatomy and physiology of the digestive system:
- explain the structure of the digestive system;
 - analyze the function of the digestive system;
 - discuss characteristics and treatment of common digestive orders;
- PT-TS1a.13** analyze nutritional factors that relate to body structure and function:
- analyze the function of nutrients;
 - analyze dietary guidelines;
 - discuss characteristics and treatment of common eating disorders;
- PT-TS1a.14** analyze the anatomy and physiology of the urinary system:
- explain the structure of the urinary system;
 - analyze the function of the urinary system;
 - discuss characteristics and treatment of common urinary disorders;
- PT-TS1a.15** analyze the anatomy and physiology of the endocrine system:
- explain the structure of the endocrine system;
 - analyze the function of the endocrine system;
 - discuss characteristics and treatment of common endocrine disorders;
- PT-TS1a.16** analyze the anatomy and physiology of the reproductive system:
- explain the structure of the male reproductive system;

- explain the function of the male reproduction system;
 - explain the structure of the female reproductive system;
 - explain the function of the female reproductive system;
 - discuss characterizes and treatment of common reproductive disorders; and
- PT-TS1a.17** analyze the health care professions:
- analyze medical/health professions and related employment opportunities;
 - discuss preparation and credentials needed in medical/health professions;
 - analyze professional/ethical characteristics of medical/health professionals;
 - perform mathematical conversions common to the medical/health professions;
 - revise personal career development plan.

STRAND

PT-TS2

Health Care Communications

Students study medical terminology.

Standard:

PT-TS2a The student will know the various methods of giving and obtaining information; both orally and in writing, in a health care setting so as to:

Components:

- PT-TS2a.1** apply medical terminology;
- PT-TS2a.2** understand medical abbreviations; and
- PT-TS2a.3** report medical information, patient history, and patient care status.

STRAND

PT-TS3

Health Care Information

Students learn strategies for collecting and analyzing health care information.

Standard:

PT-TS3a The student will use facility protocol and regulatory guidelines for collecting patient information so as to:

Components:

- PT-TS3a.1** collect and format information using facility protocols and regulatory guidelines;
- PT-TS3a.2** analyze information collected to develop appropriate therapeutic response; and
- PT-TS3a.3** maintain confidentiality according to facility protocol.

STRAND

PT-TS4

Information Technology Applications

Students use computers, networks, and communication technology to access, organize, process, transmit, and communicate information.

Standard:

PT-TS4a The student will use information technology applications appropriate to health care so as to:

Components:

- PT-TS4a.1** apply business skills in a health care setting;
- PT-TS4a.2** file records using the alphabetical and numerical systems; and
- PT-TS4a.3** use telephones and computer technology in the work place.

STRAND
PT-TS5

Ethics and Legal Responsibilities

Students understand the importance of ethical and legal guidelines in the workplace.

Standard:

PT-TS5a The student will understand legal responsibilities, limitations and implications of their actions within the health care delivery setting; perform duties according to regulations, policies, laws and legislated rights of clients; and understand accepted ethical practices with respect to cultural, social and ethnic differences within the health care environment, so as to:

Components:

PT-TS5a.1 analyze legal roles and responsibilities;
PT-TS5a.2 evaluate ethical behavior in a health care setting;
PT-TS5a.3 explore legal and ethical issues related to death and dying; and
PT-TS5a.4 understand patient confidentiality and HIPPA regulations.

STRAND
PT-TS6

Safety, Health, and Environment

Students understand the importance of safety, health, environmental, and regulatory compliance in the workplace.

Standard:

PT-TS6a The student will understand existing and potential hazards to clients, co-workers and self; and prevent injury or illness through safe work practices by following health and safety policies and procedures;

Components:

PT-TS6a.1 promote safety practices in a health care setting;
PT-TS6a.2 apply body mechanics and client safety measures;
PT-TS6a.3 observe fire safety;
PT-TS6a.4 follow OSHA blood borne pathogens guidelines; and
PT-TS6a.5 dispose of contaminants following hospital protocols.

STRAND
PT-TS7

Systems

Students use an organized set of ideas and principles to explain or interact among structured organizations.

Standard:

PT-TS7a The student will understand how their role fits into departments, organizations, and the overall health care environment, so as to:

Components:

PT-TS7a.1 analyze the health care delivery system;
PT-TS7a.2 analyze health care facilities, including government and non-profit agencies; and
PT-TS7a.3 explore health insurance, organizational structure, and trends in health care.

STRAND
PT-TS8

Leadership and Teamwork

Students collaborate with others to accomplish goals and objectives.

