

Health Science Practicum

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Health Science Practicum

Introduction

This Practicum is designed to be used by new and veteran teachers who would like to enhance their students' performance by utilizing computer generated projects. The purpose of these lessons is to transform the classroom into a lab setting with the students becoming self-driven learners and the teacher taking on the role of facilitator.

The material is adaptable and may be presented in any order the teacher chooses. Detailed lesson plans are provided which include handouts and activities.

Each unit contains at least one multimedia presentation; therefore, the teacher will need to use a desktop or laptop computer attached to a projector in order to present the materials to the class.

Customarily, students enrolled in a Practicum course are placed on jobs prior to the onset of the school year. Of course, there are often a few students who will need job placement by the teacher once school starts. Students must be employed and a training plan must be filed within 14 days of the start of the school year. It is important that all Texas Education Agency rules are followed and adequate records are kept, in the event of an audit by a representative from TEA.

The teacher is required to visit each training sponsor regarding student progress at least once per each six-week grading period, regardless of whether or not the school calendar adheres to a six week or nine week grading period.

Preparation for the First Class Day

Classroom

- Are the students desks arranged the way you would like them to be for optimal class instruction?
- Is your desk in an area where it will be easy to manage the class?
- Do you have all the things you will need already in place at your desk? (a calendar/unit planner, grade book, pencils, pens, notepad, etc.)
- Is the furniture easy to walk around?
- Are bulletin boards prepared and attractive to students?
- Do you have a space prepared for students to turn in work?
- Is the lighting in the room appropriate?
- Are the materials organized and easy to access?
- Do you have an emergency exit plan posted in the room?

Students/Parents

- Have you prepared the letters to the students and parents within the General Housekeeping portion of the Practicum?
- Have you prepared home folders for the students?

Instruction

- Have you prepared a script of what you are going to do the first day?
- Do you have a classroom management plan prepared to establish?
- Do you know what procedures you are going to use in managing your class?
- Is there a sign-in paper or do you have a roll calling system ready to put in place?
- Do you have an activity/procedure for students who arrive before the bell rings?
- Do you have a grading system ready?
- Do you have ice breakers/team builders ready to do on the first day?

Useful Websites

- **Texas Education Agency**

www.tea.state.tx.us/

- **Career and Technical Education**

<http://cte.unt.edu/>

- **O*NET**

<http://www.onetonline.org/>

- **All Club Information**

Dues and registration for most of the youth organizations is conducted on-line.

www.tea.state.tx.us/

- **Parliamentary Procedure (Robert's Rules of Order):**

http://www.ohio.edu/csen/upload/gen_info_roberts_rules_of_order.pdf

- **Research**

<https://www.tsl.state.tx.us/elibrary>

<http://www.si.edu/>

Practicum Schedule

Topic	Activity	Time Frame
Safety in the Workplace	Notes, Activities, and Projects	7 Class Periods
Communication Barriers	Notes, Activities, and Projects	4 Class Periods
Technical Writing	Notes, Activities, and Projects	6 Class Periods
Patient Education	Notes, Activities, and Projects	2 Class Periods
Advanced Human Relations	Notes, Activities, and Projects	2 Class Periods
Team Teaching	Notes, Activities, and Projects	4 Class Periods
Service Learning	Notes, Activities, and Projects	Will Vary
Professional Liability & Marketplace	Notes, Activities, and Projects	4 Class Periods
A & P Worldwide	Notes, Activities, and Tests	6 Class Periods
Understanding Pathophysiology	Notes, Activities, and Projects	4 Class Periods
History and Physical II	Notes, Activities, and Projects	6 Class Periods
Entrepreneurship in Healthcare	Notes, Activities, and Projects	6 Class Periods
Emerging Technologies in Medicine	Notes, Activities, and Projects	12 Class Periods
Computers in Medicine	Notes, Activities, and Projects	6 Class Periods
Academic Requirement Research	Notes, Activities, and Projects	8 Class Periods
Portfolios	Notes, Activities, and Projects	6 Class Periods
Additional Activities	N/A	N/A
Personal Management	Notes, Activities, and Projects	5 Class Periods
Career Pathways	Notes, Activities, and Projects	6 Class Periods
Project Management	Notes, Activities, and Projects	3 Class Periods
Scholarships	Notes, Activities, and Projects	10 Class Periods

*Each Class Period lasts 45 – 50 minutes

SAFETY IN THE WORKPLACE

Course	Rationale
<i>Practicum in Health Science</i>	An understanding of safety as it relates to community and self is necessary for the delivery of quality health care.
Unit I	Objectives
<i>Preparation for Practicum</i>	Upon completion of this lesson, the student will be able to: <ol style="list-style-type: none"> 1. Observe safe procedures in the administration of client care 2. Demonstrate these safe procedures in the clinical setting
Essential Question	Engage
<i>Why are safety practices so important in the workplace?</i>	Ask students if they can define the term “job hazard.” Write possible definitions on the board as students suggest them. See if everyone can agree on a definition, such as: <p style="margin-left: 40px;">A job hazard is anything at work that can hurt you, either physically or mentally.</p> <p>Show safety video clips found on www.prevent-it.ca to start discussion.</p>
TEKS	Key Points
<i>130.205 6A, 6B, 6C, 6D</i>	I. Meaning of safety <ol style="list-style-type: none"> A. Freedom from danger, risks, injury B. An attitude or way of reacting toward hazardous, or unsafe, conditions that will protect both the health care provider and the client/resident C. Any unsafe practice should be reported immediately D. Horseplay has no place in a health care setting, because it can lead to an accident
Prior Student Learning	II. Causes of accidents <ol style="list-style-type: none"> A. Poor judgment – not recognizing the danger in a situation B. Physical limitations – lack of ability to avoid or prevent an accident C. Lack of training D. Some environments are hazardous; identification of these hazards will
<i>Chain of Infection</i>	
Estimated time	
<i>3-7 hours</i>	

helps to prevent accidents

- E. Not knowing the client, identifying the wrong client, or not knowing the client's abilities

III. OSHA

- A. Occupational and Safety Act of 1970
- B. Under the Department of Labor; Secretary of Labor can enforce laws requiring safety in the work place

IV. Client care safety

A. Bed safety

1. Keep bed at working height if caring for a client in bed
2. When leaving a room or getting a client out of bed, lower the bed to the lowest level
3. Watch for bed cranks, wheels, and linen to trip people
4. Children's environment should be adjusted dependent upon the child's age and developmental ability
5. Lock wheels on bed at all times
6. Wash hands before and after caring for client/resident
7. Side rails on a bed are viewed as a restraint and should only be used if directed to do so

B. Wheelchair safety

1. Push wheelchairs from behind except going in and out of elevators or down curbs or ramps; then back in to elevator or down ramp
2. Fasten safety straps to secure the client/resident
3. Do not let client's lap cloth drag on the floor
4. Set brakes when chair is still
5. Park chair in a safe place out of the traffic
6. Pad chair to prevent pressure and possible skin breakdown
7. Wash hands before and after caring for a client/resident

C. Stretcher/Gurney safety

1. Strap client onto stretcher with arms at side or folded against the chest
2. Cover the client but don't let the cover drag on the floor
3. Stand and push at client's head, except when going down ramp; then stand at feet and control the descent of the stretcher
4. Never move a stretcher at a fast pace
5. Never leave a client unattended unless instructed to do so by the person in charge
6. Set brakes on parked stretcher
7. Wash hands before and after caring for a client/resident

D. Restraint safety

1. There are many types of restraints: soft, leather; wrist, waist, and vest
2. Restraints require a doctor's order to be applied

3. Restraints should be applied only to the level of keeping the client and others safe
 4. If a restraint is tied, the knots should not be placed at a bony prominence or in an area where pressure sores might develop
 5. If a client is restrained, he/she should be checked every 15-30 minutes; restraints should be released every 2 hours
 6. Restraints should be used only for the duration ordered or for the duration of usefulness
 7. Restraints are tied to the bed frame, not the side rails
 8. The limb restrained should be checked frequently for impaired circulation – blueness, swelling, or pale
 9. Use a clove hitch knot or double clove hitch knot
- E. General safety with clients
1. Identify client prior to giving care by looking at client identification bracelet
 2. Perform the five checks before leaving any client's/resident's room:
 - a. Check to see if side rails are up (if supposed to be); is bed the same as when you entered – i.e. HOB up if tube feeding in place?
 - b. Is bed in the lowest position?
 - c. Is client comfortable and in good alignment?
 - d. Are call bell and supplies within reach?
 - e. Are wheels of bed locked?
 3. Always wash hands before and after giving care.
- F. Oxygen safety
1. Oxygen does not burn, but it supports combustion
 2. Flammable materials such as oils should not be used around oxygen
 3. Store and use oxygen safely away from hot sources and sunlight
 4. Keep oxygen on a stand; tanks that fall can begin spinning out of control if the oxygen begins to leak; don't use if tank is cracked or you have difficulty in opening the tank
 5. Humidify oxygen
 6. Give skin care regularly, especially to nasal area
 7. Crack tanks away from your eyes and the eyes of others
 8. Use only oxygen that is designated safe for humans – with USP on tank standing for United States Pharmacopoeia
 9. Always use a regulator on an Oxygen tank
- V. Housekeeping safety
- A. Clean spills immediately
1. If the spill origin is unknown, it should be considered to be a hazardous substance
 2. Caution signs must be displayed after spill has been cleaned and floor is still wet
- B. Housekeeping equipment must be stored out of the way when not in use;

- staff should help clients to keep their areas neat, clean, and tidy
 - C. Check linens for pins, dentures, lancets, etc. before sending to laundry
 - D. Light bulbs must be replaced immediately after burning out
 - E. Paper towels must be made available at all times; empty dispensers must be reported immediately
 - F. Never mix solutions; for example, a mixture of bleach and ammonia can form poisonous fumes
 - G. Read labels of solutions three times before using:
 - 1. when removing from shelf
 - 2. when pouring
 - 3. when replacing
- VI. Fire safety
- A. In health care setting, fire is one of the greatest concerns
 - B. Prevention is the number one item in a health facility's safety program
 - C. Three elements needed for fire (fire triangle) – all elements must be present
 - 1. fuel
 - 2. heat
 - 3. oxygen
 - D. To stop a fire, at least one element must be removed
 - E. If fire occurs -- RACE
 - 1. R = Rescue
 - 2. A = Alarm (pull alarm or call operator)
 - 3. C = Contain (shut windows and doors, or contain with pillow or blanket)
 - 4. E = Evacuate (if fire and smoke a threat)
 - a. know when and how to evacuate
 - b. know where fire exits are located
 - c. maintain fire extinguishers clear of obstructions
 - d. know your responsibilities in a fire/evacuation situation
 - e. smoke and panic kill more people than the fire itself
 - f. evacuate the ambulatory first, then wheelchair bound, last bed bound
 - 5. Fire extinguishers
 - a. Class A = Common combustibles – ash is the by-product – contain pressurized water
 - b. Class B = Flammable liquids -- contains carbon dioxide
 - c. Class C = Electrical -- contains potassium bicarbonate or chloride, which can be irritating to the skin or eyes
 - d. Class D = Combustible metals i.e. magnesium, verillium
 - e. An ABC fire extinguisher can be used on all types of fire
 - 6. Use of fire extinguisher -- PASS

- a. P = Pull pin
 - b. A = Aim at base
 - c. S = Squeeze handle
 - d. S = Sweep nozzle from side to side to displace oxygen away from fire
- 7. Never use an elevator in the event of a fire as it creates a draft
 - 8. Windows should not be opened if there is a fire as it creates a draft
 - 9. If smoke is coming from under a door, the door is hot to the touch, or the doorknob is hot to the touch, DO NOT OPEN THE DOOR

VII. Electrical safety

- A. Electricity is a vital part of health care; today's delivery of health care is not possible without electricity
- B. Dangers of electricity include
 - 1. Electrical shock
 - 2. Fire
 - 3. Explosion
 - 4. Burns
- C. Two things to remember about electricity
 - 1. Follows the path of least resistance.
 - 2. Always seeks ground – which is why ground wires have been placed on all equipment in the hospital
 - 3. Ground wires allow electricity to flow back to the grounding system and prevent it from flowing through unwanted conductors – i.e. people
- D. Basic working of electricity
 - 1. It flows in a circle or circuit
 - 2. Danger is when a person becomes part of the circuit
 - 3. This happens if electricity is allowed to leak
 - a. shorts
 - b. frayed cords
- E. Effects on people
 - 1. Disrupts the body's own electrical currents causing pain, paralysis, and muscle contraction
 - 2. The heart is especially vulnerable because it has its own electrical current
 - 3. Skin is an insulator; clients can be vulnerable to even small shock because the skin is less resistant due to wetness, cuts and wounds, IV's, catheters, etc.
- F. Prevention
 - 1. All equipment should have three prongs; never use cheaters
 - 2. Check cords for frays and cracks
 - 3. Personal equipment should be checked by the medical emergency department for safety

4. Follow manufacturer's instructions for use and maintenance of equipment
5. Disconnect and report tools or equipment that sparks, gets too hot, stalls, trips the breaker, or gives shocks

VIII. Hazard Communication

- A. Right to Know bill that is Federal law since 1987
- B. States the responsibility of employers in regards to hazardous substances in the work environment
- C. OSHA oversees compliance
- D. Comprehensive list of all products that contain hazardous chemicals must be kept in the health care facility.
- E. Unidentified spills in the health care environment should be cleaned by Environmental Services
- F. MSDS – Material Safety Data Sheet must be maintained on every substance that is on the comprehensive list of all products
- G. MSDS must contain
 1. manufacturer's name and address
 2. safety exposure limits
 3. symptoms of over-exposure
 4. emergency procedures
 5. fire and explosion information
 6. special protection information
 7. health hazards
 8. spill/leak information
 9. hazardous ingredients
 10. physical information
 11. modes of body entry
 12. special precautions
- H. MSDS Labels and meaning
 1. All hazardous materials containers must be labeled
 2. If label is missing, illegible, worn, or incomplete – it must be replaced
 3. Chemical name must be present
 4. Health hazard must be indicated
 5. Level of flammability must be indicated
 6. Level of reactivity also indicated
 7. Personal protective equipment required must be on MSDS form
 8. Rating – 0 = no hazard
1 = slight hazard
2 = moderate hazard

3 = high hazard

4 = extreme hazard

- 9. Failure to comply results in fine – possibly up to \$10,000 per container violation

IX. Driving Safety

- A. Wear a seat and shoulder belt while driving
- B. NEVER exceed the posted speed limit
- C. Must have and maintain a VALID Texas driver's license
- D. All drivers must have and maintain CURRENT proof of insurance
- E. If you are involved in a vehicle accident while working, contact the supervisor or manager immediately

X. Dealing with Difficult People

- A. DO NOT get involved in an altercation; tell the manager
- B. DO NOT argue or confront someone who may be intoxicated; excuse yourself politely and get the manager
- C. Always use your best judgment in any situation

Activity

- I. Role play workplace scenarios using safety hazard pictures
- II. Evaluate safety at job site utilizing the Safety Checklist
- III. Complete the MSDS activity
- IV. Complete the Emergency Plan activity

Assessment

Successful completion of Safety Test.

Teacher Note

Students must pass this test with an 80% in order to participate in work based learning. If a student does not meet that requirement, they are allowed one retake of the test. (See Safety Test B) If still unable to pass, they will work in the library during the work based learning experience, writing a paper on safety in the health care setting.

Materials

Safety Checklist for Job Site

MSDS Key

Copy of MSDS sheets

Personal Protective Equipment

Key for Safety Test

Key for Safety Test B

<http://www.prevent-it.ca/> -- Scroll down on page for public service announcement for work place safety.

Accommodations for Learning Differences

For reinforcement, the student will review material and retake the safety test.

For enrichment, the student will teach a safety lesson to the class on one of the key point topics.

National and State Education Standards**National Health Science Cluster Standards**

HLC06.01 Health care workers will understand the existing and potential hazards to clients, co-workers, and self. They will prevent injury or illness through safe work practices and follow health and safety policies and procedures.

TEKS

130.205 (c)(6)(A) integrate regulatory standards such as standard precautions and safe patient handling;

130.205 (c)(6)(B) respond to emergencies consistent with the student's level of training such as fire and disaster drills;

130.205 (c)(6)(C) evaluate hazardous materials according to the material safety data sheets; and

130.205 (c)(6)(D) apply principles of infection control and body mechanics in all aspects of the health science industry.

Texas College and Career Readiness Standards

English Language Arts

- I. A. 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.
- II. A. 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.
- III. B. Develop effective speaking styles for both group and one-on-one situations.
- IV. A. Apply listening skills as an individual and as a member of a group in a variety of settings.
- V. A. 2. Explore a research topic.
- V. B. 3. Synthesize and organize information effectively.

Science

- I. A. 1. Utilize skepticism, logic and professional ethics in science.

Social Studies

- I. E. 4. Identify and evaluate the sources and consequences of social conflict.

Material Safety Data Sheets (MSDS)

The Texas Hazard Communications Act requires that technical bulletins detailing information about hazardous chemicals be available for each hazardous chemical stored in a school or work facility. These sheets must be readily available for reference by employees and laboratory students. When reading an MSDS, the following considerations should be taken.

The MSDS often outlines only the minimum precautions for safe handling of the chemical. Thus, if the employer's or reader's judgment suggests more stringent procedures, those procedures should be used.

In many cases, the emergency first aid procedures and handling precautions are written to deal with a worst-case scenario, such as an extensive exposure. Minor accidents may not require the same level of response. Seek the advice of an expert. React prudently.

Do not assume a substance is hazard free if there is no mention of a particular health effect in the MSDS. A particular hazard may not have been known at the time the MSDS was written.

The MSDS should be complete without blank spaces. Question the supplier if blank spaces are found. If data are not available, the MSDS sheet should indicate so in the space provided.

Study the MSDS provided carefully. Answer the questions below in complete sentences on a sheet of notebook paper.

1. Which substance is described by this MSDS?
2. What is the chemical formula of this substance?
3. List two descriptions of this substance. Why is this information important?
4. What are the specific health hazards associated with the substance?
5. How would a spill of this substance be handled?
6. Which first aid procedures would be used in case of skin contact with this substance?
7. Select three hazardous chemicals that are commonly used in health care settings. Find an MSDS for each chemical. Highlight important handling information for each chemical including fire/explosion potential, reactivity data, health hazard data, and emergency/first aid procedures.

MATERIAL SAFETY DATA SHEET

CHEMICAL NAME & SYNONYMS SUDAN IV SOLUTION		FLINN CATALOG NUMBER S0160
FORMULA Mixture	FORMULA OR ATOMIC WEIGHT Mixture	CAS NUMBER 85-83-6 as Sudan IV
PHYSICAL DATA (DENSITY, SOLUBILITY, ETC.) Consists of: Sudan IV dry powder, acetone and ethyl alcohol.		
APPEARANCE AND COLOR Red liquid; distinct alcohol odor.		
COMPATIBLE CHEMICAL FAMILY Organic #2 See Flinn Chemical Catalog/Reference Manual	DOT CLASS Flammable Liquid	REACTIVITY Stable
CONDITIONS TO AVOID (IF ANY): Avoid heat. Avoid sources of ignition, i.e. (open flame, sparks).		
HEALTH HAZARDS (IF ANY): Toxic as ethyl alcohol. Not all health aspects of this substance have been fully investigated.		THRESHOLD LIMIT VALUE (TLV) IF ESTABLISHED 1000 ppm as ethyl alcohol or acetone.
FIRE HAZARDS (IF ANY): Use a triclass, dry chemical fire extinguisher. Flammable liquid.		
SPILLS AND LEAKS: Absorb on sand or vermiculite. Place in a suitable container. Use the disposal method listed on the right.		DISPOSAL METHOD 18b See Flinn Chemical Catalog Reference Manual
SPECIAL PRECAUTIONS (IF ANY): Wear chemical gloves and goggles. Use and dispense in a hood.		
FIRST AID (IF SUBSTANCE DANGEROUS): External: Wash affected parts with copious quantities of water. Internal: Wash mouth; see a physician. Eyes: Wash continuously for 15 minutes. See a physician. Respiratory: Transport to fresh air.		
Consult your copy of the Flinn Chemical Catalog/Reference Manual for even more information about laboratory chemicals		

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Key - Material Safety Data Sheets (MSDS)

1. Which substance is described by this MSDS?

Sudan IV Solution

2. What is the chemical formula of this substance?

Mixture

3. List two descriptions of this substance. Why is this information important?

Red liquid, distinct alcohol odor.

4. What are the specific health hazards associated with the substance?

Toxic as ethyl alcohol. Not all health aspects have been fully investigated.

5. How would a spill of this substance be handled?

Absorb on sand or vermiculite. Place in a suitable container.

6. Which first aid procedures would be used in case of skin contact with this substance?

External: Wash affected parts with copious quantities of water.

Internal: Wash mouth; see a physician.

Respiratory: Transport to fresh air.

Eyes: Wash continuously for 15 minutes; see a physician.

7. Answers will vary.

Emergency Plan

Choose a particular health care setting (clinic, hospital, nursing home, emergency department, etc.). Consider the various types of disasters, both internal (example – bomb threat or suspicious package) and external (example – tornado or earthquake). Select six different specific disaster events and write about how the health care facility might go about addressing each of those events. What must they do to keep their employees and patients safe? How can they effectively handle incoming patients who are affected by external disasters? What should the employees be asked to do to help? Where is the facility's evacuation location?

Job Site Safety Checklist

Answer the following questions at your job site.

1. Does my job opportunity require any personal protective equipment such as protective gloves, eyewear, mask, back belts?
2. Will I be using any chemicals and if so, where is the “Right to know” station and the MSDS sheets?
3. Where are the Fire Exits as compared to my job station?
4. Does the company have an Employee Safety Handbook or company specific training that I will need to complete?
5. Where is the company First Aid Kit located and who has access to it?
6. Where are the fire extinguishers?
7. Where are the emergency telephone numbers posted?
8. Who is the immediate supervisor responsible for my safety?
9. Does the company have any specific rules concerning driving?
10. Where is the lockout/tag out station so that I may identify the tag system used when equipment is being serviced?

Safety Test

NAME: _____

DATE: _____

Multiple Choice: In the space provided on your answer sheet, place the letter of the answer that best completes the statement.

1. If you find a damaged piece of equipment
 - a. dispose of it immediately.
 - b. report it to the teacher or supervisor.
 - c. use it anyway.
 - d. repair it yourself before you use it.
2. Solutions that will be used in the hospital
 - a. can usually be mixed together.
 - b. do not always need a label.
 - c. must be labeled and used as directed.
 - d. A and C
3. When handling any electrical equipment, be sure to
 - a. wash your hands immediately before handling it.
 - b. check first for damaged cords or improper grounds.
 - c. plug equipment carefully into any socket to see if it sparks.
 - d. use it properly on the client and observe for any malfunctions.
4. Do not use an electrical appliance
 - a. if the ground prong is damaged.
 - b. if it sparks.
 - c. if it trips a breaker.
 - d. if it shocks.
 - e. All of the above
5. Horseplay and practical jokes
 - a. are permitted if no one is insulted.
 - b. may be done during breaks or study time.
 - c. cause accidents and have no place in the classroom or clinical setting.
 - d. usually do not result in accidents.
6. The three things needed to start a fire are
 - a. air, oxygen, and fuel.
 - b. fuel, heat, and oxygen.
 - c. fuel, carbon dioxide, and heat.
 - d. air, carbon dioxide, and fuel.