Standard

PT-TS8a The student will understand the roles and responsibilities of individual members as part of a health care team, including their ability to promote the delivery of quality health care so as to:

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Components:	PT-TS8a.1	distinguish appropriate role and responsibilities of each team member;
	PT-TS8a.2	respect and value the expertise and contribution of all team members; and
	PT-TS8a.3	perform task in a pleasant and cooperative manner.
Standard	PT-TS8b	Health care workers will be able to communicate patient information among team members allowing for feedback as needed so as to:
Component	PT-TS8b.1	evaluate relevancy of information to be conveyed; and
	PT-TS8b.2	formulate and report information in a way that is clear and concise.

**STRAND
PT-TS9**

Client Interaction/Communication

Standard:	PT-TS9a	The student will be able to explain planned procedures to patients and health professionals including goals, side effects and coping strategies so as to
Components:	PT-TS9a.1	assess patient's understanding of information provided;
	PT-TS9a.2	demonstrate empathy for patients;
	PT-TS9a.3	modify communication to the needs of the patient and appropriate situation;
	PT-TS9a.4	develop clear written patient information and instruction;
	PT-TS9a.5	keep written records as appropriate within facility policies and protocols; and
	PT-TS9a.6	communicate with patient with respect and dignity.

**STRAND
PT-TS10**

Health Maintenance Practices

Standard:	PT-TS10a	The student will understand the fundamentals of wellness and the prevention of disease processes and practice preventive health behaviors among clients so as to:
Components:	PT-TS10a.1	apply infection control measures in a clinical setting;
	PT-TS10a.2	analyze principles of infection control; and
	PT-TS10a.3	maintain sterile technique and isolation.

**STRAND
PT-TS11**

Treatment Planning and Implementation

Standard	PT-TS11a	The student will understand the purposes of the treatment plan and collaborate in planning procedures that support the goals for the patient according to facility protocol, regulatory guidelines and within their scope of practice, so as to:
Component	PT-TS11a	create a treatment plan using a problem-solving model, incorporating patient input;
	PT-TS11a.2	select appropriate resources to implement treatment plan;
	PT-TS11a.3	evaluate the plan for appropriate outcomes;
	PT-TS11a.4	evaluate priorities in order to organize work;

- PT-TS11a.5** use equipment and instruments according to the manufacturer's guidelines and accepted safety practice; and
- PT-TS11a.6** document actions according to facility protocol and regulatory guidelines.

STRAND
PT-TS12

Standard

Technical Skills

PT-TS12a The student will apply technical skills required for all career specialties so as to:

Component

- PT-TS12a.1** provide first aid in an emergency setting;
- PT-TS12a.2** acquire certification in cardiopulmonary resuscitation;
- PT-TS12a.3** provide basic first aid;
- PT-TS12a.4** apply diagnostic skills in a clinical setting;
- PT-TS12a.5** measure and record vital signs;
- PT-TS12a.6** apply medical assisting and laboratory skills;
- PT-TS12a.7** analyze client nutrition and diet therapy;
- PT-TS12a.8** evaluate therapeutic diets;
- PT-TS12a.9** apply skills related to dental and pharmaceutical careers;
- PT-TS12a.10** identify teeth and dental instruments;
- PT-TS12a.11** work with medications and mathematical conversions;
- PT-TS12a.12** apply patient care skills in a clinical setting;
- PT-TS12a.13** position, turn and transfer patients;
- PT-TS12a.14** make a bed;
- PT-TS12a.15** administer personal care and apply restraints;
- PT-TS12a.16** apply therapeutic skills for rehabilitation and injury prevention in sports medicine and physical therapy;
- PT-TS12a.17** demonstrate assistive and therapeutic techniques; and
- PT-TS12a.18** analyze the therapeutic role of massage therapy and sports medicine.

STRAND
PT-TS13

Standard:

Monitor Client Status

PT-TS13a The student will monitor and assess patient's health status, and develop appropriate therapeutic response based on facility protocol, so as to:

Components:

- PT-TS13a.1** analyze and assess patient response;
- PT-TS13a.2** assess need for follow up and changes to treatment plan; and
- PT-TS13a.3** respond to patient health changes as prescribed by facility protocol.

STRAND
PT-TS14

Standard:

Evaluate patient response to administered treatments and procedures

PT-TS14a The student will evaluate patient's needs, strengths and problems in order to determine if treatment goals are being reached so as to:

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Components:	PT-TS14a.1 choose appropriate evaluation tools to assess patient response to treatment plan;
	PT-TS14a.2 analyze information gathered; and
	PT-TS14a.3 revise or create modifications to treatment plan based on patient response.

STRAND

PT-TS15

Employability and Career Development

Students use skills to plan career paths and pursue career opportunities.

Standard	PT-TS15a The student will understand how employability skills enhance their employment opportunities and job satisfaction so as to:
Component	PT-TS15a.1 practice effective employability skills;
	PT-TS15a.2 demonstrate the professional qualities of a health care worker;
	PT-TS15a.3 apply customer service skills in a health care setting; and
	PT-TS15a.4 develop and apply skills related to a specific career goal.