7. If your personal safety is in danger because of fire
 - a. get the fire extinguisher and try to put the fire out.
 - b. run out of the area as fast as you can, yelling "FIRE."
 - c. evacuate the area quickly and efficiently.
 - d. open all windows and doors.
8. Restraints
 - a. can be applied as needed at the discretion of a nursing assistant.
 - b. require a doctor's order before applying on a client.
 - c. should be applied tightly so the client can't escape.
 - d. should be used to relieve the nursing assistant of the need to check on a client.
9. The proper knot to use on restraints is
 - a. a clove hitch or double clove hitch.
 - b. a double knot.
 - c. a square knot.
 - d. any knot that holds securely.
10. A restraint should be released
 - a. if the limb below the restraint is pale, slightly blue, and/or has swelling.
 - b. every four hours.
 - c. every 15-30 minutes.
 - d. only when the client needs to use the bathroom.
11. Side rails
 - a. should always be put up on a client's bed.
 - b. are viewed as a restraint, and should be used only if directed to do so.
 - c. should never be used, since clients tend to climb over them.
 - d. are a nuisance and new hospital beds seldom have them.
12. The best way to contain a fire
 - a. is to open the windows wide in the room.
 - b. fan the fire.
 - c. close the doors and windows.
13. Before leaving a client's room
 - a. call signal and supplies should be within the client's reach.
 - b. wheels on the bed should be locked.
 - c. the area should be free of any hazards.
 - d. All of the above.
14. When giving a bed bath, it is best to have the bed at
 - a. the lowest possible level.
 - b. a comfortable working height.
 - c. a safe level for the client.
 - d. a level allowing the client's feet to touch the floor.

15. OSHA is
- a state organization supervising safety in the work place.
 - a federal organization supervising safety in the work place.
 - a hospital-based organization supervising safety in the work place.
16. When pushing a client on a stretcher down a ramp
- the client's head should be higher than their feet.
 - the client's head should be at the end closest to the nursing assistant.
 - the nursing assistant should be at the client's feet.
 - the nursing assistant should be at the client's head.
 - A and C
17. Which of the following is true about electricity?
- It can disrupt any normal electrical current within the body.
 - It seeks the path of least resistance to reach ground.
 - It travels in a circuit.
 - None of the above.
 - All of the above.
18. MSDS stands for
- Manufacturing System Display Stand.
 - Multipurpose Sanitation and Disinfection System.
 - Material Safety Data Sheet.
 - Maternal Satisfaction and Developmental system.
19. When going down the curb of a sidewalk with a client in a wheelchair
- turn the wheelchair sideways and go down.
 - carefully wheel the chair off the curb with the client facing forward.
 - back down the curb very carefully.
 - keep on walking until you find a driveway.
20. A hazardous number rating of 0 equals
- no hazard.
 - slight hazard.
 - extreme hazard.
 - d.** moderate hazard.

True/False: In the space provided on your answer sheet, write either true or false for the following statements.

21. Carbon dioxide fire extinguishers leave a residue which can cause irritations of the skin and eyes.
22. Spills of any kind should be wiped up immediately using proper procedure.
23. Class A fire extinguishers can be used on electrical fires.

24. Every time you remove your gloves, you must wash your hands with soap and running water as soon as possible.
25. If you want to know more about a substance you are working with, read the MSDS form.
26. Mixing ammonia with bleach is a very good disinfectant to use when cleaning a client's room.
27. It is O.K. to use an unlabeled bottle if you smell the contents first and identify the solution inside the bottle.
28. The proper way to operate a fire extinguisher is to pull the pin, aim at the top of the flame, squeeze the handle, and sweep.
29. RACE stands for Run away from the fire, Activate the alarm, Close all doors, and Evacuate.
30. It is important to dry hands fully when working with electrical appliances.
31. A restraint requires an order.
32. It is all right to use an electrical appliance if the wires are frayed, as long as the bare wires aren't showing.
33. Always check linen before disposing of it for any sharps or client's belongings.
34. Oxygen does not burn.
35. All hazardous materials without labels may carry a fine up to \$10,000.
36. The third prong on an electric plug is important because it provides the correct flow of electricity.
37. Read the labels of solution bottles three times when using.
38. Report any unsafe situations or violations of a safety practice immediately to your instructor or supervisor.
39. Smoke and panic kill more people in fires than the fire itself.
40. An unknown spill should be cleaned up immediately by the person who discovers the spill.

Make a list of the five safety practices to check before leaving a client's room.

- 41.
- 42.
- 43.
- 44.

45.

Matching: For each of the following situations in Column A, select the correct fire extinguisher from Column B and write the letter in the space on your answer sheet.

COLUMN A	COLUMN B
46. Used on burning gasoline, oil, and paints	A. Class A
47. Used on electrical fires.	B. Class B
48. Used on burning paper, cloth, and wood	C. Class C
49. Contains carbon dioxide	D. Class D
50. Used on burning metals	
51. Contains pressurized water	
52. Contains potassium bicarbonate or chloride	

Safety Test

KEY

Multiple Choice

1. B
2. C
3. B
4. E
5. C
6. B
7. C
8. B
9. A
10. A
11. B
12. C
13. D
14. B
15. B
16. E
17. E
18. C
19. C
20. A

32. False
33. True
34. True
35. True
36. False
37. True
38. True
39. True
40. False

List five Safety Practices

41. Bed is in the lowest position
42. Brakes are on so the bed is stable.
43. Client is in good alignment and comfortable.
44. Client has the call button and necessary supplies within reach.
45. Side rails are up if necessary, and client is in the safest position (e.g. head of bed up)

True/False

21. False
22. True
23. False
24. True
25. True
26. False
27. False
28. False
29. False
30. True
31. True

Matching

46. B
47. C
48. A
49. B
50. D
51. A
52. C

NAME: _____ DATE: _____

TEST B: SAFETY PRACTICES

Multiple Choice: For each of the following, select the best answer and place the letter in the corresponding space on your answer sheet.

1. When making the bed, it is best to have the bed at
 - a. the lowest position available.
 - b. a safe level for the client.
 - c. a comfortable working height.
 - d. a level that allows the client's feet to touch the floor.
2. The single most important safety skill a nursing assistant can perform is
 - a. using good communication skills.
 - b. washing hands between clients and whenever soiled.
 - c. using good body mechanics.
 - d. use of physical barriers, such as gloves when caring for all clients.
3. When pushing a client in a wheelchair from the curb down into the street
 - a. the client should be facing the street as the wheelchair is pushed down the curb.
 - b. the client's back should be toward the street as you back them down into the street slowly.
 - c. go down the street until you find a handicapped area and then push them down the ramp, facing the street.
 - d. ask the family to get them down the curb for you.
4. OSHA is a federal organization supervising safety in the work place. OSHA stands for
 - a. Occupational Supervisors of Health Administration.
 - b. Occupational Safety and Health care Administration.
 - c. Occupational Safety and Hazards Administration.
 - d. Occupational Safety and Health Administration.
5. The best way to identify a client is to
 - a. call them by their name.
 - b. ask the client's family.
 - c. ask another health care person to verify the identity of the client for you.
 - d. check the client's identification bracelet.
6. Fire requires the following items to burn
 - a. fire, oxygen, fuel.
 - b. fuel, heat, oxygen.
 - c. oxygen, air, heat.
 - d. air, heat, fuel.

7. MSDS stands for
 - a. Manufacturing System Display Stand
 - b. Multipurpose Sanitation and Disinfection System.
 - c. Material Satisfaction and Developmental system.
 - d. Material Safety Data sheet.
8. A hazardous number rating of 4 indicates
 - a. extreme hazard.
 - b. no hazard.
 - c. slight hazard.
 - d. moderate hazard.
9. The client who has been restrained, per M.D. order, must have their restraints checked every
 - a. hour on the hour.
 - b. two hours.
 - c. 15-30 minutes.
 - d. shift.
10. When transporting a client on a stretcher the client should
 - a. be secured with safety belts.
 - b. not be moved at a fast pace.
 - c. be provided privacy by covering them up.
 - d. pushed from the end of the stretcher where the head is, unless going down a ramp or into an elevator.
 - e. A and C
 - f. All of the above
11. Which of the following is true about electricity?
 - a. It can disrupt any normal electrical currents within the body.
 - b. It seeks the path of least resistance to reach ground.
 - c. It travels in a circuit.
 - d. All of the above.
 - e. A and B

True/False: For each of the following write the word true or false in the space provided on your answer sheet.

12. All hazardous materials without labels may carry a fine of up to \$10,000 per container incident.
13. Oxygen supports combustion.
14. The letters RACE stand for Rescue, alarm, Call and Evacuate.
15. The third prong on an electric plug is important because it is a ground wire.

16. Burns are the primary reason people die in fires.
17. Oxygen is drying to the skin and mucous membranes, therefore the client's skin must be washed often and the oxygen must be humidified.
18. You should not clean up a spill that smells unusual, has an unusual color, or is unknown as a substance.
19. Report all unsafe situations or violations of safe practice immediately to the instructor or supervisor.

Matching: For each of the situations in Column A, select the correct fire extinguisher from Column B and write the letter in the space on your answer sheet.

COLUMN A	COLUMN B
20. Contains potassium bicarbonate or chloride	A. Class D
21. Used on burning gasoline	B. Class C
22. Contains pressurized water	C. Class A
23. Used on electrical fires	D. Class B
24. Used on burning metals	
25. Used on burning paper, cloth, and wood	
26. Used on burning liquids and cooking fires	
27. Contains carbon dioxide	
28. Used on burning oil and paints	

Fill in the Blank:

What are the five checks that should be made before leaving a client's room?

29.

30.

31.

32.

33.

What do the letters PASS stand for?

34.

35.

36.

37.

38. When putting out a fire, it is important to sweep the extinguisher toward the _____ of the fire.

What are the three precautions to use when working with oxygen?

39.

40.

41.

42. How many times should the label on a bottle be read when planning to use contents?

Test B: Safety Practices

KEY

Multiple Choice

1. C
2. B
3. B
4. D
5. D
6. B
7. D
8. A
9. C
10. F
11. D

True/False

12. True
13. True
14. False
15. True
16. False
17. True
18. True
19. True

Matching

20. B
21. D
22. C
23. B
24. A
25. C
26. D
27. D
28. D

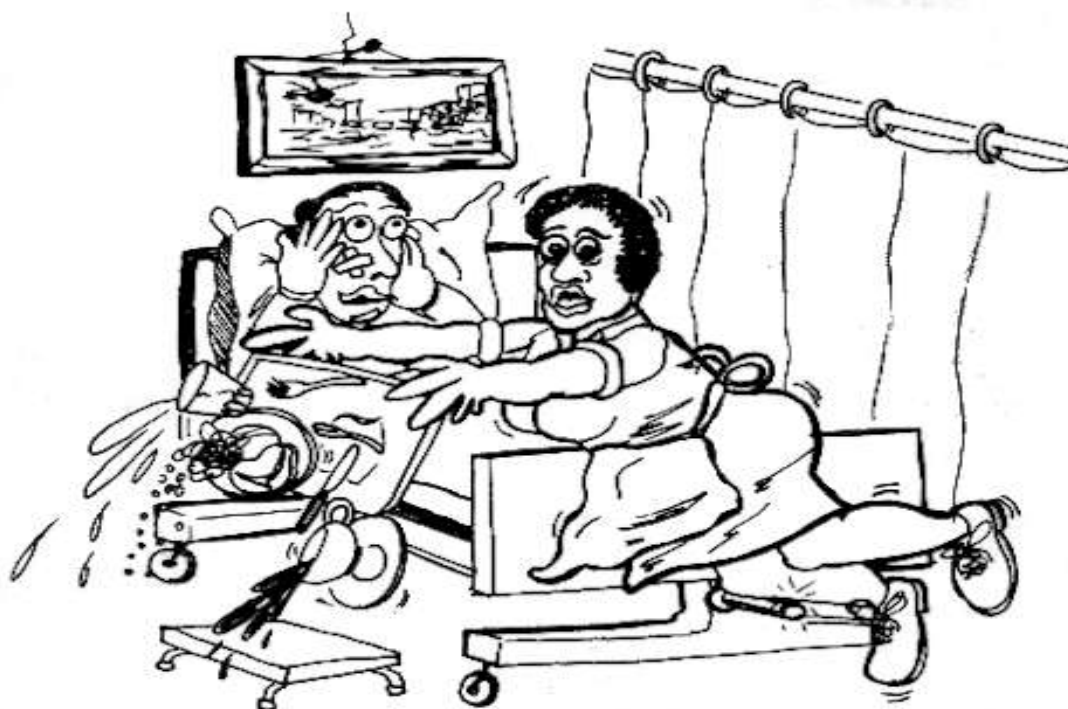
Fill in the Blank

29. Side rails are up if necessary.
30. Client has call bell and all supplies within reach.
31. Wheels of bed are locked.
32. Client is comfortable and in good alignment.
33. Bed is at the lowest level.
34. Pull the pin
35. Aim at the base of the fire

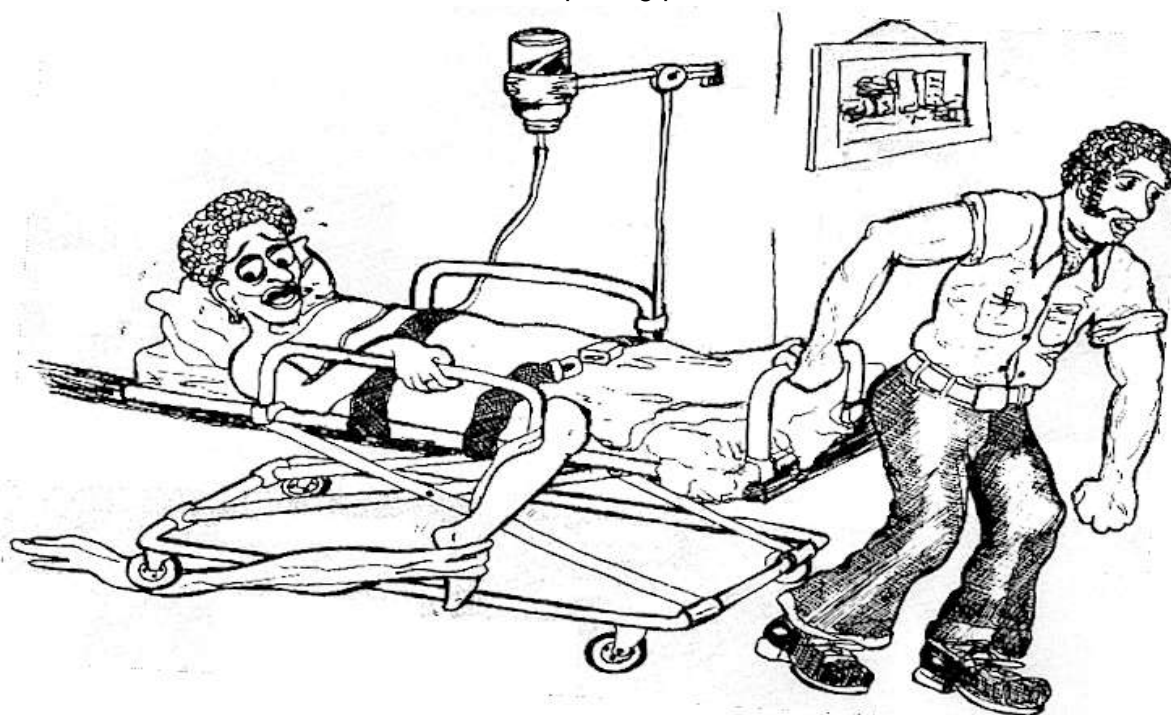
36. Squeeze the handle
37. Sweep from side to side
38. Base
39. Always keep on a stand
40. Use only oxygen that is USP
41. Never set in a sunny spot, or by a heat source.
Always use a regulator on the tank.
Humidify the oxygen
Crack the tank away from other people's faces
42. Three

Role Play Topics

Do not leave bed cranks extended



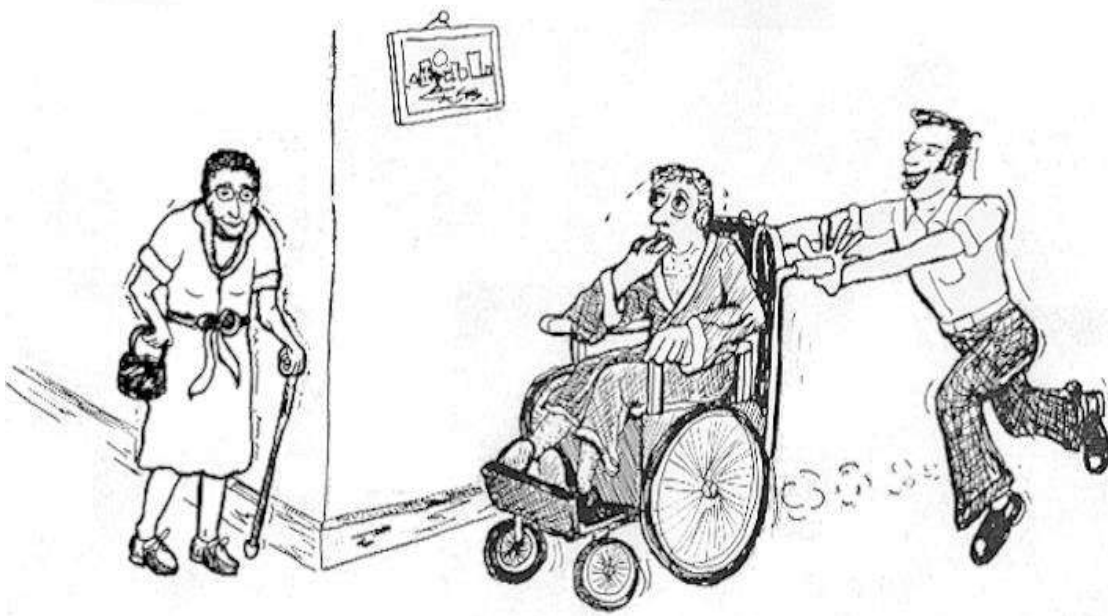
Avoid hazards when transporting patients on a stretcher



Do not climb to reach equipment without a safety ladder.



Approach intersections with care.



Avoid hazards in the pharmacy.



Clean spills from the floor immediately.



COMMUNICATION BARRIERS

Course

Practicum in Health Science

Unit II

Communication

Essential Question

How do today's health care professionals handle communication barriers?

TEKS

*130.205 (c)
1D,1E,1F
2B,2C*

Prior Student Learning

Professional Communication lesson

Estimated time 2-4 Hours

Rationale

Communication Barriers are common in the health care field. Health professionals are expected to use effective communication techniques.

Objectives

Upon completion of this lesson the student will be able to:

1. Understand effective communication
2. Use effective listening techniques
3. Use proper verbal and nonverbal communication skills
4. Practice communication techniques to minimize communication barriers seen in health care

Engage

A family member approaches you and is concerned that no one has spoken to their parent about the tests and procedures which will be run tomorrow. However, you had spent ten minutes explaining everything that was going to take place tomorrow to the patient. What seems to be the communication problem?

Key Points

- I. Good communication is essential to limit communication barriers
 - A. be aware of communication filters which can distort messages within their group:
 1. Semantics
 - a. jargon and abstract words are interpreted by different people in different ways
 - b. it is always important to be precise and explicit with words
 2. Emotions (our most powerful communication filter) -- always remember: senders who are emotional or angry are perceived differently
 - a. emotions can prevent receiver from hearing what speaker has to say
 - b. emotional state can make listener too susceptible to speaker's point of view
 - c. it is important to detach self from emotional feelings and think of the verbal content of message
 3. Attitudes (beliefs backed up by emotions; deeply embedded ideas

- and feelings)
- a. bias towards accents, ethnicity, mannerisms, dress, demeanor, physical characteristics can change the way we send and receive messages
 - b. receiver and/or sender bias towards the values and opinions of others can effect message interpretation (abortion issue, religious preference, gender orientation, political viewpoints, social perspectives)
4. Role Expectations – sometimes people tend not to listen when individuals talk “outside” of their expected role (mom or dad giving academic advice; best friend who has never had a date telling you how to treat your boy/girl friend, etc.). It is always best to remain open and objective.
- B. Be aware of the messages you send with body language
1. eyes transmit more information than any other part of the body
 2. gestures indicate whether people are open or closed to communication, how comfortable an individual is during given situations, who is the true leader of a group
 3. individuals who agree with a speaker will mirror the speaker’s posture or expressions, silently signaling agreement
 4. positioning oneself in a group is critical to inclusiveness; turning your back to people in a group signals that they aren’t included
- C. Who Is Responsible For Effective Communication?
1. both the sender and the receiver share equal responsibility for effective communication
 2. communication loop is complete when the receiver understands, feels, or behaves according to the message of the sender; when this does not occur, the communication process breaks down
 3. receivers must provide senders with enough feedback to ensure that an accurate message has passed through all the filters that might alter it
- D. How To Improve Group Communication
1. Send Clear Messages
 - a. don’t talk too fast
 - b. don’t be too wordy
 - c. be aware of filters that can distort your message
 - d. ask purposeful questions to make sure you were understood
 2. Use Words Carefully
 - a. use language that is simple and precise
 - b. avoid words that might be vague and/or ambiguous
 - c. avoid technical or occupational jargon
 3. Use Repetition

- a. repetition is an important tool in ensuring communication accuracy
 - b. use parallel channels of communication -- send memo and follow-up with phone call
- 4. Use Appropriate Timing
 - not wise to communicate when receiver is extremely busy
- 5. Develop Listening Skills -- We *hear*, but do we *listen*?
 - a. listening is taught least, yet used the most
 - b. may explain why people listen at a 25% efficiency rate in typical situations (miss about 75% of messages spoken by others!)
 - c. discrepancy between our rate of speaking and our rate of hearing -- people speak approximately 150 words per minute; listening capacity is about 450 words per minute. Because message is usually much slower than our capacity to listen, we have plenty of time to let minds roam, think ahead, and plan that we are going to say next
 - d. Five Signs of Poor Listening Habits:
 - i. thinking about something else while waiting for speaker's next words or sentence
 - ii. listening primarily for facts rather than ideas
 - iii. tuning out when talk seems to be getting too difficult
 - iv. prejudging from person's appearance or manner that nothing interesting will be said
 - v. paying attention to outside sights and sounds when talking to someone
- E. Active Listening -- process of feeding back to the speaker what listeners think the speaker means
 - 1. Steps towards becoming an active listener:
 - a. cultivate a listening attitude
 - i. regard person worthy of respect & attention
 - ii. empathize with speaker and really try to understand other's experience
 - iii. drop expectations of what you are going to hear or what you would like to hear
 - iv. be patient and refrain from formulating response until speaker has finished talking
 - b. focus full attention
 - i. establish eye contact
 - ii. equalize difference in height between you and speaker
 - iii. maintain open body posture and lean forward

- iv. slightly continually refocus away from distractions
- 2. Take notes
 - taking notes ensures greater accuracy and builds speakers confidence in your ability to remember details
- 3. Ask questions
 - ensures your own understanding of speaker's thoughts and feelings and helps secure additional information
- 4. Empathic Listening
 - a. avoid being judgmental
 - b. accept what is said -- you do not have to agree with what is being said, but you should let the person know you understand his or her viewpoint
 - c. be patient – signs of impatience send a negative message to the person needing to talk
- 5. Common Communication Barriers
 - a. Anything that interferes with communication can lead to a lack of understanding or misinterpretation of the message.
 - b. Patients are often physically ill and emotionally upset when a health care worker is attempting to communicate with them.
 - c. Health care also has its own language – “medical terminology” and patients often do not understand medical words.
 - d. Patients may also have sensory impairments that interfere with communication.
 - i. Poor hearing, poor vision, confusion, and speaking problems
 - ii. Aphasia – absence or impairment of the ability to communicate through speech, writing, or signs (stroke patients)
 - e. It is the health care worker's responsibility to make sure that the patient understands the information being communicated and that the health care worker understands what the patient is conveying.

Activity

- I. Complete the “Communication Practice” activity
- II. Complete “Communication Barrier Brain Storming” activity

Assessment

Successful completion of Activities

Materials

Copies of the Communication Practice activity, the scenarios, and the history and physical form

Copies of the “Communication Barrier Brain Storming” activity

Accommodations for Learning Differences

For reinforcement, the student will select a second scenario in Activity I to research and fill in history and physical form.

For enrichment, the student will research new technology on the market which can help health care workers with solutions for communication barriers.

National and State Education Standards

National Health Science Standards

HLCO2.01 Communications

Health Care Workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing. Adjust communication to other’s ability to understand. Apply the elements of communication using the sender-receiver model. Apply active listening skills using reflection restatement and clarification techniques. Demonstrate courtesy to others including self-introduction. Interpret verbal and non-verbal behaviors to augment communication and within the scope of practice.

TEKS

130.205 (c)(1)(D) examine the environmental factors that affect homeostasis;

130.205 (c)(1)(E) relate anatomical structure to physiological functions;

130.205 (c)(1)(F) distinguish atypical anatomy and physiology in the human body systems;

130.205 (c)(2)(B) demonstrate therapeutic communication skills to provide quality care; and

130.205 (c)(2)(C) employ therapeutic measures to minimize communication barriers.

Texas College and Career Readiness Standards

English-Listening:

B.1 Listen critically and respond appropriately to presentations

B.2 Listen actively and effectively in a one-on-one communication

Communication Practice

Patient History and Scenarios

Step 1: Assign each student one of the following scenarios. Have each student research the patient's condition and be prepared to answer questions related to health history and current health complaints.

Step 2: Pair students up and have them interview one another and fill in patient history form. Each student is to role-play the scenario they have been given to research.

Step 3: Student who played the part of the patient will give constructive criticism to student who asked the questions for the history and physical about their communication skills including their emotion, tone, body language and volume.

Patient Scenarios

1. A 57-year-old male suffering from a MI. History of HTN, Arteriosclerosis, and a forty-year two pack a day cigarette smoking.
2. An 82-year-old woman with left sided weakness and a diagnosis of a CVA. History of DM, bladder incontinence, and glaucoma.
3. A pregnant 25-year-old woman with a history of gestational diabetes, toxemia, and severe headaches.
4. A 33-year-old woman with a history of TIA's, muscle weakness, and DVT's.
5. A 40-year-old male with Crohn's disease. History of depression and suicidal tendencies.
6. A 20-year-old homeless male with a history of ETOH use, TB, and schizophrenia.

7. A 35-year-old female with morbid obesity presents with a history of sleep apnea and a cholecystectomy.
8. A 17-year-old female with a history of fatigue, severe dysmenorrhea, and PID.
9. An 18-year-old male with gonorrhea, UTI, and a history of asthma.
10. A 21-year-old male with a history of Oxycontin and heroin use, peptic ulcers, and severe acne.
11. A 56-year-old female with Grave's disease. History of severe weight loss, increased appetite, sleeping disorders, and heart palpitations.
12. A 14-year-old male suffering from heart arrhythmias, syncope, and chronic fatigue.
13. A 5-day-old premature baby boy with jaundice, high-pitched crying, and restlessness. (You will answer as the parent)
14. A 67-year-old female presents with pneumonia. History of arthritis and uterine cancer.
15. A 5-year-old female presents with chickenpox. History of a broken clavicle and eczema.
16. A 13-year-old female presents with spiral fracture to tibia with complete fracture through the tibia and fibula growth plate. History of appendectomy and hypoglycemia.
17. An 8-year-old male with history of hemophilia, multiple blood transfusions, and is positive for HIV.
18. A 71-year-old male presents with rectal bleeding, arrhythmia's and is HoH.
19. An 88-year-old female presents with hemorrhoids. History of emphysema and scarlet fever.
20. A 15-year-old female with Down syndrome presents with epileptic seizure activity. History of esophageal stricture and amenorrhea.

Rubric

Patient History and Scenario Patient Research Rubric	Possible	Allocated
1. Researched signs and symptoms of disorder	20	
2. Researched history of disorder	20	
3. Researched disorders that would complicate disorder	15	
4. Researched treatments (operations, therapies and medications)	15	
5. Able to answer questions from history and physical correctly	15	
6. Gives constructive criticism to history taker about their communication skills including their emotions, tone, body language and volume	15	
TOTAL POINTS	100	

Obtaining Medical History and Communication Practice	Possible	Allocated
1. Assembled clipboard, medical history form and pen	5	
2. Greets, identifies and sat opposite patient	10	
3. Ask patient for chief complaint and records correctly	10	
4. Ask patient for signs and symptoms and records correctly	10	
5. Ask patient for history of disorder and records	10	
6. Ask patient about other health history and records	10	
7. Ask patient about current medication usage and records	10	
8. Ask patient about therapeutic treatments and records	5	
9. Ask patient about social history and records	5	
10. Thanked patient when finished	5	
11. Communication skills/ emotion	5	
12. Communication skills/ tone	5	
13. Communication skills/ volume	5	
14. Communication skills/ body language	5	
TOTAL POINTS	100	

“Communication Barrier Brain Storming” Activity

Divide students into groups of 3-4 students to brainstorm good communication methods to use when working with the following patients. The groups should come up with at least 4 different methods for each patient. Groups should also be prepared to share ideas with entire class.

1. A patient who does not speak the same language you do:

a.

b.

c.

d.

2. A patient who has suffered a massive stroke:

a.

b.

c.

d.

3. A 4 year abused patient who has been brought in under protective custody and no family are allowed in room until investigation is conducted:
 - a.
 - b.
 - c.
 - d.
4. An elderly patient who suffers from mild retardation:
 - a.
 - b.
 - c.
 - d.

5. A 65-year-old male homeless war veteran with a history of ETOH use and post-traumatic stress syndrome:
- a.
 - b.
 - c.
 - d.

HISTORY AND PHYSICAL FORM

TODAY'S DATE / /									
PATIENT NAME:			PREFERRED NAME:			PHONE #		AGE HT. WT.	
FOR NONE			ADMISSION / LIST			MEDICATIONS		FOODS	
			LATEX			OTHERS			
PREVIOUS HOSPITALIZATION(S) OR OPERATIONS (INDICATE APPROXIMATE YEAR)					CURRENT AND RECENT MEDICATIONS (INCLUDE PRESCRIPTIONS, EYE DROPS, OVER-THE-COUNTER MEDS, ASPIRIN, IBUPROFEN, DIET AIDES & DOSAGE)				
CHECK IF YOU HAVE A BAD REACTION TO ANESTHESIA? X YES X NO									
HAS A BLOOD RELATIVE HAD A BAD REACTION TO ANESTHESIA? X YES X NO									

YES	NO	HAVE YOU HAD:	YES	NO	HAVE YOU HAD:
		DIABETES			WOMEN: IS THERE A POSSIBILITY YOU ARE PREGNANT?
		HYPOGLYCEMIA (Low Blood Sugar)			LAST MENSTRUAL PERIOD:
		THYROID PROBLEMS			DO YOU HAVE A HISTORY OF SMOKING?
		HEART PROBLEMS (Rheumatic Fever, Murmur, Chest Pain, Heart Attack, Irregular Heartbeat, EKG changes, Angina, Ankle Swelling, Valve Replacement, etc.)			PACKS PER DAY DATE QUIT
		BLOOD CLOTS, TRANSFUSION PROBLEMS, OR BLEEDING TENDENCY (Hemophilia etc.)			DO YOU DRINK ALCOHOLIC BEVERAGES
		HIGH BLOOD PRESSURE			HOW OFTEN: HOW MUCH?
		STROKE (Weakness/Numbness on one side, Difficulty Speaking, Loss of Vision etc.)			DO YOU HAVE A HISTORY OF SUBSTANCE ABUSE OR ADDICTION?
		SEIZURES (Epilepsy, Convulsions, Blackouts, etc.)			DO YOU HAVE ANY OF THE FOLLOWING:
		NEUROLOGICAL PROBLEMS (Loss of Sensation, Numbness, Tingling, etc.)			False Teeth Bridges Braces
		SEVERE HEADACHES			Loose Teeth Capped Teeth Retainers
		LUNG PROBLEMS (Asthma, Chronic Cough, Pneumonia, Wheezing, Shortness of Breath, Emphysema, Abnormal Chest X-ray, etc.)			DO YOU WEAR CONTACT LENSES?
		TUBERCULOSIS/TB			ARE YOU RECEIVING TREATMENT FOR GLAUCOMA?
		SLEEP APNEA (Breathing Interruption During Sleep, etc.)			DO YOU HAVE ANY SPECIAL COMMUNICATION NEEDS? Vision Hearing Language Speech
		LIVER PROBLEMS (Jaundice, Hepatitis, etc.)			DO YOU HAVE ANY PHYSICAL LIMITATIONS?
		KIDNEY, BLADDER OR PROSTATE PROBLEMS (Infections, etc.)			DO YOU HAVE ANY ENVIRONMENTAL CONCERNS? (Room Temperature, Lighting, etc.)
		STOMACH PROBLEMS (Ulcer, Hiatal Hernia, Reflux, Heartburn, etc.)			DO YOU HAVE ANY SPECIAL REQUESTS?
		BOWL PROBLEMS (Irritable Bowel, Diverticulosis, etc.)			DO YOU CURRENTLY NEED ASSISTANCE TO GET AROUND THE HOUSE, DO ERRANDS, AND TAKE CARE OF YOUR PERSONAL NEEDS?
		BACK TROUBLE (Strain, Disc Problems, Numbness/Tingling of Hands or Feet, etc.)			WOULD YOU LIKE TO DISCUSS ANY CONCERNS OR FEARS REGARDING THIS PROCEDURE?
		BROKEN BONES OF HEAD, NECK OR SPINE OR RESTRICTIONS IN MOVEMENT			
		DIFFICULTY OPENING MOUTH (TMJ, etc.)			
		ARTHRITIS			
		MUSCLE DISORDERS (MD, Myasthenia Gravis, etc.)			
		CANCER			
		MENTAL HEALTH / PHOBIAS (Anxiety, Depression, Psychosis, etc.)			
		MENTAL DISABILITY (Confusion, Memory Loss, Downs Syndrome, etc.)			
		SKIN PROBLEMS (Eczema, Fragile, etc.)			
		OTHER MEDICAL PROBLEMS / COMMENTS			
		ANY ILLNESS, COLD, COUGH OR FEVER WITHIN THE LAST WEEK?			
		RECENT EXPOSURE TO ANY COMMUNICABLE DISEASES? (Chicken Pox, Measles etc.)			

YES	NO		YES	NO	
		1. Do you have a history of falling down?			9. Do you have any problems or complaints regarding
		2. Have you used or do you currently use any of the following services?			your bowel movements? Constipation
		Homemaker services			Diarrhea Black / bloody stools
		Meals on Wheels			Other:
		Transportation			10. Do you use anything to maintain your usual bowel
		Medical supplies / Oxygen			pattern? Enemas Laxatives
		Nursing services			Special diet Fiber supplements
		Other:			Stool softeners Other
		3. Have you been or are you afraid you will be physically, verbally or mentally abused by someone?			11. Do you have any problems sleeping?
		4. Would you like to discuss any financial concerns regarding:			Insomnia Pain Breathing difficulties
		Cost of this hospitalization			Up at night to use bathroom
		Questions about insurance / Medicare coverage			Other:
		Cost of ongoing treatment / medications & supplies			12. Would you like to discuss any concerns about the
		5. In the last 6 months, have you experienced:			impact of your condition on your sexuality?
		Weight change Appetite change			Explain:
		Explain:			13. Are there any cultural or religious practices which are
		6. Are you on a special diet or is there anything you cannot eat? Explain:			important to maintain or perform during this hospitalization?
		7. Do you have any difficulty chewing, swallowing or with digestion? Explain:			14. Is there anything else you want to ask about or tell us
		8. Do you have any problems or complaints regarding urination?			that will help you deal with your condition?
		Pain / Burning Control			15. Who will be the key support person for you during this
		Frequency Other			hospitalization?

TECHNICAL WRITING AND RECORD KEEPING

Course	Rationale
<i>Practicum in Health Science</i>	Accurate recording and reporting are important methods of communication used by health care workers to ensure quality patient care. Technical writing is a valuable form of communication used to help patients understand treatments and procedures.
Unit II	Objectives
<i>Communication</i>	Upon completion of this lesson, the student will be able to:
Essential Question	<ul style="list-style-type: none"> • Compile information from a variety of sources to create a technical report • Accurately describe and report information, according to facility policy, observations, and procedures
<i>Why is clear communication so important in health care?</i>	Engage
	Mrs. Smith comes in to Dr. Litchfield's office for a follow-up appointment; unfortunately she is going to need to have surgery. Dr. Litchfield took the time to explain the procedure and that Mrs. Smith needed to see a specialist for the procedure, but Mrs. Smith's daughter has called back twice asking questions. Perhaps they should have sent information home so Mrs. Smith could read it again and shared it with her family members.
TEKS <i>130.205 1B,C, 2A</i>	
Prior Student Learning	Key Points
<i>none</i>	I. Communication <ul style="list-style-type: none"> A. Quality health care depends on good communication. <ol style="list-style-type: none"> 1. Communication between health care worker and health care worker 2. Communication between health care worker and patient 3. Communication between health care worker and family B. In many settings patients will see a number of health care workers for diagnosis and treatment. The larger the number of people who are involved in the patients care, the more critical communication becomes. C. Recording and reporting <ol style="list-style-type: none"> 1. Accurate recording and reporting is as important as face to face verbal communication. 2. This record gives other health care workers the big picture of what is happening to the patient. D. Brochures and written instructions
Estimated time	
<i>3-6 hours</i>	

1. A very important form of communications
2. Written instruction allows the patient to go back over the information over and over again until he or she feels comfortable with its content.

II. Recording and Reporting

- A. All observations should be recorded promptly and accurately while providing care.
- B. Relevant information should be reported in its order of occurrence.
- C. The health care worker's ability to observe patient behavior and symptoms will directly affect care.
- D. Reporting unusual events or any change in behavior or condition is every health care worker's responsibility.

III. Observation

- A. Use senses to make observations
 1. Sense of sight: color of skin, swelling, presence of a rash or sores, color of urine or stool, amount of food eaten, and other similar factors
 2. Sense of smell: body odor, unusual odors of breath, wounds, urine, or stool
 3. Sense of touch: pulse, dryness or temperature of the skin, perspiration, swelling
 4. Sense of hearing: listen to respirations, abnormal body sounds, coughs, and speech
- B. Types of Observation
 1. Subjective Observation
 - a. Cannot be seen or felt. They are ideas, thoughts, or opinions.
 - b. Commonly called symptoms
 - c. Usually statements or complaints made by the patient
 - d. Report in the exact words used by the patient
 2. Objective Observation
 - a. Can be measured, seen, felt, heard, or smelled
 - b. Commonly called signs

IV. Documentation

- A. A record of the patient's progress throughout treatment
- B. Many people are responsible for documenting information on patients.
- C. Documentation must be accurate, concise, and complete.

1. Writing should be neat and legible.
2. Spelling and grammar should be correct.
- D. All records must contain certain information:
 1. Patient name, address, age, identification number
 2. Diagnosis and physician's orders
- E. Other information may be required:
 1. Care or treatment given and how patient tolerated it.
 2. Time of treatment
 3. Observations that would be helpful to other health care workers
- F. All documentation must be signed with the name and title of the person recording the information.
- G. Errors should be crossed out neatly with a straight line, have "error" recorded by them, and show the initials of the person making the error.
- H. Patient documentation is a legal record, admissible in a court of law.
- I. If you do not write it down, it did not happen!
- J. Use ink for all documentation.
- K. Entries should be in short phrases. You do not need to write in complete sentences.
- L. Time should be recorded in military (24 hour) time.

V. Technical Writing

- A. Any writing designed to describe and inform about how something works.
- B. A really good technical writer (communicator) takes difficult scientific and technical language and transforms it into concepts that are easy to grasp and instructions that are easy to follow.
- C. You might be surprised to realize just how much of the information you encounter each day comes from a technical writer's keyboard:
 1. ATM display messages
 2. Application forms for a loan
 3. Rules for playing games
 4. Instructions for heating a frozen dinner
 5. Policies in your company's employee handbook
 6. Safety notices and warnings of all kinds

VI. Technical Writing and Health Care

- A. Medical writers work in diverse settings and have a wide range of responsibilities:
 1. Regulatory documents

2. Clinical study protocols
3. Drug brochures
4. Procedure brochures
5. Research papers
6. Health care magazines
7. Medical newspapers, newsletters and articles
8. Medical web sites
9. Patient education materials
10. Marketing and advertising materials

VII. Tips for Good Technical Writing

- A. Select appropriate format for the document.
- B. Organize material logically.
- C. Prepare user-friendly instructions.
- D. Use graphics to enhance technical information.
- E. Zero in on reader's needs.
- F. Revise the work based on feedback to ensure the correct message is being received.

VIII. Written Communication

- A. All written communications should be evaluated to make sure that the correct message is being sent. Is the appropriate response to the message being given by the receiver?
- B. Always ask for feedback to continually improve written communication.

Activity

- I. Complete the Technical Writing Report. See teacher and student guideline sheets.
- II. Complete the observation activity. See guideline sheet.

Assessment

Technical Writing Rubric

Materials

Technical Writing Report Teacher Guidelines

Technical Writing Report Student Guidelines

Miscellaneous articles to use for students to observe

Accommodations for Learning Differences

For reinforcement, the student will write a grammatically correct discharge statement for a patient.

For enrichment, the student will interview a malpractice attorney focusing on cases associated with improper communication. Report to class.

National and State Education Standards

National Health Science Standards

HLCO2.01 Communications

Health Care Workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

Adjust communication to other's ability to understand. Apply the elements of communication using the sender-receiver model. Apply active listening skills using reflection restatement and clarification techniques. Demonstrate courtesy to others including self-introduction. Interpret verbal and non-verbal behaviors to augment communication and within the scope of practice.

TEKS

103.205 (c)1B compile information from a variety of sources to create a technical report;

103.205 (c)1C plan, prepare, and deliver a presentation;

103.205 (c)2A accurately describe and report information, according to facility policy, observations, and procedures.

Texas College and Career Readiness Standards

English-Listening:

B.1 Listen critically and respond appropriately to presentations

B.2 Listen actively and effectively in a one-on-one communication

Technical Writing Report Teacher Guidelines

Introduction

The purpose of technical writing is to communicate technical, and often complex, information to various audiences. Because the audience will have varying degrees of familiarity with the content, the writing must be adapted so that the information is clear, concise, and usable to the audience. A good technical writer takes difficult scientific and technical language and transforms it into concepts that are easy to follow.

Technical Writing Report

- Assign the Technical Writing Report.
- You may assign a specific topic that is relevant to your specific class or you can allow students to choose their own topic.
- Technical Writing Topic Ideas:
 - Safety notice or warning
 - Policy in a handbook for work or school safety
 - Write a memo
 - Look in textbooks, magazines, journals, or periodicals for ideas.
 - Write about improvements (what needs to be fixed) in local hospital, home, school, neighborhood, or city
 - Write a step by step brochure for a common task
- Distribute Technical Writing Report Rubric.

Technical Writing Report Grading

- Students will follow written instructions given by another student and give appropriate feedback.
- Pair students up and have them exchange Technical Writing Reports. Each student will need a rubric to grade their partner's assignment.
- During the grading, they may not ask each other for clarification.
- When finished grading, students will provide verbal feedback on how well they were able to understand the report as written. Students need to go over the rubric with each other and clarify any misconceptions and justify the score given.

TECHNICAL WRITING REPORT STUDENT GUIDELINES

Introduction

The purpose of technical writing is to communicate technical, and often complex, information to various audiences. Because the audience will have varying degrees of familiarity with the content, the writing must be adapted so that the information is clear, concise, and usable to the audience. A good technical writer takes difficult scientific and technical language and transforms it into concepts that are easy to follow.

Technical Writing Report Topic _____

- ✓ Complete technical writing report using the rubric provided. Be sure that your report is easy to understand and simple to follow.

- ✓ A classmate will grade you on how clear and simple your report is written using the rubric.

OBSERVATION ACTIVITY TEACHER GUIDELINES

Objective: To allow students the opportunity to practice observation and documentation skills.

1. Collect several common objects such as tape dispenser, stapler, eraser, remote controls, paper weight, small lab equipment etc. You will need multiples so more than one student observe. You may also want to set students in groups to view objects.
2. Give students 5 minutes with each object to look at, touch and record their objective observations.
3. Then rotate objects and repeat times 3
4. Then pick one of the three objects to start comparing student observations by listing them on the board. Ask students to add to the list from their recorded observations.
5. View the list. Did students observe the texture, the temperature, smell etc.?
6. Repeat step 5 with the other two objects.

Course	Rationale
<i>Practicum in Health Science</i>	Teaching is a major component in many healthcare fields. Client education, as well as general population awareness education, can lead to more well-informed consumers, and can help to improve patient health and reduce the demand for professional services.
Unit II	
<i>Communication</i>	Objectives
	Upon completion of this lesson, the student will be able to:
Essential Question	<ul style="list-style-type: none"> • Evaluate the client's ability to understand communications • Adapt communication to accommodate individual needs • Plan and teach a given topic
<i>How does patient education improve healthcare delivery?</i>	Engage
	Contact a local clinic and get patient teaching pamphlets on several health-related issues. Divide the students into groups of four, with each group having a different pamphlet. The groups will read their information and summarize what they learned. Each group will pick a spokesperson to present what they learned to the class.
TEKS TEKS 130.205 1C, 2B, 5A	Key Points
Prior Student Learning	<ol style="list-style-type: none"> The Importance of Education <ol style="list-style-type: none"> Encourages active participation by clients Encourages clients to be informed consumers Encourages higher compliance rates Promotes good health and wellness activities Effective means of disease prevention Enhances relationship between clients and the medical community Effective marketing tool for the healthcare industry
<i>Roles and Responsibilities of HealthCare Workers</i>	
<i>Verbal and Non-Verbal Communication</i>	<ol style="list-style-type: none"> Client Education <ol style="list-style-type: none"> The process of influencing the patient's behavior to effect changes in the knowledge, attitudes, and skills needed to maintain and improve health

Estimated time

1-2 hours

- B. Educated patients experience better health and have fewer complications.
 - C. Must be ongoing and interactive
 - D. Teaching is a planned method, or series of methods, used to help someone learn.
 - E. Effective teaching demands analytical and problem-solving skills.
 - F. Factors affecting client learning
 - 1. Age and developmental level
 - 2. Family support networks and financial resources
 - 3. Cultural influences
 - 4. Literacy
 - G. Learning Domains
 - 1. Cognitive: The acquisition of knowledge
 - 2. Psychomotor: Learning a physical skill
 - 3. Affective: Changes in attitudes, values, and feelings
 - H. Teaching Strategies
 - 1. Cognitive
 - a. Lecture or discussion
 - b. Audiovisual materials
 - c. Printed materials
 - d. Computer-assisted instruction programs
 - 2. Affective Domain
 - a. Role playing
 - b. Discussion
 - c. Role modeling
 - d. Audiovisual materials
 - e. Printed materials
 - 3. Psychomotor
 - a. Demonstration
 - b. Discovery
 - c. Audiovisual materials
 - d. Printed materials
- III. Examples of Printed Materials
- A. Brochures, booklets, and fact sheets
 - 1. Explain specific diagnostic procedures
 - 2. Provide information about a disease or medical condition, health maintenance, and pharmaceuticals
 - B. Newsletters can offer health care tips, office policies, and new discoveries in health care.
 - C. Community Assistance/Resource Directories provide names, addresses, and phone numbers of available medical services.
 - D. Accommodations must be made for clients who cannot read well,

understand or speak English, or are mentally impaired.

IV. Examples of Visual Materials

- A. The best method for comprehension
- B. Use in conjunction with written materials
- C. Video tapes – effective for complicated topics and procedures
- D. Seminars and classes – conducted by healthcare professionals utilizing a variety of multimedia technologies
- E. Bulletin boards
- F. Billboards
- G. Anatomical models
- H. Computer software programs

V. Multicultural Issues

- A. Clients with different cultural backgrounds may differ in:
 - 1. Their perceptions of the causes of illness
 - 2. The way they perceive and report symptoms
 - 3. Treatment expectations
 - 4. Their willingness to follow instructions.
- B. Understanding and respecting these differences will enhance communication

VI. Verify Client Understanding

- A. Have the client explain information in their own words.
- B. Have the client repeat any demonstrations to verify their understanding.

Activity

- I. Research health issues and select an issue of concern.
- II. Develop a plan to educate a group or individual on this issue (obtain instructor approval for topic and educational plan).
- III. Present the plans to class and choose one for class implementation.

Assessment

Multimedia Rubric

Oral Presentation Rubric

Teaching Plan

Materials

Libraries (public, hospital, university)

Internet and computer resources

Professional Associations

Community Resources such as the Public Health Department, Health Clinics, etc.

Accommodations for Learning Differences

For reinforcement, the student will interview a public health official to identify community health issues.

For enrichment, the student will participate in the HOSA Community Awareness Project, or Health Education (<http://www.hosa.org>).

National and State Education Standards

National Health Science Standards

HLCO2.01 Communications

Health Care Workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing. Adjust communication to other's ability to understand. Apply the elements of communication using the sender-receiver model. Apply active listening skills using

reflection restatement and clarification techniques. Demonstrate courtesy to others including self introduction. Interpret verbal and non-verbal behaviors to augment communication and within the scope of practice.

TEKS

130.205(c)(1)C plan, prepare and deliver a presentation;

130.205(c)(2)B demonstrate therapeutic communication skills to provide quality care; and

130.205(c)(5)A participate in team teaching and conflict management such as peer mediation, problem solving and mediation skills.

Texas College and Career Readiness Standards

ELA III A Understand elements of communication both in informal group discussions and formal presentations

B Develop effective speaking styles for both group and one on one on one situations

Cross Disciplinary Standard

I. Key Cognitive Skills

c. Problem Solving

1. Analyze a situation to identify a situation to be solved

2. Develop and apply multiple strategies to solve a problem

3. Collect evidence and data systematically and directly relate it to solving a problem

e. Work Habits

1. Work Independently

2. Work Collaboratively

Teaching Plan Template

Topic		Need For Teaching	
Information about Group/Learner and Barriers of Learning		Learning Readiness	
		Reference	
Goal	Objectives	Teaching Strategies	Learning Activities
Content		Evaluation	

Oral Presentation Rubric

Student: _____

Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Clearly and effectively communicates the main idea or theme.					
Presenter is self-confident and clearly expresses ideas.					
Presenter answers questions with well thought-out responses.					
Holds the audience's attention and maintains eye contact.					
Visual aids are clear and add to the presentation.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Multimedia Rubric

Student: _____ Class: _____

Title: _____ Other Group Members: _____

Date: _____

Scoring criteria	5 Excellent	4 Good	3 Needs Some Improvement	2 Needs Much Improvement	1 N/A
Clearly and effectively communicates an introduction to the theme/objective of the project.					
Clearly and effectively communicates the content throughout the presentation.					
Integrates a variety of multimedia resources to create a professional presentation (transition, graphics).					
Presentation holds the audience's attention and relates a clear message.					
Timing between slides is sufficient for the viewer to read or observe content.					
Each image and font size is legible to the entire audience.					

Scale:

26-30 A Excellent

21-25 B Good

16-20 C Needs Some Improvement

11-15 D Needs Much Improvement

6-10 F Not Appropriate

TOTAL=

Comments

ADVANCED HUMAN RELATIONS

Course	Rationale
<i>Practicum in Health Science</i>	Health care workers use human relations in dealing with patients and co-workers.
Unit II	Objectives
<i>Communication</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Identify, define, and discuss terms and factors relating to human relations • Explore communication styles, self-esteem, personal values, attitude formation, and motivation in relation to effectively dealing with others • Develop personal strategies for building good relationships • Interpret common theories of human behavior and choose techniques for personal integration • Understand the importance of good human relations and communications in providing a suitable working environment • Explain the nature, purpose, and importance of human relations in an organizational setting
Essential Question	
<i>Why do I have to be courteous to patients?</i>	
TEKS 130.205(c) 1A, 3A, 7A	Engage
	What are some complaints that you have heard family or friends make about their care or treatment at a healthcare facility?
Prior Student Learning	Key Points
<i>Personal traits of Health Care Professionals</i>	<ol style="list-style-type: none"> I. Factors involved in self-understanding <ol style="list-style-type: none"> A. Self-acceptance B. Self-image C. Values D. Self-confidence -- a belief in oneself and in one's powers and abilities E. Relations with others - the qualities that make a person likable <ol style="list-style-type: none"> 1. genuineness -- means being oneself; genuine people do not put up false fronts to try to look good; genuine people do not put on an act and are comfortable with themselves. 2. trustworthiness -- the key to building trusting relationships with others is to be trustworthy; when others take risks with you, you must prove their risks are worth taking. II. Techniques for being accepted by fellow employees
Estimated time	
<i>1 – 2 Hours</i>	

- A. Try to get along with co-workers.
 - B. Seek acceptance by co-workers in a job.
 - C. Accept others' life styles -- everyone should learn to respect another person's right to be different.
 - D. Avoid incorrect assumptions to avoid offending others before all facts are known.
 - E. Maintain a good appearance because a good first impression will help one on the way to being accepted.
 - F. Develop a good attitude -- one of the most important factors that determine one's acceptance by others in any environment is attitude.
 - G. Observe rules -- there is usually a set of rules to be followed at the workplace, but there are also unwritten rules that workers are expected to observe.
- III. Reasons for employees losing their jobs
- A. Inability to get along with fellow employees
 - B. Poor attendance and lateness for work
 - C. Abuse of break time
- IV. Factors that affect human relations with employers
- A. Competence -- the ability to perform a required task; as a rule competent employees get along with their employers.
 - B. Cooperation -- working with others to reach a given goal; the employer has a right to expect your cooperation.
 - C. Loyalty -- a feeling of obligation and devotion to one's employer or job; includes not complaining to others about your working conditions.
 - D. Initiative -- recognizing what jobs need to be done and doing them without being reminded.
 - E. Trustworthiness -- the quality that makes one dependable; the employer knows the trustworthy employee will do what is expected and often even more.
 - F. Honesty -- qualities of trustfulness, honor, and integrity; free of fraud and deception.
 - G. Dependability -- being on the job everyday, arriving on time, and notifying the employer if one cannot be at work.
- V. Basic ways of getting along with people
- A. Think before you speak; always say less than you think.
 - B. Make promises sparingly and keep them faithfully, no matter what it costs.
 - C. Be interested in others -- in their pursuits, their welfare, their homes, and families; let everyone you meet, however humble, feel that you regard them as a person of importance.
 - D. Never let an opportunity pass to say a kind and encouraging thing to or about somebody.
 - E. Be cheerful; keep a pleasant smile on your face.

- F. Reserve an open mind on all debatable questions; discuss but do not argue -- it is a mark of a superior mind to disagree yet be friendly.
 - G. Discourage gossip and make a rule to say nothing of another unless it is something good.
 - H. Be careful of others' feelings -- wit and humor at the other fellow's expense are rarely worth the effort.
- VI. Reasons why people work and set goals
- A. To achieve satisfaction
 - B. To support family
 - C. To attain acceptance of peers
 - D. To gain power
 - E. To accumulate wealth
- VII. Establishing human relations with patients
- A. Learn to know, understand, and relate to the patient in any situation.
 - B. Show sympathy for the patient by being eager to serve and by having a gentle touch.
 - C. Realize and understand sick people are sensitive, both emotionally and physically; sickness causes strain and patients are not always on their best behavior.
 - D. Remember to be kind and tolerant when patients are irritable and demanding.
 - E. Realize much of the satisfaction assistants derive from their work is due to the relationship they develop with the patient.
- VIII. Human relations in communication
- A. Good attitudes enhance communication.
 - B. Good communication lowers employee turnover.
 - C. Good communication eliminates misunderstanding.
 - D. Communication implies two important things:
 - 1. sharing means that communication involves the action of more than one person; there must be one to send the message and another to react to it
 - 2. understanding means that both the sender and receiver of the message share the same meaning of what is said; this part of communication is the most difficult because people tend to give different meanings to the same words, and human relations problems develop because of the failure of people to share and understand messages.
- IX. Barriers to good communication in human relations:
- A. Human relation problems may develop because of the failure of people to share and understand messages.
 - B. When a person uses a word, that word is used with just one meaning.

- C. The particular meaning is what that person intends the word to mean.
- D. Bypassing is a barrier in communication because one single word or expression is complicated by several different meanings, or several different words might have the same meaning
- E. Employers and employees can cause communication problems by misusing language; two of the most serious problems that arise due to the misuse of language are:
 - 1. labeling or name-calling
 - a. to unfairly classify someone as a certain type of person.
Typical labels given to people are:
 - 1) clown -- a person who appears to do silly things
 - 2) troublemaker -- a person who appears to be frequently involved in problems
 - 3) animal -- a person lacking in manners
 - 2. emotional confusion -- words that mean the same thing; some have pleasant sounds while others do not.
 - a. negative appeal positive appeal

 - death insurance life insurance

 - garbage collector sanitary engineer

 - stock salesperson investment counselor

 - lie fib

 - pop quiz unscheduled test
 - 3. avoid emotional confusion in human relations by using as many positive sounding words or titles as possible.
 - 4. listening -- when good listeners do not understand a message, they ask the speaker for a different explanation; good listeners must be alert; listening is much more than hearing -- the process of listening requires an active mind.
 - 5. grapevine -- the term dates back to the Civil War, when the United States sent secret messages by telegraph line strung through trees and bushes almost like a vine; today, the term "grapevine" includes all forms of unofficial communication, but messages by way of the grapevine are only about 80 percent reliable.

Activity

- I. Read *My Name is Mrs. Simon* and complete the Response Sheet.

Assessment

Successful completion of *My Name is Mrs. Simon* Response Sheet.

Materials

My Name is Mrs. Simon

Movie: *The Doctor*

Accommodations for Learning Differences

For reinforcement, the student will complete Developing a Relationship with Patients activity.

For enrichment, the student will watch the movie *The Doctor* and identify human relations techniques throughout.

National and State Education Standards

National Health Science Cluster Standards

HLC02.01 Communications

Health care workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

TEKS

130.205(c)(1)(A) Interpret data from various sources in formulating conclusions;
130.205(c)(3)(A) demonstrate proficiency in medical terminology and skills related to the health care of an individual; and
130.205(c)(7)(A) interpret knowledge and skills that are transferable among health

science professions.

Texas College and Career Readiness Standards

I. Key Cognitive Skills

A. Intellectual curiosity

1. Engage in scholarly inquiry and dialogue.
2. Accept constructive criticism and revise personal views when valid evidence warrants.

B. Reasoning

1. Consider arguments and conclusions of self and others.
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.
3. Gather evidence to support arguments, findings, or lines of reasoning.
4. Support or modify claims based on the results of an inquiry.

C. Problem solving

1. Analyze a situation to identify a problem to be solved.
2. Develop and apply multiple strategies to solving a problem.

E. Work habits

1. Work independently.
2. Work collaboratively.

F. Academic integrity

1. Attribute ideas and information to source materials and people.
2. Evaluate sources for quality of content, validity, credibility, and relevance.
3. Include the ideas of others and the complexities of the debate, issue, or problem.
4. Understand and adhere to ethical codes of conduct.

A. Reading across the curriculum

1. Use effective pre-reading strategies.
2. Use a variety of strategies to understand the meanings of new words.
3. Identify the intended purpose and audience of the text.
4. Identify the key information and supporting details.
5. Analyze textual information critically.
6. Annotate, summarize, paraphrase, and outline texts when appropriate.
7. Adapt reading strategies according to structure of texts.
8. Connect reading to historical and current events and personal interest.

Read the Article, “My Name is Mrs. Simon.” Answer the Questions Below.

1. Identify three (3) desired personal characteristics that are missing in the hospital staff caring for Mrs. Simon. For each characteristic identified, give a specific example that supports your choice.

Characteristic:

Example:

Characteristic:

Example:

Characteristic:

Example:

2. Describe how you would feel if a member of your family was treated like this.
3. What actions could you take if this did occur to one of your family members?
4. What do you consider to be your strongest personal characteristic? Explain.
5. Which one do you consider to be your weakest? Explain.
6. What specific actions could you take to improve on the characteristic you chose in question #5?

A WOMAN TODAY by Emma Elliot

“My Name is Mrs. Simon”

Old and ailing, my mother was fighting a valiant battle against one of America’s best hospitals.

Almost the last sentence my mother spoke before she died at age eighty-five was “My name is Mrs. Simon.” The young orderly who was moving her from her hospital bed to a gurney (to be taken to x-ray for what seemed to be an endless series of tests), had been calling her ‘Doll’, “Grannie”, or ‘Annie”. My mother’s first name was Anna, and she came from a fairly formal European background, in which older people are rarely on a first-name basis with anyone but relatives and close friends.

Two weeks before her death, my mother had been managing her large home on her own. She worked actively as a volunteer for a number of local civic organizations, read books and listened to classical music on the radio. Recently she had had increased difficulty walking. The pain in her legs and some loss of balance made her physician decide to put her in the hospital for a series of tests. Before she left, she went to a beauty parlor to get her hair done -- a weekly ritual for twenty years. My mother, a great beauty throughout her life, cared very much how she presented herself to the world.

The hospital her physician had chosen was a large, university-affiliated institution, famous throughout the United States for its outstanding research record. My mother had an excellent insurance program to supplement her Medicare benefits, so she was able to move into a small private room. She had not been in a hospital since her last child was born more than fifty years before, but she had never been afraid of new experiences. She reassured my stepfather, her husband of more than twenty years, that when the doctors found out what was wrong with her she’d be fine. They would take their daily strolls around the neighborhood and even get to a movie or a concert.

I am a medical writer, and was on assignment on the West Coast when the call came that my mother was going into the hospital for what her doctor called “routine tests.” I asked whether I should come home. “Of course not,” my mother said. “Finish your work. I will manage. I always do.”

But, somehow the situation worried me enough so that I flew home a day later. When I walked into her hospital room I was appalled. My mother was not the same woman I had seen two weeks earlier. Her hair was straggly and uncombed, and her face looked shrunken, which I soon realized was because they had taken her dentures away. “Senile, old people can hurt themselves with those false teeth,” a nurse’s aide explained. That was the first time I had heard the word senile applied to my mother. People had used all kinds of adjectives to describe her: willful, stubborn, a little vain, but also intelligent, adaptable, and beautifully groomed. Never had she been suspected of being senile. Now I would hear that word

every day, many times, until the evening she died, and each time I would protest vigorously. “Has there been a medical diagnosis of senility?” I asked the nurse’s aide. The young woman looked terribly surprised.

“She’s eighty-five,” she replied in a matter-of-fact tone. “People at that age just don’t have all their marbles.” She was putting crudely what many others on the hospital floor, from cleaning personnel to physicians, would put in milder or more scientific terms.

I looked around the room, which seemed as unkempt and forlorn as my mother. Her lunch tray, untouched, held a plate of tough-looking meat and a hard roll -- foods that would be difficult to chew even if she had her dentures. The gelatin dessert she refused on grounds of taste. (I remember she used to look contemptuously at a gelatin salad and say, “Stop trembling... I wouldn’t dream of eating you.”)

“What have you eaten since you got here?” I asked. “Not much,” she said. “I don’t seem to get anything I can chew. They give me a menu everyday, but without my glasses I can’t read it.” She slurred her words because it was difficult for her to talk without her dentures. Shaken I asked about the glasses. “A nurse took them away with my pocketbook when I got here,” she said simply. “I have asked everybody who comes into the room to give them back, but they insist I never brought them in the first place.”

A quick search of her room turned up the glasses and her pocketbook in a closet, out of reach. Also in the closet were her brush and comb, which explained the condition of her hair. By that time, I was furious, a feeling that would intensify during the next ten days. I went back to the nurses’ station and asked that my mother be given her dentures, eyeglasses and personal grooming articles. “Well, if you insist,” the nurse said, “but you know that these senile people keep losing things, and nobody on this floor has time to look for them.” She was about thirty, with a pair of glasses on a chain around her neck. “Don’t you ever lose your glasses?” I asked. “Of course,” she said. “That’s why I have this chain.”

With her personal belongings back, my mother was now able to see the menu, read the newspaper and get-well cards from friends and family, see the numbers on the dial phone next to the bed and talk to the outside world without slurred speech. She could (and did, until the last day of her life) comb and brush her hair. But the word senile continued to haunt her days and nights.

My stepfather, in his nineties, was terribly worried about her. Together they had coped very well in the big suburban house, but now he found he could not manage. His son and daughter-in-law came to take him home with them to another suburb more than thirty miles from the hospital. He could no longer drive, and his children held full-time jobs. So while he and my mother were able to talk daily on the phone, he could not get into the city to see her.

But one afternoon he persuaded a neighbor to drive him to the hospital for visiting hours. When he called with the good news, my mother started primping immediately. Not for the first time, she asked to

wear her own nightgown and bed jacket instead of a stiff, rust-stained, tied-in-the-back hospital gown. But her nightclothes were not to be found, and another nurse insisted they had never been brought. "She's just imagining packing them. They imagine lots of things." A five-minute search turned them up, still in her suitcase, locked up at the nurse's station. I insisted that she wear her own clothes from now on, unless there was a medical reason for wearing the hospital gown. At this point, several nurses began looking at me as if senility was an infectious disease and I had caught it. Apparently, to many of these young people, being old did not just mean being senile, it also meant being so hopelessly ugly that appearance should no longer matter.

My stepfather did not agree with the staff. He thought my mother looked very pretty in her silky, cream-colored gown with matching jacket. They were exceedingly glad to see each other and spent the full two hours -- first talking, and then, just holding hands. When he left, he asked me, "She'll be home in a few days, won't she?" I assured him that she would. (That's what everyone had told me.) They never saw each other again. It was the last reasonably happy hour my mother had.

The next day, the medical tests started in earnest, since a preliminary examination had not shown what was wrong with her. It seemed as if every hour another person came in to stick a needle into her arm to get more blood. Eventually, the veins in her arms collapsed, and getting blood became more difficult and painful. "Why do you have to get blood so often?" she asked a resident who had come in to get one more sample. "Why don't you just come once and get all you need? Then you wouldn't have to stick me with needles all the time." It seemed like a perfectly sensible question, one I had been meaning to ask. "Old people ask such funny things," said the resident, laughing as he probed for a usable vein.

By evening, all the blood tests and x-rays (for which she waited in a corridor on a hard gurney for hours) failed to reveal anything definite. Her personal physician, whom she had visited for more than thirty years, had left for two weeks the day after she entered the hospital. He had assured me that his partner (who'd never met my mother) would cover for him and visit regularly, but the partner got the flu. That left my mother in the hands of the hospital's teaching faculty, residents and interns. They had a genuine, if academic, interest in finding out the cause of her problems, so when ordinary tests did not turn up any definite diagnosis, they decided on some extraordinary ones: a spinal tap and a bone-marrow examination. I have had both and knew they were frightening at best, very painful at worst. "Why is this necessary?" I asked. "If she has a brain tumor or leukemia (which would be indicated by the spinal tap and bone-marrow examination, respectively), what are you going to do about it? She obviously cannot withstand extensive surgery, radiation treatments or chemotherapy. So why are you doing this?" I never received an answer.

When she entered the hospital, my mother had signed a release (which was not explained to her, and which, without her glasses, she had not been able to read) authorizing the hospital staff to do any tests and procedures they considered advisable. The resident on the floor reminded me that I had no legal

authority to stop any test. So my mother was rolled out of her room on that gurney, and I did not see her again for four hours. When she was brought back, she looked gray and terrified. She submitted to the spinal tap with little complaint, but to get enough bone marrow, they had to pierce her breastbone. She said it hurt terribly, but everybody had told her, “Old people’s bones are so brittle. It can’t hurt much. Be a good girl, Annie.” From that evening until she died two days later, she cowered in her bed and started to cry whenever anyone came into the room. She also stopped speaking English, reverting exclusively to her native German.

Her new attitude brought yet another specialist into the picture, a neurologist whose questions seemed exceedingly silly to her. He wanted to know what day it was and who was president of the United States. “I could tell him who the city councilman from my district is,” she said to me in German, “but why should I?” The neurologist motioned me out of the room and started to ask me about her medical history. “Has there been any insanity in your family?” he wanted to know. I inquired why he was asking. “Well, your mother is clearly having a psychotic episode,” he said. “She’s talking gibberish.” I pointed out that far from talking gibberish, she was speaking clear, grammatical German. He looked a little disconcerted, made a note on her chart, did not apologize, and left, never to be heard from again.

I had been spending the nights at the hospital, but that night my mother was so exhausted, I was sure she would sleep. I was tired myself, so I decided to go to my apartment and return early in the morning. After all, what else could happen to humiliate and hurt her?

Something could. Early the next morning, before I arrived, she was wheeled from her room to a small auditorium, where a large number of white-coated individuals poked her, looked into her eyes with flashlights and then discussed her condition at great length. Obviously, she had been the subject of teaching rounds, in which one intern or resident presents a difficult case to his colleagues and professors. I had been the subject of teaching rounds myself when I was in the hospital two years earlier, but I had been asked whether I would agree to this procedure, and I had been dressed in a nightgown and a robe, neat and dignified. My mother was there in one of those hospital gowns, open at the back. Nobody had washed her face or combed her hair. She was terribly embarrassed and exhausted.

For the rest of the day, she was in pain. Her feet hurt. Her back hurt. She was dizzy. She could no longer get to the toilet alone, and finding someone to help her was no easy task. I spent a lot of time trying to get some pain medication for her, finding an extra pillow to put behind her back, asking someone to bring a bedpan. She had developed diarrhea, and once when she soiled the bed it took thirty minutes to get a nurse’s aide to come with clean sheets. Certainly the floor was busy and probably understaffed, but after all those days in the hospital it had become obvious to me that the five old people on that floor had their bells answered last. “Those people are always complaining” or “They just want attention” were sentiments heard a lot around that nurses’ station.

As a medical writer, I was appalled at the way this hospital's trained professionals were treating their elderly patients. They, of all people, should be well aware that "old age" and "senility" are not interchangeable terms. In fact, only 5 percent of older people ever suffer from severe intellectual impairment. Fifteen percent may suffer some mild disability, such as minor memory loss, but 80 percent of those who live to very old age, into their eighties or even nineties, never experience any symptoms of senility at all.

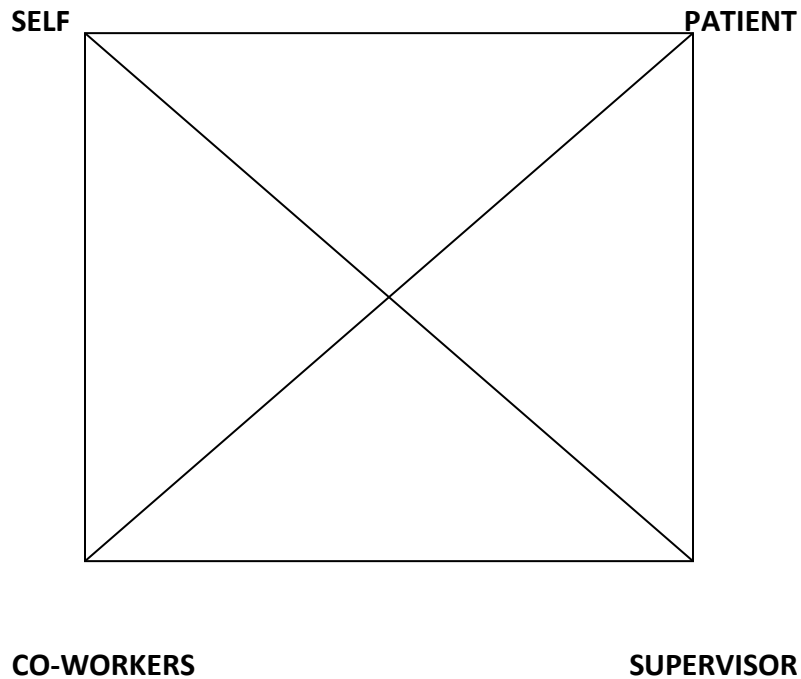
We tend to forget that Picasso was painting the last day of his life. He died at ninety-one. Alfred Hitchcock was planning a new film. He died at eighty. Martha Graham, America's greatest dancer and choreographer, produced brilliant new dances this year -- the year of her ninetieth birthday. What is true for them is true for hundreds of thousands of older Americans who could live full productive lives, who could teach us and our children about the past and thus prepare us for the future, if we would just let them. To discriminate against the very minority we are all destined to join in the most irrational prejudice of all.

Late that evening my mother started to have difficulty breathing. The floor resident ordered one more x-ray. The gurney came through the door. "Nein," my mother said. "No, no....." "Now don't you be difficult, Dolly," said the orderly, as he transferred her from bed to gurney. He was younger than her youngest grandson. That's when she announced firmly and with dignity, "My name is Mrs. Simon." They got her as far as the elevator. I was holding her hand when she stopped breathing. The resident sounded the alarm. I was told to go to the waiting area as an emergency cart came rushing down the hall and fifteen people collected around her. Her heart had stopped. They tried to resuscitate her, but nothing worked. She was dead.

"We tried everything," said the resident who came to tell me it was all over. "Except to treat her with dignity and respect," I wanted to say, but I didn't. I wrote this article instead.

-Ladies Home Journal - August 1984

Relationships With People



Human relations refer to relationships between people. The relationship can be formal or informal, close or distant, emotional or unemotional. In health care many kinds of relationships with different people must be considered. As an employee at a health care facility you have a relationship with (1) self, (2) co-workers, (3) your supervisor, and (4) the patient.

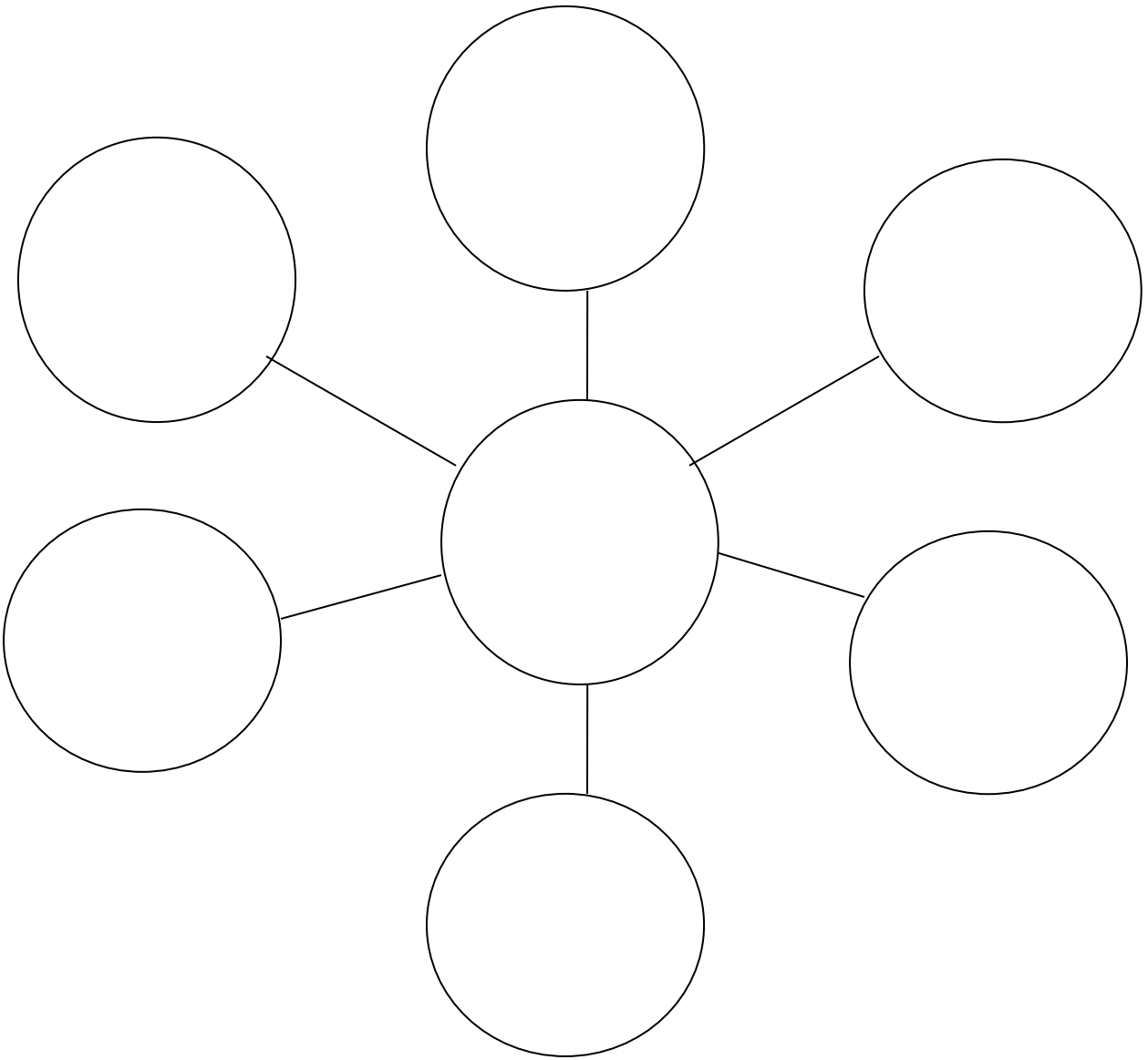
Relationships With People

Human relations refer to relationships between people. The relationship can be formal or informal, close or distant, emotional or unemotional. In health care many kinds of relationships with different people must be considered. As an employee at a health care facility you have a relationship with (1) self, (2) co-workers (in your unit/department), (3) your supervisor, (4) the patient, (5) patient's family/visitors, (6) physicians, (7) other health care workers.

Using the Describing Qualities Thinking Map –

- place your name in the center circle of the diagram;
- place the other people you will come in contact with in the other circles;
- list the type of relationship that you can form with each type; and
- list things that may happen to change the relationship.

Describing Qualities



Describing Qualities

Created by: Daniel Longoria, based on Thinking Maps, Inc © 2000 *For Educational Classroom Use*

Course	Rationale
<i>Practicum of Health Science</i>	As a healthcare team member it is important to work together with other healthcare team members and family members to ensure the best patient care possible.
Unit III	Objectives
<i>Teamwork / Team building</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Explain the importance of working as a team member in the health field • Identify ways in which heterogeneous team members work well together • Explore ways in which to resolve common group dilemmas • participate in team teaching
Essential Question	Engage
<i>How do healthcare workers work through conflict</i>	See John Godfrey Saxe's (1816-1887) version of the famous Indian legend of the "Blind Men and the Elephant" and complete the activity.
TEKS 130.205 (c) 5A,B,C	Key Points <p>I. View Point -- Just as the blind men each went away with a different opinion, many times when working with people conflicts and differences of opinion occur regarding what the main priorities should be. And, many times just as the poem pointed out, there are many correct answers depending on the person's view point.</p> <p>As a health care worker you need to understand how different personalities may look at situations differently. Most people will fall into one of the of four basic personality types, and while you will most likely have qualities of all four colors, one color tends to be the brightest. Look at the brief description and predict which one you are and then complete the "Understanding Yourself and Others Personality Profile" sheet. The results will provide insight and new awareness about yourself and others.</p>
Prior Student Learning <i>none</i>	Red -- <ul style="list-style-type: none"> Task and results oriented Honest Likes recognition Can't sit still Doesn't like to be late
Estimated	

time

2-4 hours

Enjoys individual sports (golf, fishing, tennis, etc.)

Car -- expensive or showy (often a sports car)

If they bought a swing set ? . . . would pay to have someone else put it together.

Yellow --

People oriented

Expressive

Friendly

Loves to talk

Extravagant

Optimist

Enjoys team sports (football, basketball, etc.)

Car -- large enough to carry friends around (CRV, van)

If they bought a swing set? . . . would invite everyone over for a swing assembly party to put the set together.

Green --

Detail oriented

Precise

Controlled

Thrifty

Does thing right the first time

Completes the job

Car -- practical (small recreation vehicle, economy)

If they bought a swing set? . . . would carefully remove *all* of the parts from the carton (in case it had to be returned); would count all the parts (to be sure they were all there); and, would carefully read all of the instructions before beginning the assembly project.

Blue -- Creatively oriented

Sincere

Loyal

Caring

Sensitive

Understanding

Open-minded

Enjoys nature

Car -- jeep

If they bought a swing set . . . wouldn't! They would design their own and build it from scratch.

II. Just as understanding different personalities are important in resolving conflict, the ability to effectively communicate clearly also plays an important part.

A. Who Is Responsible For Effective Communication?

1. The sender and the receiver share equal responsibility for effective communication – this especially important when teaching patients and family members about treatments or procedures.
2. Communication loop is complete when the receiver understands, feels, or behaves according to the message of the sender. When this does not occur, the communication process has broken down.
3. Receivers must provide senders with enough feedback to ensure that an accurate message has passed through all of the filters that might alter it -- as a health care worker you should always be checking for understanding, by asking questions or having the patient and/or family demonstrate treatment or steps.

B. How To Improve Group Communication

1. As the speaker:

- a. Send Clear Messages
 - i. don't talk too fast
 - ii. don't be too verbose ("wordy")
 - iii. be aware of filters that can distort your message
 - iv. ask purposeful questions to make sure you were understood
- b. Use Words Carefully
 - i. use language that is simple and precise
 - ii. avoid words that might be vague and/or ambiguous
 - iii. avoid technical or occupational jargon
- c. Use Repetition
 - i. studies show that repetition, or redundancy is an important

- element in ensuring communication accuracy
 - ii. repeat messages
 - iii. use parallel channels of communication -- send memo and follow-up with phone call
 - d. Use Appropriate Timing – not wise to communicate when receiver is extremely busy
- 2. As the listener: Active Listening (process of feeding back to the speaker what we listeners think the speaker meant)
 - a. Steps towards becoming an active listener:
 - i. cultivate a listening attitude
 - a) regard person worthy of respect and attention
 - b) empathize (feel with) speaker and really try to understand other's experience
 - c) drop expectations of what you are going to hear or what you would like to hear
 - d) be patient and refrain from formulating your response until speaker has finished talking
 - ii. focus your full attention
 - a) establish eye contact
 - b) equalize difference in height between you and speaker
 - c) maintain open body posture and lean forward slightly
 - d) continually refocus away from distractions (both internal and external)
 - iii. take notes
 - a) taking notes ensures greater accuracy and builds speakers confidence in your ability to
 - b) remember important details
 - iv. ask questions – this ensures your own understanding of speaker's thoughts and feelings and helps you secure additional relevant information

III. Another negotiation skill needed to resolve conflict is a good attitude. Attitude is a choice people make every day. It can influence how we react and how others react in a stressful situation. Having a positive attitude usually makes conflict easier to resolve, or at least makes people more willing to look at options. In the workplace setting or when working with a team the following guidelines can foster a good attitude.

A. Focus on the positive aspect of work

- B. Stop complaining
- C. Help your co-workers
- D. Reduce unrealistic expectations of yourself and others
- E. Think optimistically
- F. Anticipate some rejection
- G. Smile
- H. Say something pleasant
- I. Change negative statements to positive ones
- J. Turn obstacles into opportunities
- K. Find a way around problems

Activity

- I. Complete the “Blind Men and the Elephant” activity and discussion.
- II. Complete the “Understanding Yourself and Others Personality Profile.”
- III. Complete the role play with “colors” activity
- IV. Complete Team Work Problem Solving activities
- V. As a team, write and present a lesson plan to teach: (pick a topic that could be used for a health education in your area) Examples:
 - a. diabetic patients about nutrition
 - b. dangers of alcohol
- VI. As a team, write and present a lesson plan on “Step by Step -- How to _____” on a skill such as how to take blood pressure, how to make a bed, etc.

Assessment

Successful completion of activities

Teamwork Rubric

Oral Presentation Rubric

Materials

- I. Sheet of paper and pencil per student

- II. Copies of color personality test for each student
- III. Copies of scenario for students to role play
- IV. See the individual materials list on each team work problem
- V. Use the rubric from the National HOSA “Health Education” competition as a guideline for students
- VI. Use the rubric from the National HOSA “ Clinical Specialty ” competition as a guideline for students

Accommodations for Learning Differences

For reinforcement, the student will write step by step directions for “How to Make Peanut Butter and Jelly Sandwich.” Instructions can be found in the communication lesson for Principles to Health Science.

For enrichment, student will teach lesson written to educate the public.

National and State Education Standards

National Health Science Cluster Standards

- 2.11 Interpret verbal and nonverbal communication.
- 2.12 Recognize barriers to communication.
- 2.13 Report subjective and objective information.
- 2.14 Recognize the elements of communication using sender-receiver model.
- 2.15 Apply speaking and active listening skills.

TEKS

130.205 (c) 5A participate in team teaching and conflict management such as peer mediation, problem solving and negotiation skills; and

130.205 (c) 5B refine consensus-building techniques.

Texas College and Career Readiness Standards

English-Listening:

- B.1 Listen critically and respond appropriately to presentations
- B.2 Listen actively and effectively in a one-on-one communication
- B.3 Listen actively and effectively in group discussions

Social Studies Standards:

V.A. 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.

Cross-Disciplinary Standards

Key Cognitive Skills

- C.1 Analyze a situation to identify a problem to be solved.
- C.2 Develop and apply multiple strategies to solving a problem.

THE BLIND MEN AND THE ELEPHANT

By John Godfrey Saxe

(1816-1887)

A version of the famous Indian legend

It was six men of Indostan
To learning much inclined,
Who went to see the Elephant
(Though all of them were blind),
That each by observation
Might satisfy his mind.

The *First* approach'd the Elephant,
And happening to fall
Against his broad and sturdy side,
At once began to bawl:
"God bless me! but the Elephant
Is very like a wall!"

The *Second*, feeling of the tusk,
Cried, -"Ho! what have we here
So very round and smooth and sharp?
To me 'tis mighty clear
This wonder of an Elephant
Is very like a spear!"

The *Third* approached the animal,
And happening to take
The squirming trunk within his hands,
Thus boldly up and spake:
"I see," quoth he, "the Elephant
Is very like a snake!"

The *Fourth* reached out his eager hand,
And felt about the knee.
"What most this wondrous beast is like
Is mighty plain," quoth he,

"'Tis clear enough the Elephant
Is very like a tree!"

The *Fifth*, who chanced to touch the ear,
Said: "E'en the blindest man
Can tell what this resembles most;
Deny the fact who can,
This marvel of an Elephant
Is very like a fan!"

The *Sixth* no sooner had begun
About the beast to grope,
Then, seizing on the swinging tail
That fell within his scope,
"I see," quoth he, "the Elephant
Is very like a rope!"

And so these men of Indostan
Disputed loud and long,
Each in his own opinion
Exceeding stiff and strong,
Though each was partly in the right,
And all were in the wrong!

MORAL

So oft in theologic wars,
The disputants, I ween,
Rail on in utter ignorance
Of what each other mean,
*And prate about an Elephant
Not one of them has seen!*

This work is in the public domain.

THE BLIND MEN AND THE ELEPHANT ACTIVITY

Teacher leads discussion about interpersonal communication using questions:

- What happens when you disagree with someone?
- Why do we disagree?

The Blind Men and the Elephant Activity

- Each student needs a clean sheet of paper
- Fold paper in half hamburger style
- Fold paper in half hamburger style a second time
- Should have 8 squares front and back- number squares 1-8 in the upper right hand corner of each square
- Instruct students that you will be reading the poem entitled The Blind Men and the Elephant. The poem has 8 stanzas. They will be instructed to draw a picture after each stanza.
- Read 1st stanza- draw your own version of the elephant
- Read 2nd stanza-draw what you think the first blind man envisioned (wall)
- Read 3rd stanza- draw what you think the second blind man envisioned (spear)
- Continue through each stanza
- Read the 8th Stanza and instruct the students to draw a composite picture of the elephant based on the perceptions of the six blind men.
- Discussion Question:
 - What caused the disagreement between the blind men?
 - What assumptions are being made by each blind man?
 - Whose opinion was right or wrong?
 - How could this be resolved?
 - What is the moral of this parable?

Understanding Yourself And Others Personality Profile

There are no “right” or “wrong” answers. This questionnaire will help you to determine your preferred social style. The results will provide an insight into:

- new awareness about yourself & others
- solving conflicts with others
- leadership, teamwork, & relationship insight

Circle one word or phrase per line that best describes your behavior style.

1. assertive	conforming	sensitive	trusting
2. spontaneous	checks with others	mentally visualize	analyze/investigate
3. involved	orderly	straight forward	like to explore
4. stubborn	dictatorial	rebellious	easily discouraged
5. demanding	manipulative	uncooperative	silent/quiet
6. connects/joins	idea person	resists change	in charge
7. cautious	kindhearted	harmony	active
8. caring	outspoken	consistent behavior	mild
9. convincing	aggressive	disciplined	possessive
10. daring	dreamer	obedient	participating
11. logical	satisfied	friendly	bold
12. “eager beaver”	imaginative	accurate/precise	popular
13. reserved	innovative/new ideas	forceful	optimistic
14. power	teamwork	individual	conservative
15. talkative	restless	attentive	modest
16. leader	counselor	designer	controller
17. methodical	workaholic	helpful	self-directed
18. industrious	detailed	mentally active	hopeful
19. task-oriented	people-oriented	idea-oriented	result-oriented
20. emotional	flexible	likes recognition	precise
21. irritable	rigid	resentful	easily threatened

22. indirect	frank	careful	exact
23. goal oriented	volunteers for jobs	competent & steady	schedule oriented
24. excels in emergencies		thrives on compliments	
dry sense of humor		avoids causing attention	
25. enjoys watching people		strong-willed, decisive	
energy & enthusiasm		perfectionist, high standards	
26. makes friends cautiously		behaves or dresses in flashy way	
very self-confident		persistent & thorough	
27. neat & tidy		looks good on surface	
avoids conflicts		is usually right	

Understanding Yourself and Others Personality Profile

Score Sheet

1. red	green	blue	yellow
2. red	yellow	blue	green
3. yellow	green	red	red
4. green	red	yellow	blue
5. red	yellow	green	blue
6. yellow	blue	green	red
7. green	blue	yellow	red
8. yellow	red	green	blue
9. yellow	red	green	blue
10. red	blue	green	yellow
11. green	blue	yellow	red
12. red	blue	green	yellow
13. green	blue	red	yellow
14. red	yellow	blue	green
15. yellow	red	green	blue
16. red	yellow	blue	green
17. green	red	yellow	blue
18. red	green	blue	yellow
19. green	yellow	blue	red
20. blue	yellow	red	green
21. red	green	blue	yellow
22. yellow	red	blue	green
23. red	yellow	blue	green
24. red	yellow	blue	green
25. blue	red	yellow	green
26. blue	yellow	red	green
27. green	yellow	blue	red

Profile Totals:

RED _____ YELLOW _____ BLUE _____ GREEN _____

Description of Four Basic Personality Types

Red --

Task and results oriented

Honest

Likes recognition

Can't sit still

Doesn't like to be late

Enjoys individual sports (golf, fishing, tennis, etc.)

Car -- expensive or showy (often a sports car)

If they bought a swing set ? . . . would pay to have someone else put it together.

Yellow --

People oriented

Expressive

Friendly

Loves to talk

Extravagant

Optimist

Enjoys team sports (football, basketball, etc.)

Car -- large enough to carry friends around (CRV, van)

If they bought a swing set? . . . would invite everyone

over for a swing assembly party to put the set together.

Green --

Detail oriented

Precise

Controlled

Thrifty

Does thing right the first time

Completes the job

Car -- practical (small recreation vehicle, economy)

If they bought a swing set? . . . would carefully remove

all of the parts from the carton (in case it had to be returned); would count all the parts (to be sure they were all there); and, would carefully read all of the instructions before beginning the assembly project.

Blue -- Creatively oriented

Sincere

Loyal

Caring

Sensitive

Understanding

Open-minded

Enjoys nature

Car -- jeep

If they bought a swing set . . . wouldn't! They would

design their own and build it from scratch.

Note to the teacher: Statistically, most classes are comprised of "yellow" personalities. They will make up the majority for most groups. I always try to put just one "red" in each group. Too many reds in one group can be challenging! "Greens" and "blues" should be equally distributed among groups if possible for optimum group productivity.

Role Play with Colors

Scenario #1

- In bright color groups, develop a role play about having/changing a flat tire
- Remind groups to think about the attributes of their bright color
- Present role play

Scenario #2

- In pale color groups, develop a role play about planning a trip to Disney World for Spring Break
- Remind groups to think about the attributes of their pale color
- Present role play

Discuss how working with each group turned out.

Team Work Problem Solving

Problem # 1

Work with team members who share your personality color -- team should be no larger than 3.

Objective: Students will construct the tallest tower with 25 spaghetti noodles and 10 marshmallows.

Materials: (per team)

1. 25 pieces of Spaghetti
2. 10 mini-marshmallows

Tools: Ruler for measurement

Limitations:

1. You may only use the materials provided
2. Teams will be given only 20 minutes to plan and execute the task
3. Tower must be free standing (not leaning on anything) for at least 3 minutes

Problem # 2

Work with team members who do NOT share your personality color: team should be no larger than 3.

Objective: Students will design the smallest, re-sealable container to hold 91 beans.

Materials: (per team)

1. 2 index cards
2. 12 inches of masking tape
3. 1 bean for practice

Tools:

1. Ruler
2. Scissors

Limitations:

1. Build your container so that it can be opened and closed.
2. Container should hold 91 beans and close.

Problem # 3

Work with team members who do share your personality color.

Objective: Design and construct the tallest flag tower that will support your team's custom designed flag.

Materials: (per team)

1. 2 sheets of 8 1/2 " x 11" paper
2. 2 paper clips
3. Masking tape
4. 1 index card

Tools:

1. Crayons
2. Scissors
3. Ruler

Limitations:

1. You may use only the consumable materials provided.
2. The flagpole must be free standing and cannot be taped, glued, etc. to the test surface.
3. ½ of the team members should work on the pole construction and the other ½ should work on the flag creation.
4. You have only 15 minutes to complete the exercise.

After completion of the 3 team problems discuss as a group the good, bad and the ugly of working with people who share your personality color.

Then discuss as group the good, bad and ugly of working with people who do NOT share your personality color.

In the work world it is common for people with certain personality colors to choose certain types of professions, or they will have customers who are of a certain personality color. Discuss as a group –

which professions are common for their personality color and identify whether they cater to a certain personality color.

Finally discuss how understanding personalities can help diffuse conflict in their personal life and in the work place.

Oral Presentation Rubric

Student: _____ Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Clearly and effectively communicates the main idea or theme.					
Presenter is self-confident and clearly expresses ideas.					
Presenter answers questions with well thought out responses.					
Holds audience attention and maintains eye contact.					
Visual aids are clear and add to the presentation.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Team Work Rubric

Student: _____ Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Participates in group discussions and encourages others to join the conversation.					
Effectively works to keep the discussion moving in a rapid progression to achieve goals.					
Actively shares ideas and thoughts while offering helpful criticism and recommendations to others.					
Gives credit to others for their ideas and understands the feelings and thoughts of others.					
Involves others by asking questions or requesting input to reach an agreement.					
Clearly and effectively expresses ideas and thoughts.					

NOTE: N/A represents a response to the performance which is "not appropriate."

<p>Course</p> <p><i>Practicum in Health Science</i></p> <p>Unit III</p> <p><i>Teamwork/ Teambuilding</i></p> <p>Essential Question</p> <p><i>How can you participate as a team member in health care?</i></p> <p>TEKS</p> <p><i>103.205C 5A, 5C</i></p> <p>Prior Student Learning</p> <p><i>Teamwork and Consensus</i></p> <p>Estimated time</p> <p><i>Will vary with project</i></p>	<p>Rationale</p> <p>As future health care professionals, students need exposure to leadership opportunities in the community as well as a safe environment to use their problem solving skills in a meaningful project.</p> <p>Objectives</p> <p>Upon completion of this lesson, the student will be able to:</p> <ul style="list-style-type: none"> • Describe the importance of philanthropic activities • Participate in a service learning project as a team member working to solve problems • Collaborate with community leaders on solutions to impact the community in a positive manner <p>Engage</p> <p>Have you ever been a part of a project that you left feeling like you really accomplished something? <i>(Listen to responses.)</i> Have you ever been part of a project where you felt like you really learned something? <i>(Listen to responses.)</i> We are going to work on a developing a project where we accomplish both.</p> <p>Key Points</p> <ol style="list-style-type: none"> Service Learning is a teaching/learning method that connects meaningful community service experiences with academic learning, personal growth and civic responsibility. <ol style="list-style-type: none"> The true Service Learning concept is often difficult for people to understand, because they may have had personal experience and knowledge with community service and/or volunteerism that stressed the service aspect. While community service is a wonderful thing it is only a portion of service learning. At first, service learning may sound a little like community service or volunteerism. However, in service learning there are objectives for learning as well as for service. There is intent and purpose that the service learning project changes both the student giving the service and the receiver of the service. This is accomplished by combining service tasks with structured opportunities.
---	--

- D. For the student, these opportunities link the task to self-reflection and self-discovery. Upon completion of the experience, the student will have acquired or strengthened values, skills, and knowledge content.
- II. True Service Learning should include the following:
 - A. Academic skills acquired
 - 1. critical thinking
 - 2. reasoning
 - 3. problem-solving
 - 4. scientific method and research
 - 5. computer
 - B. Social and personal skills acquired
 - 1. communication
 - 2. teamwork
 - 3. public speaking
 - 4. leadership
 - 5. accountability
 - 6. intangibles
 - C. Characteristics of effective service-learning programs
 - 1. meaningful
 - 2. cooperative, promoting teamwork and citizenship
 - 3. addresses complex problems
 - 4. engages problem-solving in the specific context
 - 5. prioritizes real-world issues
 - 6. promotes deeper learning
 - 7. generates emotional consequences
 - 8. supports social, emotional and cognitive learning and development
- III. Six Key Components to Successful Service-Learning
 - A. Investigation -- the first step in planning service-learning: in this phase, community priorities and needs are assessed to determine what type of service would be meaningful. Methods of investigation may include interviews with community leaders, touring the community, surveys, and researching public documents. From the investigation, clear and attainable goals for learning, service, and the growth of participants should be achieved.
 - B. Preparation -- the next component of service-learning: careful and thorough planning will increase the level of success! In this phase, participants set goals for the project, as well as select the service to be rendered. It is also at this time that participants identify learning goals, which are connected to their curriculum. Logistics such as necessary training, needed supplies, and determining evaluation methods are addressed and planned for during this phase. This step is important in ensuring that the project will be an engaging,

meaningful, and a positive experience for both students and the recipients.

- C. Action -- the third component in an effective service-learning program: this is the most visible phase of the project. The students are carrying out their meaningful service to their community or other recipient. At the same time, this is where the core meaning of the project occurs. As service is being provided, students begin to reflect upon their experiences and the foundation for self-growth is set.
- D. Reflection -- the fourth component of the process: effective reflection encompasses more than summarization and talking. Students will need to think deeply about their experiences: analyze, reason, and problem-solve along the way. The reflection needs to be structured to assist students in integrating their service experiences into their knowledge and being able to see their experiences in a broader sense. This reflection should occur throughout the process, and part of the learning process.
- E. Demonstration and Celebration -- this next component is demonstration and celebration: there is value of designating demonstration as a distinct component of service-learning. Through demonstration, students can show how they integrated their learning goals with their service. Demonstration also helps developing youth leadership and voice. Sharing this demonstration with all participants, administrators, community leaders and media may likely lead to the project having even broader impact and further action. Negative stereotypes of youth are overcome by sharing and publicizing the work of the students. As all stakeholders participate in this demonstration, recognition and gratitude are expressed, and the event becomes a celebration. This culminating celebration helps “cement” the experiences in the lives of all involved.
- F. Sustainability -- the final component is sustainability -- to keep the work going, both in the school and community, AND in the students. Many times the continuation of these initiatives depends upon one or two individuals. By focusing on sustainability, you can work with school and community leaders to make the commitment to service-learning an integral part of schools and organizations. Encourage future service-learning projects to continue where former ones stopped – build on the accomplishments. Help students continue their role of service by encouraging them to use their natural gifts and talents in work in their own organizations and communities.
 - 1. Service and civic commitment
 - 2. Build on accomplishments
 - 3. Assist students in use their gifts and talents

- IV. Students must see the relevance -- to have meaningful service in a service-learning project it must be personally interesting and engaging to students. They must be able to see the connection, or relevance, from their class work to their experiences in service. Teachers must determine appropriateness of the activities based on age and ability levels. Certainly, the service must address the needs of the recipient. Many well-intended groups provide service to others based on what is “thought” is needed. A quality service-learning project should be based on outcomes valued by the recipient of the service.

Activity

- I. Develop and participate in a Service Learning Project. See Service Learning Project Template and Student Reflection Questions.

Assessment

Varies with activity

Materials

Copies of guidelines for service learning project

National Dropout Prevention Center www.dropoutprevention.org -- sponsors the guide, *Reflection: A Guide to Effective Service-Learning*, which offers tools and ideas for creating learning environments and facilitating reflection during each step of a service-learning project.

National Service-Learning Clearinghouse www.servicelearning.org -- A collection of books, research, tools, program descriptions, and many other ideas for planning and implementing service-learning projects.

National Youth Leadership Council www.nylc.org – one of the most well established organizations in K-12 service-learning: website offers many types of training resources, books and technical assistance opportunities for teachers, including an annual conference.

Students in Service to America www.studentsinservicetoamerica.org –collection of resources and tools for designing and implementing service projects and service-

learning programs, also contains *Students in Service to America (SISTA): A Guidebook for Engaging America's Students in a Lifelong Habit of Service*.

Service Learning Texas www.servicelearningtexas.org/ -- Offers several resources to help teachers plan service-learning projects.

U.S. Department of Education
www2.ed.gov/students/involve/service/edpicks.jhtml -- Offers several resources to help teachers plan service-learning projects.

Accommodations for Learning Differences

For reinforcement, the student will participate in a community service project.

For enrichment, the student will Participate in the Barbara James Service Award.
<http://www.hosa.org>

National and State Education Standards

National Health Science Cluster Standards

HLC07.01 Leadership and Teamwork

Health care workers will understand 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.

TEKS

130.205(c)(5)(A) participate in team teaching and conflict management such as peer mediation, problem solving, and negotiation skills;

130.205(c)(5)(C) engage in leadership opportunities in the community.

College and Career Readiness Standards

Cross-Disciplinary Standards

I.C. Problem Solving

1. Analyze a situation to identify a problem to be solved.
2. Develop and apply multiple strategies to solving a problem.
3. Collect evidence and data systematically and directly relate to solving a problem.

Service Learning Project Template

PROJECT/ACTION: There are hundreds of projects out there. It is important that students do the research to discover needs in the community that they want to learn about, and then also research to find solutions. A couple of examples are listed below.

The students will provide one-on-one attention to nursing home residents by adopting a grandparent and addressing their needs for socialization by setting up and running social events.

Peer teaching elementary students about safety and helping to set up an after school program for latch-key kids.

Peer teaching middle school students about the dangers of meth and helping middle school counselors with at risk students by acting as positive peer mentors.

TEKS

103.205(c) 5C

MATERIALS

List all materials needed

REFLECTION

Student questionnaire

Journal Writing

Video presentations on the interaction between students and clients

Oral presentations to other students

CELEBRATION

Party for clients

Certificates of participations

ASSESSMENT

Relate to specific essential elements

Design rubrics for reflective items

Observation of students actually tutoring

Student Reflection Questions

What do you now understand about the issue you tackled with your service-learning project?

What questions do you still have?

What was the most effective part of your project?

What was least effective?

What would you do differently next time?

What are you most proud of?

What are you most disappointed in?

In what ways can you tell what you've learned over the course of the project?

How does what you learned in this project connect to other learning?

Has this service learning project changed your opinion or way of thinking?

What follow-up work is need?

Course	Rationale
<i>Practicum in Health Science</i>	Project Management involves planning, monitoring, and coordinating all aspects of a project, and the motivation of all those involved, in order to achieve desired results.
Unit III	
Teamwork/ Teambuilding	Objectives
	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Define Project Management • Apply the seven Project Management Techniques • Describe the Project Management Planning Process • Use the most common Project Management Organizational Tools • Complete Project Management Team Projects
Essential Question	
<i>Why is it necessary to understand how to use Project Management?</i>	Engage
	Discuss the following question with the class: <p>Why is project management important?</p>
TEKS 130.205 (c) 1A 3E 5A	Key Points
	<ol style="list-style-type: none"> I. Project Management <ol style="list-style-type: none"> A. Project Management involves planning, monitoring, and coordinating all aspects of a project, and the motivation of all those involved, in order to achieve desired results. II. Project Management in School <ol style="list-style-type: none"> A. Project Management skills are highly desirable in the workplace. B. School projects provide excellent opportunities for students to refine their planning and time management skills and to acquire executive thinking skills as they analyze and synthesize tasks using Project Management Tools. III. Project Management Techniques <ol style="list-style-type: none"> A. Students are given several types of projects to manage throughout the academic school year. B. There are seven important Project Management Techniques used to manage team projects. Each technique will help students manage
Prior Student Learning	
<i>none</i>	
Estimated time	
<i>3 days</i>	

and produce quality team projects.

1. #1 Understand the Project
 - a. Read all instructions before you start the project.
 - b. Ask questions to clarify.
 - c. Be sure that you understand the expectations of the final result.
 2. #2 Research and Summarize
 - a. Research – find your topic.
 - b. Read!
 - c. Summarize what you read.
 - d. Restate in your own words.
 - e. Always cite your source even if you summarize in your own words.
 - f. Never cut/paste from the Internet.
 3. #3 Cite the Source
 - a. If you quote more than three words from a source, you must place those words in quotations.
 - b. Cite the source.
 - c. Otherwise it is plagiarism.
 4. #4 Working on the Project
 - a. Be original.
 - b. Be creative.
 - c. Spend time planning the project.
 - d. Planning will save you from making mistakes and starting over.
 - e. Periodically, show your teacher your project in order to get feedback.
 5. #5 Group Work
 - a. Split the tasks among the group.
 - b. Be clear about expected results.
 - c. Pull your own weight – do your part of the work.
 - d. Offer to help others.
 6. #6 Time
 - a. Projects are not a race to see who can finish first.
 - b. Use your time wisely.
 - c. Know the deadlines.
 - d. Finish on time.
 7. #7 Time Management
 - a. Use real-world skills and manage your time wisely.
 - b. Employers expect great results in a timely manner.
- C. Following the project guidelines
1. Helps you earn good grades;
 2. Helps you learn real-world skills; and
 3. Fosters confidence when you know you produced something

worthy.

IV. Project Management Planning Process

- A. Project Management involves planning, monitoring, and coordinating projects. There are several questions you will encounter with your project team.
 - 1. What do you and/or your team do first?
 - 2. What should come next?
 - 3. How many people do you need to accomplish your project?
 - 4. What resources do you need to accomplish your project?
 - 5. How long will it take?
 - 6. What can you get completed by the end of the six weeks?
 - 7. When will the project be finished?
 - 8. How will you know you are done with the project?

V. Project Management Organizational Tools

- A. Students use organizational tools to help them manage their projects.
- B. The most popular organizational tools used in schools and the workplace are:
 - 1. Task List and Schedule are used to identify tasks that need to be completed before others can start. It allows the project team to determine the several factors in project planning :
 - a. Hours/Days Required
 - b. Member(s) Assigned
 - c. Planned Start Date
 - d. Planned End Date
 - e. Actual Start Date
 - 2. Gantt Charts
 - a. Are also referred to as a project timeline. It consist of bar graphs that help plan and monitor project development or resource allocation on a horizontal time scale.
 - b. They are used by supervisors and team leaders to schedule team members for various time-dependent tasks including visiting clients, making sales calls, being on medical call, being on guard duty, etc.

Activity

- I. Student teams will analyze and identify Project Management careers.
- II. Student teams will complete a specific Project Management Task List and Schedule. Teacher will assign students a project specific to class subject area. Each student team will use the Task List and Schedule handout to learn how to apply Project Management Techniques and the planning process.

Assessment

Successful completion of all activities.

Materials

Handouts for each student

- *Project Management Terms and Definitions*
- *Note Taking Form*
- *Activity 1 - Project Management Team Project*
- *Activity 1 - Project Management Team Project Task List and Schedule*
- *Activity 2 - Team Project Task List and Schedule*
- *Project Management Assessment Tool*

Pencils and Pens

Computer and Internet access for teacher and students

Projector (for digital presentation)

Accommodations for Learning Differences

For reinforcement, the student will define key terms.

For enrichment, the student will interview a professional Project Manager. Include the importance of Project Management in high school and the workplace.

National and State Education Standards

National Health Science Cluster Standards

2.11 Interpret verbal and nonverbal communication.

2.12 Recognize barriers to communication.

2.13 Report subjective and objective information.

2.14 Recognize the elements of communication using sender-receiver model.

2.15 Apply speaking and active listening skills.

TEKS

130.205(c)(1)(A) interpret data from various sources in formulating conclusions;

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science.

130.205(c)(5) (A) participate in team teaching and conflict management such as peer mediation, problem solving, and negotiation skills;

Texas College and Career Readiness Standards

English-Listening:

B.1 Listen critically and respond appropriately to presentations

B.2 Listen actively and effectively in a one-on-one communication

B.3 Listen actively and effectively in group discussions

Social Studies Standards:

V.A. 1. Use appropriate oral communication techniques depending on the context or nature of the interaction.

Cross-Disciplinary Standards Key Cognitive Skills

C.1 Analyze a situation to identify a problem to be solved.

C.2 Develop and apply multiple strategies to solving a problem

Project Management Terms and Definitions

1. **Project Management** – involves planning, monitoring, and coordinating all aspects of a project, and the motivation of all those involved, in order to achieve desired results.
2. **Project Management Techniques**
 - Understand the Project
 - Research and Summarize
 - Cite the Source
 - Working on the Project
 - Group Work
 - Time
 - Time Management
3. **Project Management Planning Process** – involves planning, monitoring, and coordinating projects. During the process there are several questions you will encounter with your project team.
4. **Project Management Organizational Tools**
 - *Task List and Schedule* – are used to identify tasks that need to be completed before others can start. It allows the project team to determine the several factors in a project planning.
 - *Gantt Chart* – referred to as a project timeline. It consists of bar graphs that help plan and monitor project development or resource allocation on a horizontal time scale.

NAME _____ DATE _____ PERIOD _____

NOTE TAKING FORM

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS VOCABULARY TERMS:	NOTES:

SUMMARY: WHAT HAVE I LEARNED TO ANSWER THE ESSENTIAL QUESTION?

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS	NOTES:
VOCABULARY TERMS:	

Activity 1 - Project Management Team Project

Part 1 - Analyzing Career Job Ads

1. Students will work with a partner.
2. Visit the school library.
3. Use copies of the **career job ads** pages from newspapers in the school library.
4. Underline references to any of the **essential skills** and circle specific references to **Project Management** in the ads.
5. Identify a job website and refer to **Project Management** positions advertised on the Internet.

Part 2 - Analyzing Career Job Ads

Group Discussion

1. What are some of the jobs/careers that specifically identified **Project Management Skills** as a required skill or an asset for employment?

2. What are the salary ranges for these jobs?

[illegible]

Rubrics

Graded Elements	Total Points
Quality of Research	50
Correct use of Spelling, Grammar, and Capitalization	25
Presentation Skills	25
Total	100

Activity 1 - Task List and Schedule

Project Title _____

Completion Date _____

Project Team Members:

1.

2.

3.

4.

Tasks	Hours/Days Required	Member(s) Assigned 1, 2, 3, 4	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						

Project Management Assessment Tool

Directions

Each student will rate each of the following skills using a five-point scale, with one being the lowest rating and five the highest. Circle your answer.

Student

1. Defined clearly the end product or outcome of the project. 1 2 3 4 5	5. Identified and procured needed resources. 1 2 3 4 5
2. Identified the tasks necessary to complete the project. 1 2 3 4 5	6. Anticipated potential problems and developed contingency plans. 1 2 3 4 5
3. Developed the steps in an action plan for each distinct task category. 1 2 3 4 5	7. Reflected on the project outcomes and process to identify new understanding. 1 2 3 4 5
4. Highlighted critical tasks with specific deadlines that impacted project completion and monitored these carefully. 1 2 3 4 5	

For group projects, consider these additional criteria:

8. Shared leadership and ownership for project success. 1 2 3 4 5	11. Contributed to the learning of others. 1 2 3 4 5
9. Negotiated roles and responsibilities. 1 2 3 4 5	12. Demonstrated mutual respect and appreciation for team members. 1 2 3 4 5
10. Shared workload equitably. 1 2 3 4 5	

Activity 2 - Team Project - Task List and Schedule

Project Title _____

Completion Date _____

Project Team Members:

1.
2.
3.
4.

Task	Hours/Days Required	Member(s) Assigned 1, 2, 3, 4	Planned Start Date	Planned End Date	Actual Start Date	Actual End Date
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						

Project Management Assessment Tool

Directions

Each student will rate each of the following skills using a five-point scale, with one being the lowest rating and five the highest. Circle your answer.

Student

1. Defined clearly the end product or outcome of the project. 1 2 3 4 5	5. Identified and procured needed resources. 1 2 3 4 5
2. Identified the tasks necessary to complete the project. 1 2 3 4 5	6. Anticipated potential problems and developed contingency plans. 1 2 3 4 5
3. Developed the steps in an action plan for each distinct task category. 1 2 3 4 5	7. Reflected on the project outcomes and process to identify new understanding. 1 2 3 4 5
4. Highlighted critical tasks with specific deadlines that impacted project completion and monitored these carefully. 1 2 3 4 5	

For group projects, consider these additional criteria:

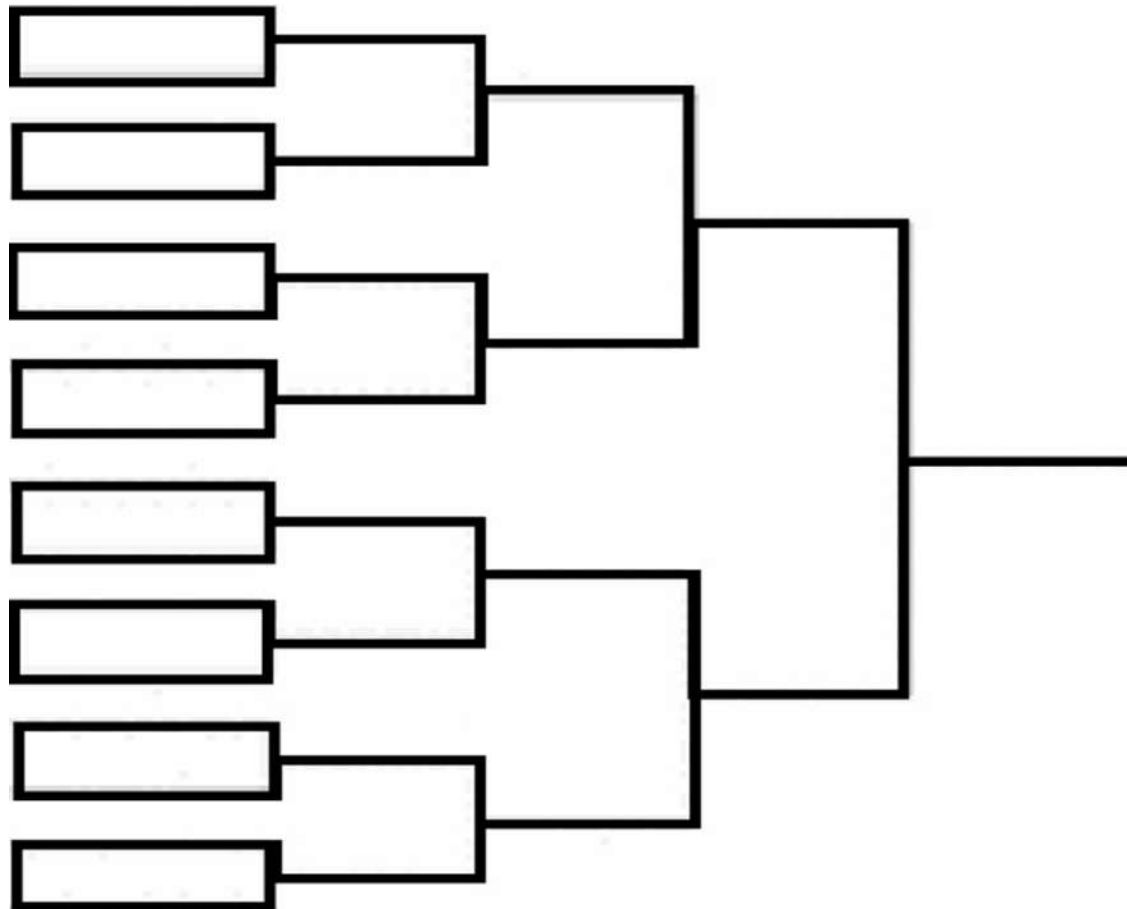
8. Shared leadership and ownership for project success. 1 2 3 4 5	11. Contributed to the learning of others. 1 2 3 4 5
9. Negotiated roles and responsibilities. 1 2 3 4 5	12. Demonstrated mutual respect and appreciation for team members. 1 2 3 4 5
10. Shared workload equitably. 1 2 3 4 5	

Rubrics:

Graded Elements	Total Points
Task List and Schedule	40
Project Management Assessment Tool	40
Correct use of Spelling, Grammar, and Capitalization	20
Total	100

Project Management Organizational Tool

Gantt Chart



PROFESSIONAL LIABILITY AND MEDICAL MALPRACTICE

Course	Rationale
<i>Practicum in Health Science</i>	The health science student needs to know ethical behavior standards and legal responsibilities.
Unit IV <i>Ethical and Legal Responsibilities</i>	Objectives Upon completion of the this lesson, the student will be able to: <ul style="list-style-type: none"> • Identify legal terms utilized in healthcare • Correlate how professional liability, privacy, confidentiality, and the elements of negligence relate to court cases on medical ethics and standards of care
Essential Question <i>What are the ethical, moral, and legal standards expected of healthcare workers in today's society?</i>	Engage Define Professional Liability and Medical Malpractice. Discuss the possible causes of malpractice, recent cases in the news media, and the responsibilities of a healthcare provider. Key Points I. Competent adults are liable, or legally responsible, for their own acts, both on the job and in their private lives. <ul style="list-style-type: none"> A. Employers are liable for their employees in regards to <ol style="list-style-type: none"> 1. Building and grounds – adequate upkeep to prevent injury 2. Automobiles – if an employee uses their own car or their employer's car, the employer must be adequately insured in case of an accident. 3. Employee safety – a comfortable and safe work environment II. As professionals we are responsible for our actions (or failure to act) under a reasonable standard known as the Standard of Care. <ul style="list-style-type: none"> A. Professionals are held to a higher standard and may be held liable for negligence. B. Healthcare workers must be careful in the duties they perform; if they perform duties commonly assigned to those with a higher level of training and expertise, they may legally be held to a higher standard of care.
TEKS <i>130.205 4(A), 4(C)</i>	
Prior Student Learning	
<i>Client Autonomy</i> <i>Patient's Rights</i>	
Estimated time	

III. Privacy, Confidentiality, and Privileged Communication

- A. It is a healthcare professional's ethical and legal duty to safeguard a patient's privacy.
- B. Confidentiality is the act of holding in confidence information that is not to be released to unauthorized individuals.
- C. Privileged communication is information held confidential within a protected relationship.
- D. Medical office confidentiality should be maintained:
 - 1. Do not release information to a third party without a signed consent.
 - a. When talking on the phone regarding test results, be sure no one else can hear.
 - b. When leaving a message on an answering machine, just tell the patient to call the office regarding their recent appointment.
 - 2. Do not decide confidentiality on the basis of your personal approval of the thoughts and actions of the patient.
- E. Confidentiality may be waived
 - 1. If the patient sues the physician for malpractice
 - 2. If the patient signs a waiver to release information

IV. Tort of Negligence

- A. Unintentional tort of negligence is the basis for malpractice claims
 - 1. Tort is a civil wrong committed against a person or property, excluding a breach of contract.
 - 2. Negligence is an unintentional tort alleged when one may have performed or failed to perform an act that a reasonable person would or would not have done under similar circumstances.
- B. Medical professional liability claims are classified in three ways:
 - 1. Malfeasance – a performance of a totally wrongful and unlawful act
 - 2. Misfeasance – a performance of a lawful act in an illegal or improper manner
 - 3. Nonfeasance – a failure to act when one should have
- C. The four elements that must be present to prove a healthcare professional is guilty of negligence:
 - 1. Duty – a person charged with negligence owed the duty of care to the victim.
 - 2. Derelict – a healthcare provider breached (failed to comply) the duty of care to the patient.
 - 3. Direct Cause – a breach of duty was the direct cause of the patient's injury
 - 4. Damages – monetary awards sought by the plaintiffs (patients) in the lawsuit where there is a legally recognizable injury to a person

V. Elements of a Lawsuit

- A. A patient feels he or she has been injured.
- B. A patient seeks the advice of an attorney.
- C. The attorney believes the case has merit, and requests copies of patient's medical records.
- D. Pleading Phase
 - 1. The patient's attorney files a complaint with the court.
 - 2. A summons is issued by the court, and is delivered to the defendant.
 - 3. The defendant's attorney files an answer to the summons.
 - 4. A cross complaint is made and the patient files a reply.
- E. Interrogatory or Pretrial Discovery Phase
 - 1. The trial date is set by the court.
 - 2. Pretrial motions may be made, such as a dismissal or amendment of the original complaint.
 - 3. A court order (subpoena) is issued requiring that a deposition (sworn testimony) be taken from a medical office employee. [Someone] may request an interrogatory, which is a written set of questions requiring written answers.
 - 4. A pretrial conference with the judge, where attorneys discuss the issues in the case
- F. Trial Phase
 - 1. Jury selection
 - 2. Opening statements by both attorneys
 - 3. Witnesses take the stand
 - 4. Closing statements by both attorneys
 - 5. The jury's verdict
 - 6. The final judgment is handed down by the court
- G. Appeals Phase
 - 1. Post-trial motions are filed.
 - 2. Appeal the case to a higher court.
- H. Nine out of ten lawsuits are settled out of court, but many times healthcare practitioners are asked to give testimony. There are two kinds of testimony:
 - 1. Fact – these are only the actual facts the witness has observed.
 - 2. Expert – must have relevant education, skills, knowledge, and experience in order to be judged as an expert in the trial.

VI. Alternative Dispute Resolution

- A. As court calendars become overcrowded, alternative dispute resolution has become increasingly popular. Alternative Dispute Resolution consists of techniques for resolving civil disputes without going to court.
- B. Methods used are arbitration and mediation:
 - 1. Arbitration is a method of settling disputes where both parties abide by the decision of an arbitrator and the arbitrator is selected directly by both parties.

2. Mediation is a method in which a neutral third party listens to both sides and resolves the dispute. The mediator does not have authority to impose a solution.

Activity

- I. Student groups use the **court case packet** and identify if the court case involved liability, standard of care, privacy, confidentiality, privileged communication, negligence, or a combination of these. Present to class for discussion.

Assessment

Successful completion of Court Case Packet

Test on Professional Liability and Medical Malpractice

Materials

Court Case Packet

Key for Test on Professional Liability and Malpractice

Internet Websites:

- American Health Information Management Association (www.ahima.org)
- Physician's Committee for Responsible Medicine (www.pcrm.org/)
- American Arbitration Association (www.adr.org)

Law and Ethics for Medical Careers, by Karen Judson and Sharon Hicks, CMA

Medical Law and Ethics, by Bonnie Fremgen, Prentice Hall

Accommodations for Learning Differences

For reinforcement, the student will watch a Court TV program on medical malpractice, and write a documentation of events.

For enrichment, the student will use Internet web sites and identify sources that might be used by laypersons to check the credentials and malpractice records of physicians.

National and State Education Standards

National Health Science Cluster Standards

HLC02.01 Communications

Health care workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

HLC04.01 Information Technology Applications

Health care workers will use information technology applications required within all career specialties. They will demonstrate use as appropriate to health care applications.

HLC08.01 Ethics and Legal Responsibilities

Health care workers will understand the legal responsibilities, limitations, and implications of their actions within the health care delivery setting.

HLC08.02 Ethics and Legal Responsibilities

Health care workers will understand accepted ethical practices with respect to cultural, social, and ethnic differences within the health care environment. They will perform quality health care delivery.

TEKS

130.205(c)(4)(A) appraise individual ethical and legal behavior standards according to professional regulatory agencies; and
130.205(c)(4)(C) critique court cases related to professional liability and ethics.

Texas College and Career Readiness Standards

Cross-Disciplinary Standards:

I.A.1 Engage in scholarly inquiry and dialogue

I.A.2 Accept constructive criticism and revise personal views when valid evidence warrants

I.B.1 Consider arguments and conclusions of self and others

I.B.2 Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions

I.B.3 Gather evidence to support arguments, findings, or lines of reasoning

II.A.4 Identify the key information and supporting details

Social Studies Standards:

I.E.4 Identify and evaluate the sources and consequences of social conflict

I.F.2 Analyze ethical issues in historical, cultural, and social contexts

IV.A.3 Evaluate sources from multiple perspectives

English/Language Arts Standards:

II.A.5 Analyze the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument

III.B.2 Participate actively and effectively in group discussions

Test – Professional Liability and Medical Malpractice

Damages	Negligence	Liability
Tort	Confidentiality	Malfeasance
Breach	Nonfeasance	Standards of Care
Misfeasance		

1. _____ is the act of holding in confidence information that is not to be released to unauthorized individuals.
2. Being legally responsible for your own actions is called _____.
3. _____ is performance of a totally wrongful and unlawful act.
4. _____ is a civil wrong committed against a person or property, excluding breach of contract.
5. Failure to comply is called _____.
6. _____ is failure to act when one should.
7. Being responsible for our actions (or failure to act) under a responsible standard is _____.
8. Monetary awards sought by the plaintiff are _____.
9. _____ is performance of a lawful act in an illegal or improper manner.
10. _____ is an unintentional tort alleged when one may have performed or failed to perform an act that a reasonable person would or would not do under similar circumstances.

Use your critical thinking skills to answer the questions that follow each of the case studies.

11. A trainee anesthesiologist ran out of oxygen before the operation was completed, causing the patient to suffer a fatal cardiac arrest.

This case was adjudicated as a strong medical malpractice case and was won by the plaintiff. Referring to the four Ds of negligence, explain why.

12. During an endoscopic retrograde cholangiopancreatography (ERCP), an inexperienced nurse injected the dye too forcefully and caused the patient to develop pancreatitis and other debilitating injuries.

The patient sued and won. Refer to the four Ds of negligence to explain the court's decision.

13. An on-call ophthalmologist, without seeing the patient, diagnosed his eye pain, sensitivity to light, and nausea as sinusitis. In fact, the patient had acute angle closure glaucoma, and lost sight in the eye.

When this case came to trial, the court found in favor of the patient/plaintiff. Explain the court's decision based on the four Ds of negligence.

Professional Liability and Medical Malpractice

KEY

1. Confidentiality
2. Liability
3. Malfeasance
4. Tort
5. Breach
6. Nonfeasance
7. Standard of Care
8. Damages
9. Misfeasance
10. Negligence
11. The anesthetist owed the patient duty of care that was breached by (direct cause) failing to make sure there was sufficient O₂ for the procedure. There was a legally recognized injury to the patient.
12. The nurse owed the patient duty of care that was breached when she used an improper technique in performing a procedure within the scope of her duties. The patient suffered an injury that influenced the court's decision.
13. The physician established duty of care to the patient by diagnosing over the phone. That duty breached the physician's failure to conduct a physical exam, which led to a misdiagnosis. The patient suffered a recognized injury.

Court Cases

Minor's Informed Consent Not Necessary

A Texas Physician was sued for failing to secure informed consent from a minor patient before performing an abortion.

In 1974 a 16-year-old girl's mother told her physician that her daughter was retarded and had been raped. The mother gave her written permission for her minor child to have an abortion, which the physician performed. The physician did not know that in reality the girl was not retarded and had not been raped. She had conceived the child with her boyfriend.

Sixteen years later the patient examined her medical records and realized that she had undergone an abortion. She sued the physician, claiming that she had not given informed consent for the procedure. In 1974 Texas did not require that a minor give informed consent for the procedure. Since the physician had obtained informed consent from a parent, as required by law at that time, a trial court held, and an appeals court affirmed, that he was entitled to summary judgment.

Powers v. WF Floyd. 904 SW2d 713 (Texas Ct. of App. May 10, 1995. rehearing overruled May 24, 1995)

Minor Says No to Surgery

Believing they were acting in the best interests of a minor, a county health department in New York State tried to obtain the court's permission to seek surgery for a 14-year-old boy who had a cleft palate and upper lip (also called a harelip).

The boy's father would not consent to surgery for his son because he believed that forces in the universe would heal all ailments. Influenced by his father, the boy refused the offer of surgery for his condition.

The court ruled that the boy could not be forced to have surgery. He could turn down the procedure because his cooperation would be needed for the speech therapy that would follow. A majority of the judges saw less harm in letting him wait until he was an adult and could make the choice for himself, than in pursuing the surgery.

In the Matter of S. 309 NY 80 127 NE 2d 820 (1955)

Physician Sued for Abandonment

A patient entered the emergency room of a hospital complaining of rectal bleeding, and was admitted as a patient of her regular attending physician. Two diagnostic procedures were completed and three more were scheduled. The patient refused to sign consent forms for the three procedures, saying she

didn't want to be anesthetized. Her physician discussed these concerns with the patient and told her to sign the consent forms or sign herself out of the hospital. The physician told the patient he would release her from his services. At that time, the patient was given a list of other physicians she could contact. The patient selected another physician and discharged herself from the hospital. The patient charged the original physician with abandonment.

A superior court entered summary judgment for the physician. The case was appealed by the plaintiff, but the appeals court held that the physician was not guilty of abandonment. Supplying the patient, who was not in need of immediate attention, with a list of substitute physicians to replace the attending physician was a reasonable means of serving the professional relationship between a patient and an attending physician.

Miller v. Greater Southeast Community Hospital. 508 A2d 927 (DC Ct. App 1986)

Physician Sued for Breach of Contract

A Minnesota appellate court ruled that a patient had a breach-of-contract claim against a physician who had published pictures of her without her consent.

The physician performed outpatient, same-day surgery on the patient's chin and nose, and photographed her before and after surgery. The medical center later published the photographs in a brochure. The patient was not identified.

The patient filed suit against the physician and medical center for invasion of privacy, intentional infliction of emotional distress, and violation of the Patient's Bill of Rights. She also alleged the breach of an implied contract by the physician.

On appeal, the court ruled that the patient had only a cause of action for breach of implied contract.

Stubbs v. North Memorial Center 448 N.W.2d 78 (Minn Ct. of App. Nov 14 1989)

Upset or Incompetent?

Emotional upsets do not necessarily make a patient incompetent to consent to medical treatment. During a fight with his son, a Seattle man felt chest discomfort and thought he was having a heart attack. At the hospital, he was given four drugs, including a narcotic pain medication. The suspected heart attack was diagnosed as a muscle strain, but while he was hospitalized the man agreed to surgery on his nose. The nose surgery turned out bad, and the man sued, claiming that he had been in a drug-induced state and could not make an intelligent decision about having the nose surgery. If he had not been competent, then the man had not actually consented to the surgery and the surgeon committed assault.

A judge dismissed the case. The law presumed that the patient in this case had been competent because a legally competent person is one who can understand his or her illness, the proposed treatment, and the risks in either accepting or refusing it. The patient met these criteria.

Grannum v. Berard 70 Wash 2d 304 422 P2d 812 (1967) annot. 25 A.L.R. 3d 1443

No Breach of Contract by a Radiologist

A Georgia appellate court ruled that a patient's claim that a radiologist breached an express warranty had been properly dismissed by a lower court.

The radiologist performed an arteriogram procedure which allegedly caused permanent injuries to the patient. The patient sued the radiologist for medical malpractice and breach of an express contract that he would not suffer any ill effects. The patient argued that the radiologist had stated the procedure would be routine and that he had nothing to worry about.

Affirming the dismissal of the claim based on breach of contract, the appellate court said the radiologist had not expressly warranted that the patient would suffer no ill effects.

Servias v. Philbrick 380 S.E.2d 496 (Ga. Ct. of App. March 10, 1989 rehearing denied. March 22, 1989. Ga. Sup. Ct. May 4, 1989)

ANATOMY AND PHYSIOLOGY WORLDWIDE

Course <i>Practicum in Health Science</i>	Rationale It is vital for any healthcare practitioner to be knowledgeable about the human body and diseases that affect varies population around the world.
Unit V <i>Anatomy & Physiology & Pathophysiology</i>	Objectives Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Research different health care issues in our global society • Identify the changes that occur in specific systems/organs with increasing age, and compare them with the normal functioning of that body system/organ
Essential Question <i>How is the body organized for systematic study?</i>	Engage Health issues vary from person to person, however, we do see trends of certain disorders or diseases occurring in certain groups or populations around the world. What are some of the disorders we frequently see in the United States? What disorders do neighboring countries worry about? How does world travel affect our health care concerns? Are their diseases affecting certain age populations?
TEKS <i>130.205 (c) 1A,B,C,D, E, F, H</i>	Key Points I. Human Body <ul style="list-style-type: none"> A. complex structure made up of many different body systems that work interdependently of each other B. from the tiniest cell to the largest organ, the body relies on these complex systems to stay in a state of homeostasis to stay healthy C. body cells, tissues and organs can be damaged by many different forces - from pathogens that attack the body, to environmental factors that damage the body, to hereditary issues passed down through families D. because the organ systems do not work in isolation, homeostasis is threatened and people become sick
Prior Student Learning <i>Understanding Basic A&P of the human</i>	II. Physical Illness or Disability <ul style="list-style-type: none"> A. can occur at any age B. understanding the etiology (cause) of a disorder is important when working with a patient

body

Estimated time

2-6 hours

- C. birth defects are present at birth and may be inherited or due to failure of development, occurring in-utero (in the mother's womb), or due to complications during or around the time of birth; some examples of birth defects include:
 - 1. Cerebral Palsy
 - 2. Cleft lip or Cleft Palate
 - 3. Down's Syndrome
 - 4. Hydrocephaly
 - 5. Spina Bifida
- D. injuries can occur at any age, ranging from trauma to accidents, such as drowning or choking on something occluding the airway, leaving the patient with lasting physical problems
- E. debilitating illnesses occur at any age: depending on the severity of the disease, physical changes may be minimal or very extensive, and as the disease progresses the physical problems can worsen and cause death; some examples of debilitating diseases include:
 - 1. Arteriosclerosis
 - 2. Alzheimer's
 - 3. Cancer
 - 4. Cardiovascular diseases
 - 5. Cystic fibrosis
 - 6. COPD
 - 7. Multiple sclerosis
 - 8. Parkinson's disease

III. Scientists have classified diseases according to their basic etiology

- A. idiopathic (unknown)
- B. iatrogenic (disease that arises as a complication of medical or surgical intervention)
- C. inflammatory (marked by inflammation)
- D. ischemic (a temporary deficiency of blood flow to an organ or tissue)
- E. immunologic (result of an antigen/antibody reaction)
- F. infectious (contagious – caused by a pathogen)
- G. neoplastic (new abnormal growth -- could be cancerous or non-cancerous)
- H. metabolic (disease due to abnormal biochemistry)
- I. nutritional
- J. genetic (inherited)
- K. congenital defects (born with disorder, not necessarily genetic)

IV. Physiological aging of the human body by systems

- A. skin, hair and nails
 - 1. Loss of subcutaneous fat

2. Thinning of the skin
3. Decreased collagen and elastin.
4. Decline in cell replacement
5. Wounds heal more slowly
- 6.
6. Women show aging about 10 years earlier than men because skin is thinner and drier
7. Mucous membranes become drier and sweat output decreases
8. Body temperature more difficult to regulate because of less sweat glands and reduced subcutaneous fat
9. Hair pigment decreases and hair turn gray or white
10. Hair thins
11. Hormonal changes cause loss of pubic hair
12. Nails may be brittle and flake
13. Toe nails may discolor
- B. Eyes and vision
 1. Eyelids lose their elasticity and become baggy and wrinkled
 2. Eyes sit deeper in their sockets
 3. Conjunctiva becomes thinner and yellow
 4. Quantity of tears decreases
 5. Cornea loses its luster and flattens
 6. Iris fades or develops irregular pigmentation
 7. Pupil becomes smaller, letting in less light; older adults need about three times as much light as a younger person
 8. Night vision and depth perception diminish
 9. Vitreous humor can degenerate causing "floaters"
 10. Lens enlarges and loses transparency
 11. Accommodation decreases resulting in presbyopia
 12. Impaired color vision, especially of blues and greens because cones deteriorate
 13. Predisposed to glaucoma because there is a decreased absorption of intraocular fluid
- C. Ears and hearing.
 1. Slowly develop an irreversible, sensorineural loss of hearing that might start in middle age
 2. Men more affected by this loss of hearing than women
 3. Called presbycusis
 4. There are four forms: most common is caused by the atrophy of the organ of Corti and the auditory nerve
 5. Loss occurs in the higher range of sound
 6. By age 60 most adults have difficulty hearing above 4000Hz
 7. Normal speech is at the range of 500-2000 Hz
- D. Respiratory system
 1. Lungs become more rigid; diffusing capacity declines
 2. Pulmonary function decreases due to respiratory muscle

- degeneration or atrophy
- 3. Number and size of alveoli decreases
- 4. Vital capacity declines due to decreased inspiratory and expiratory muscle strength
- 5. The chest cavity might change due to bony changes from osteoporosis
- 6. A reduction in respiratory fluid increases the risk for infections and plugs
- E. Cardiovascular system
 - 1. Heart becomes smaller and less elastic with age
 - 2. By age 70 cardiac output is reduced by 30%
 - 3. Heart valves might become sclerotic
 - 4. Heart muscle becomes more irritable resulting in more ectopic beats
 - 5. More chance for arrhythmias in general as the heart ages
 - 6. Arteries become more rigid, resulting in hypertension in some cases
 - 7. Veins dilate, resulting in reduced blood flow
 - 8. Heart takes longer to return to normal after physical or emotional stress
- F. GI system
 - 1. Reduced GI secretions, which modifies processes such as digestion and absorption
 - 2. Reduced salivation makes eating and chewing more difficult and reduces the pleasure associated with eating
 - 3. Reduction in taste buds, causing the taste of foods to be reduced and/or altered -- again reducing the pleasure associated with eating
 - 4. Aging in the past was associated with becoming edentulous; now proper oral hygiene, greater understanding of dental care, plus changes in dental care allow most elderly to keep their own teeth until they die
 - 5. GI motility reduces
 - 6. Decreased weight of the liver
 - 7. Reduced regenerative capacity of the liver
 - 8. Liver metabolizes drugs and detoxifies less efficiently.
- G. Renal system
 - 1. After age 40 renal function decreases
 - 2. By age 90 will have lost 50% of renal function
 - 3. Glomerular filtration (in part from reduced cardiac output), tubular reabsorption and concentration of urine reduced
 - 4. Size and number of nephrons decrease
 - 5. Bladder muscles weaken with age resulting in incomplete emptying of bladder
 - 6. Less able to clear drugs from the system
 - 7. Diminished kidney and bladder size
- H. Reproduction

1. Male
 - a. reduced testosterone production, which may cause a reduced libido
 - b. Testes atrophy and soften
 - c. Decrease in sperm production between ages 60-80 to as much as 50%
 - d. Prostate gland enlarges
 - e. Seminal fluid decreases and becomes less viscous
 - f. Erections of the penis require more time and stimulation
 - g. Erections aren't as hard or full
 - h. Refractory period after ejaculation may lengthen to days
2. Female
 - a. Declining estrogen and progesterone levels
 - b. Ovulation ceases about 2 years before menopause
 - c. Vulval tissue flattens and shrinks
 - d. Introitus constricts and loses elasticity
 - e. Vagina atrophies, causing it to shorten and become drier
 - f. Uterus shrinks
 - g. Breasts become pendulous as ligaments lose elasticity and fatty tissues atrophy
 - h. Nipples decrease in size and become flat
 - i. Urinary stress incontinence might occur as pelvic ligaments weaken
- I. Neurological system
 1. Neurons of central and peripheral nervous system degenerate
 2. Nerve transmission slows down
 3. Hypothalamus less effective in regulating body temperature.
 4. Decrease in deep sleep, causing frequent awakening, and reduced REM sleep
 5. After age 50 the brain loses about 1% of neurons every year; not noticeable until aging is more advanced
- J. Musculoskeletal System
 1. Adipose tissue increases with age
 2. Lean body mass decreases
 3. Bone mineral content diminishes
 4. Decrease in height resulting from exaggerated curvature of the spine and narrowing of the intervertebral spaces
 5. Less resilience in connective tissue
 6. Synovial fluid more viscous
 7. All of these changes might result in balance problems
- K. Immune system
 1. Decline of immune function begins at sexual maturity and continues with age
 2. Trouble differentiating between self and non-self and incidence of auto-immune disease increases

3. Unable to locate and destroy mutant cells
 4. Decreased antibody response in elderly makes them more susceptible to infection
 5. Fatty marrow replaced red marrow and blood production doesn't happen as efficiently as before
 6. Vitamin B12 absorption might decrease, resulting in decreased hemoglobin and hematocrit
- L. Endocrine system
1. Decreased ability to tolerate stress -- best seen in glucose metabolism
 2. Elderly people should be evaluated for diabetes
 3. Estrogen levels decrease in women resulting in possibility of coronary thrombosis and/or osteoporosis
 4. Other decreases in hormones are testosterone, aldosterone, cortisol, and progesterone

V. Health care workers around the world work together to share information and treatments. Health care agencies report information to government agencies that collect data from all over the country in order to get a better picture of the health issues plaguing the nation. The United States then in turn share this data with many different agencies and other nations around the world. Different agencies are concerned with different types of data depending on their goal or focus. A few of the major agencies we send data to and examples of the types of information gathered is listed below:

- A. World Health Organization
1. United Nations
 2. Goal: Attainment by all peoples of the highest possible level of health
 3. Definition of health: The state of complete physical, mental and social wellbeing -- not merely the absence of disease or infirmity
 4. Selected programs/committees
 - a. Communicable Disease -- Vision: Every country should be able to detect, verify rapidly, and respond appropriately to epidemic prone and emerging disease threats when they arise to minimize their impact on the health and economy of the world's population.
 - b. Biosafety Program
 - (1) Naturally occurring endemic, emerging, and re-emerging disease threats challenge global health security.
 - (2) Global health can also be threatened by the accidental, intentional or unintentional release of etiological agents of disease.
 - (3) To promote safe practices in the handling of pathogenic microorganisms based on best practices and

- international rules and regulations in
 - (a) Health care facilities
 - (b) Manufacturing
 - (c) Laboratories
 - (d) Field interest
 - (e) Transportation
- (4) To strengthen, coordinate, and evaluate for the establishment of national, regional and global plans of actions for safe handling of infectious substances
- (5) To promote safety standards in lab facility construction and post construction evaluation
- c. Violence and Health
 - (1) Violence is a major problem world wide.
 - (2) Millions die each year as a result of injuries due to violence.
 - (3) It is among the leading causes of death for 15-44 year olds world wide.
 - (4) It contributes to
 - (a) Death
 - (b) Disability
 - (c) Depression
 - (d) Alcohol & substance abuse, smoking
 - (e) Eating and sleeping disorders
 - (f) HIV and STD's
 - (5) Prevention
 - (a) Create safe and healthy communities
 - (b) Education
- d. Traditional Medicine Program
 - (1) Definition: Ways of protecting and restoring health that existed before the arrival of modern medicine
 - (2) Components of
 - (a) Acupuncture
 - (b) Traditional birth attendants -- assist in up to 95% of all rural births and 70% of urban births in developing countries
 - (3) Mental healers
- e. Herbal medications
 - (1) Primary health care in some countries
 - (2) Policies being formulated to
 - (a) Study the potential usefulness
 - (b) Evaluate the practices
 - (c) Examine safety and efficacy of remedies
 - (d) Update the knowledge of traditional and modern health practitioners
 - (e) Educate and inform the general public about

proven traditional healer practices

(f) Medicinal plants

- (i) Oldest known health care products
- (ii) Not a structured control model for licensing, dispensing, manufacturing, or trading
- (iii) Discrepancies in safety, quality, and efficacy
- (iv) In most countries, herbal markets are not adequately regulated
- (v) Products are frequently unregistered
- (vi) Often not controlled by regulatory bodies

B. United States Department of Health and Human Services

- 1. Office of Global Health Affairs - Mission: To promote the health of the world's population by advancing the Department of Health and Human Services' global strategies and partnerships, thus serving the health of the people of the United States
- 2. Regional Offices
 - a. Asia and The Pacific
 - b. China
 - c. India
 - d. Indonesia
 - e. Japan
 - f. Pakistan
 - g. Vietnam
 - h. US Associated Island Jurisdiction
 - i. Europe and the New Independent States
 - j. Middle East
 - k. Americas
 - l. Africa

C. The Center for Disease Control and Prevention

- 1. Is recognized as the lead federal agency for protecting the health and safety of people at home and abroad, providing credible information to enhance health through strong partnerships.
- 2. Serves as the national focus for developing and applying disease prevention and control, environmental health, health promotion and education activities designed to improve the health of people of the United States.
- 3. Protects health and safety
- 4. Provides credible information on health and diseases
- 5. Promotes health through partnerships

Activity

- I. Visit the World Health Organization (WHO) website, <http://www.who.int/country/> , and select various countries around the world to research and complete the Global Health Issues Research handout. Create charts and graphs depicting information gathered from each country.
- II. Compare and contrast steps various countries take to contain and eradicate a specific disease, i.e. SARS, TB. Organize results in a power point presentation using charts and graphs.
- III. Research and prepare an oral report on “common debilitating illnesses and the effect the aging process” has on them.
- IV. Interview local health department or other personal and make a “Public Service Announcement” informing the public on avoidance of a disease or health concern plaguing your area.

Assessment

Project Rubric

Oral Presentation Rubric

PSA Rubric

Materials

Internet access

Copies of Global Health Issues Research handouts

Copies of PSA guidelines – <http://www.hosa.org>

Accommodations for Learning Differences

For reinforcement, students will research current health issues in your area and present in a written report.

For enrichment, students will make a “Body Graph” using the information gathered by students in the class and “Map out” the different disorders by placing the country name and disorder on the body diagram showing the system effected.

National and State Education Standards

National Health Science Cluster Standards

HLC01.01 Academic Foundations

Health care workers will know the academic subject matter required (in addition to state high school graduation requirements) for proficiency within their area. They will use this knowledge as needed in their role.

HLC10.01 Technical Skills

Health Care Workers will apply technical skills required for all career specialties. They will demonstrate skills and knowledge as appropriate.

TEKS

130.205 (c)(1)(A) interpret data from various sources in formulating conclusions

130.205 (c)(1)(B) compile information from a variety of sources to create a technical report

130.205 (c)(1)(C) plan, prepare, and deliver a presentation

130.205 (c)(1)(D) examine the environmental factors that affect homeostasis

130.205 (c)(1)(E) relate anatomical structures to physiological function

130.205 (c)(1)(F) distinguish atypical anatomical structure to physiology in the human body system

130.204 (c)(1)(H) compare and contrast health issues in the global society

Texas College and Career Readiness Standards

English Language Arts

II. B. Understand new vocabulary and concepts and use them accurately in reading writing and speaking.

III. B. Develop effective speaking styles for both group and one-on-one situations.

IV. A. Apply listening skills as an individual and as a member of a group in a variety of settings.

IV. B. 2. Listen actively and effectively in one-on-one communication situations.

Science

1.E.1. Use several modes of expression to describe or characterize natural patterns and phenomena. These modes of expression include narrative, numerical, graphical, pictorial, symbolic, and kinesthetic.

1.E.2. Use essential vocabulary of the discipline being studied.

3.A.1. Use correct applications of writing practices in scientific communication.

Global Health Issues Research

Country Name: _____

Total population: _____

Life expectancy: _____

Access to safe drinking water: _____

Child mortality rate: _____

Top 3 causes of death for children under 5

1. _____

2. _____

3. _____

Total Health Expense: _____

Recent disease outbreak: _____

Biggest health issues: _____

Percent of adults die due to:

Communicable: _____

Non-communicable: _____

Injuries: _____

Number of HC workers:

MD's: _____

Nurses: _____

Midwives: _____

Dentists: _____

Pharmacists: _____

Project Rubric

Student: _____ Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Clearly/effectively communicates the main idea or theme.					
Reflects application of critical thinking.					
Information clearly provided in an organized and thoughtful manner.					
Strong examples used to describe the theme or objective.					
Illustrations follow a logical reasoning.					
Each image and font size is legible to entire audience.					
No spelling, grammatical or punctuation errors.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Oral Presentation Rubric

Student: _____ Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Clearly and effectively communicates the main idea or theme.					
Presenter is self-confident and clearly expresses ideas.					
Presenter answers questions with well thought out responses.					
Holds audience attention and maintains eye contact.					
Visual aids are clear and add to the presentation.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Public Service Announcement Rubric

Student: _____ Date: _____

Areas Evaluated	Points Possible	Points Awarded
Purpose (relevant, powerful message, important information)	10 8 6 4 2	
Effectiveness (captures attention, the critical message stands out, evokes emotion)	10 8 6 4 2	
Treatment (effective for target audience, encourages positive behavior)	10 8 6 4 2	
Writing (clear wording, appropriate language, accurate information)	10 8 6 4 2	
Originality	10 8 6 4 2	
z	10 8 6 4 2	
Demonstrated a clear understanding of subject/theme and purpose of the PSA	10 8 6 4 2	
Described the creative process and how they think the public will/has respond/ed to their PSA	10 8 6 4 2	
Spoke clearly and distinctly with good grammar and articulation	10 8 6 4 2	
PSA is 29-31 seconds in length	5	
Presentation by at least 3 team members	5	
Total Points		

Adapted from PSA Event Guidelines –
<http://www.hosa.org>

UNDERSTANDING PATHOPHYSIOLOGY

Course <i>Practicum in Health Science</i>	Rationale When working with patient care, health care workers need to understand what has occurred in their patient in order to look for the best possible solutions.
Unit V <i>Anatomy & Physiology and Pathophysiology</i>	Objectives Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Understand the steps of the scientific method • Explain how health care professionals use scientific method every day when working with patients • Analyze data in order to complete the scientific method process
Essential Question <i>What steps do health care professionals use to determine the problems and solutions seen in medicine?</i>	Engage Local emergency room -- Kason Erick, a 14-year-old white male presents with abdominal pain in the lower right quadrant. He also complains of fever and nausea. Triage nurse quickly collects information from Kason and his parents as she performs vital signs. Upon the completion of collecting data the triage nurse quickly moves the patient to a room and begins to request additional tests, assistance of the ER doctor, and notifies the on call surgical team of possible emergency admit. Kason's parents are nervous but feel a deep sense of relief that the emergency room staff is on the ball and will help their son. The triage nurse seemed so at ease with her job -- like she was going through a check list.
TEKS 130.205 (c) 1D,E, F&G	Key Points
Prior Student Learning <i>Basic Pathophysiology</i>	I. Health care professionals use a basic form of "Scientific Method" in order to help their patients. <ul style="list-style-type: none"> A. The basic steps used include: <ol style="list-style-type: none"> 1. Observation 2. Research 3. Hypothesis 4. Experimentation 5. Analyzing the data 6. Conclusion B. In true areas of research additional steps or repeating of steps may occur, but these are the common ones used in the field.
Estimated time 2-4 hours	II. Observation: during observation health care workers begin by observing (looking at)

the patient and asking the questions to start the data process. Even patients who cannot answer questions physically are observed. Health care workers begin by looking at how a disease “presents or shows itself,” known as manifestation. Manifestation is also called clinical presentation and includes both *signs* and *symptoms*.

A. Signs

1. objective physical observations as noted by the person who examines the patient
2. this examination is called a physical or physical examination
3. during the physical, the health professional may use techniques such as
 - a. Inspection (looking at or observing areas of the body)
 - b. Auscultation (use of a stethoscope to listen to body cavities)
 - c. Palpation (feeling lightly or pressing firmly on internal organs or structures)
 - d. Percussion (tapping various body areas to produce a vibrating sound indicative of air, fluid, size of organ, etc.)
 - e. Olfaction (using smell to note abnormalities)
4. vital signs are temperature, blood pressure, respiratory rate; other observed signs are abnormal heart sounds, mass, enlarged organs, edema

B. Symptoms refer to the patient’s awareness of abnormalities or discomfort. Symptoms are not measurable and are based on the patient’s subjective perception, i.e. pain, nausea, weakness, fatigue, and dizziness.

1. written description of symptoms in the patient’s record is referred to as the patient history.

III. Research: after gathering the first set of data, health care workers can begin to research known data that matches their observations and can classify information into a couple of basic categories, looking for possible causes or etiology (causes) of the disorder.

A. Does the patient data appear to fit into:

1. Exogenous – those that are external, i.e. trauma, chemical injury, or microbial infection
2. Endogenous – those that are internal, i.e. vascular insufficiency, immunological/autoimmune reactions, or diseases that are a result of abnormal metabolism
3. Idiopathic – appears to be unknown
4. Iatrogenic - diseases that arise as a complication of medical or surgical intervention

B. Next classify the information further into a disease classification:

1. Inflammatory (marked by inflammation)
2. Ischemic (a temporary deficiency of blood flow to an organ or

- tissue)
- 3. Immunologic (result of an antigen/antibody reaction)
- 4. Infectious (contagious – caused by a pathogen)
- 5. Neoplastic (new abnormal growth-- could be cancerous or non-cancerous)
- 6. Metabolic (disease due to abnormal biochemistry)
- 7. Nutritional
- 8. Genetic (inherited)
- 9. Congenital defects (born with disorder but not necessarily genetic)
- C. Health care workers will also take into consideration predisposing factors (risk factors) – factors that increase the probability of a person's becoming ill
 - 1. Age
 - a. Newborn babies
 - i. Immature immune system
 - ii. The liver enzymes necessary for detoxification of some substances are often lacking
 - iii. Fewer nutritional reserves
 - iv. Less body fat to insulate against cold
 - b. The elderly
 - i. Decrease in immune function
 - ii. Decline in homeostatic mechanisms
 - iii. Depression, isolation, and malnutrition
 - 2. Sex – some diseases are more prone to strike one gender than the other
 - a. Men are more likely to develop gout
 - b. Women are more likely to develop osteoporosis
 - 3. Genetic makeup (familial tendencies for diabetes, asthma, migraines, etc.)
 - 4. Stress – increases body's production of corticosteroids which decreases immune system function
 - 5. Lifestyle – personal habits in regard to diet, exercise, weight control, smoking, alcohol consumption, sexual practice, etc.
 - 6. Occupation – exposure to loud noises, pollutants, repetitive movements, heavy equipment, high places, etc.
 - 7. Preexisting illnesses
 - a. Illnesses can lower the body's resistance and make individuals more susceptible to other diseases
 - b. Chronic illness interferes with the proper function of some body systems, therefore complicating disease
 - 8. Environmental exposure
 - a. Prolonged exposure to cold or heat can lower the body's resistance

- b. Exposure to allergens
- c. Long-term exposure to sunlight
- d. Long-term exposure to occupational chemicals

- IV. Hypothesis: by definition means a possible solution to a problem, based on knowledge and research. To health care workers this step means you form a probable diagnosis to begin running a battery of tests for confirmation.
- V. Experiment: physicians begin to order a series of tests based on the hypothesis. They may run blood tests, x-rays, or tests that show conductivity such as an EKG or EEG.
- VI. Analysis of data: analyze the data from the diagnostic testing performed on the patient. Scientific method is also characterized by empiricism. The physician must look at the evidence of the data gathered to generate new knowledge and objectively look for sources of error or results that don't coincide with each other.
- VII. Conclusion: should be based on the experiment and address the hypothesis. It should be valid (based on the evidence) and reliable (repeatable). The conclusion may either accept the hypothesis or reject the hypothesis. It is perfectly acceptable to reject the hypothesis. When this occurs, the healthcare worker goes back to the beginning, taking into consideration the ordinal observations, and then formulating a new hypothesis based on all the information gathered; at that time they can determine if new and additional testing needs to be performed.
- VIII. Physicians use parts of scientific method in the next step in patient care. The next step is treatment, and they once again begin the process of observing the data, Research the current types of therapies available:
 - A. Treatment (therapy)
 - 1. The treatment of a disease should be as precise as possible in order to attempt a cure.
 - 2. Treatment interventions may include exercise, nutritional modifications, physical therapy, medications, surgery, and education. Many conditions will require a combination of therapies.
 - 3. Certain conditions could require the following therapies:
 - a. Supportive therapy – a conservative therapy that includes rest, optimal nutrition, fluids, and possibly antibiotics to prevent a secondary infection while the immune system is recovering
 - b. Palliative therapy – not a curative therapy; provides relief from signs and symptoms of a disease

- i. examples of this therapy might include steroids, pain relievers, possible surgery (removal of a tumor, etc.)
 - ii. this treatment is used for terminal illnesses and other serious chronic conditions for which there is no cure
- c. Preventive therapy – care that is given to prevent disease.
 - i. examples of preventive therapy might include mammograms, blood pressure screenings, routine dental care, colon cancer tests
- 4. Finally, analyze data to see if the treatment is working.
 - a. if not, go back to observing the old and new data, research possible treatments, form a new hypothesis of what you think will work, begin treatment (test the hypothesis) and the cycle goes on

IX. Many health care professionals take another modified form of Scientific Method and use a mnemonic system for assessment and treatment. One common example is SOAP, which stands for Subjective, Objective, Assessment, and Plan.

- A. **S** – Subjective: refers to information that the patient tells you or describes to you that you cannot not physically see. Symptoms would be fall into the Subjective category. An example would be Pain.
- B. **O** -- Objective: refers to information that you identify in the physical examination through inspection, palpation, and auscultation. Testing can also reveal other objective information. Objective information from the physical exam is referred to as signs. Example would be bleeding or vomiting, which you can physically observe.
- C. **A** – Assessment: based on the information you have collected from the Subjective and Objective components to form a conclusion or probable diagnosis for the patient.
- D. **P** – Plan: refers to the plan of action and care for the patient and beginning the treatment.

Activity

- I. Identify a diagnosis in the case study activity using the internet, symptom check list and scientific method.
- II. After completing the research for activity I -- research and report possible treatments for your patient.

Assessment

Successful completion of activities

Materials

- I. Copies of case studies and symptom check list for each student; internet access
- II. Internet access for research

Accommodations for Learning Differences

For reinforcement, the student will chose only two of the case study disorders to practice the steps of the scientific method.

For enrichment, the student will research other diseases not covered in this lesson and gather information to place in symptom's checklist.

National and State Education Standards

National Health Science Cluster Standards

HLC01.01 Academic Foundations: Health care workers will know the academic subject matter required for proficiency within their area. They will use this knowledge as needed in their role. Compare selected diseases/disorders including respective classifications, causes, diagnoses, therapies and care/rehabilitation to include biotechnological applications.

HLC02.01 Communications: Use medical terminology within a scope of practice in order to interpret, transcribe and communicate information, data and observations

TEKS

130.205 (c) 1D -- examine the environmental factors that affect homeostasis;

130.205 (c) 1E -- relate anatomical structure to physiological function;

130.205 (c) 1F -- distinguish atypical anatomy and physiology in the human body; and

130.205 (c) 1G -- implement scientific methods in preparing clinical case studies.

Texas College and Career Readiness Standards

English-Reading

B.1 Identify new words and concepts acquired through study of their relationships to other words and concepts

2 Apply knowledge of roots and affixes to infer the meaning of new words

3. Use reference guides to confirm the meanings of new words or concepts

Science-Nature of Science: Scientific Ways of Learning and thinking

B.2 Use essential vocabulary of the discipline being studied

Science-Foundation Skills

B 3 Recognize scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication

Scientific Method Case Studies

Case Study #1: 62 year-old-male, chief complaint difficulty breathing:

Signs and symptoms included pink complexion, prolonged exhalation, diminished breath sounds, wheezing, dry cough, fatigue, Temp 98.2, Pulse 112, Respirations 24, BP 146/92. diaphoretic and sitting in a tripod position with pursed lips. Use scientific method to form a hypothesis. _____

Case Study #2: 68-year-old female with moderate confusion, cyanosis, SOB (shortness of breath), pale, cool, clammy skin, severe edema in lower extremities, T 98.8, Pulse 108 and irregular, Respirations 32 with crackles, must sit up to breath, and c/o coughing up pink sputum,

SpO2 84%, abdomen distended, complains of fatigue on any type of exertion. Based on these physical findings use scientific method to form a hypothesis. _____

Case Study #3: 42 year-old-male with a history of diabetes has polyuria, polyphagia, polydipsia, poor skin turgor, nausea and vomiting, muscle cramps, dehydrated, altered mental status, fruity or acetone odor to breath, Temp 99.2, Pulse 114, Respirations 36 and deep abnormal sounds(kussmaul), BS 384 mg/dL. Based on these physical findings use scientific method to form a hypothesis. _____

Case Study # 4: 56 year-old-male was struck in the head with a foul ball. Patient now c/o weakness on the rt. side of body, decreased mental status and confusion, vomiting, dilation of rt. eye, headache, Temp 97.4, Pulse 62, abnormal respirations at 22, BP 162/84. He experienced seizure x 2 after arrival to the emergency room. Based on these physical findings and using scientific method form a hypothesis. .

Case Study # 5: 52 year-old-male with a history of alcoholism, c/o vomiting bright red blood, but no complaints of pain or tenderness in the abdomen, patient's eyes and skin are positive for jaundice , skin is also clammy and cool, Temp 97.8, Pulse 112, Respirations 32 and difficult,

BP 88/56. Based on these physical findings and using scientific method form a hypothesis. _____

Symptoms Checklist

Symptoms

Disease	Headaches	Altered mental status	Nausea	Vomiting	Dehydrated	Edema	Diarrhea	Change in pupil size	Diaphoretic	Fatigue/ weakness	Dyspnea/ SOB	Abnormal breathing rate	Cough dry or productive	Seizures	Abnormal breath sounds	Polyphagia	Polydipsia	Polyuria	Abnormal skin color/rash	Pain	Fever
Lyme	X									X									X	X	X
Pneumonia		X								X			X								X
Influenza	X	X			X					X	X		X							X	X
Emphysema								X	X	X		X							X		
Salmonella	X		X	X	X		X										X				X
Diabetic ketone acidosis (DKA)		X	X	X	X						X	X			X	X	X	X		X	
Congestive Heart failure		X				X			X	X	X	X	X		X				X		

Hypoglycemia	X	X			X				X	X						X	X				
Subdural Hematoma	X	X	X	X				X						X							
Concussion	X	X	X	X				X													
Hepatitis A			X	X	X		X			X									X	X	X
Esophageal Varices				X							X	X							X		
Meningitis	X	X		X						X				X					X	X	X
Pertussis	X								X	X	X	X	X		X				X	X	X
Urinary Tract Infection	X		X	X			X			X								X		X	X

Scientific Method Case Studies

KEY

Case Study # 1	Emphysema
Case Study # 2	CHF -- Congestive Heart Failure
Case Study # 3	DKA -- Diabetic Ketone Acidosis
Case Study # 4	Subdural Hematoma
Case Study # 5	Esophageal Varices

Course	Rationale
<i>Practicum in Health Science</i>	Healthcare workers are on the front line of fighting the spread of infectious disease. One of the most important aspects of their job is accurately diagnosing a disease by collecting the right types of information from the patient. In order to provide adequate client health care, it is necessary to obtain an accurate patient history and physical examination.
Unit VI	
<i>Multi-Competent Health Care Worker</i>	Objectives Upon completion of this lesson, the student will be able to:
Essential Question	<ol style="list-style-type: none"> 1. Record a simple patient history 2. Perform a patient exam, focusing on pulse, temperature, throat, and respiration 3. Diagnose illness by matching observed symptoms with diseases using a checklist and suggest the appropriate course of treatment 4. Describe the symptoms and risk factors of various infectious diseases
<i>What are the ramifications from an inaccurately performed health care skill?</i>	Engage The teacher will role play a history and physical while identifying the stages. Urge the students to take notes during the process. Use one of the disease cards from the lesson for the role play.
TEKS 130.205 (c) 1A, 2A, 3A, 8A, 8B, 8C, 8D	Key Points
Prior Student Learning	<ol style="list-style-type: none"> I. Information gathered while performing a history and physical on a patient helps the physician determine: <ol style="list-style-type: none"> A. Patient level of health B. Need for additional testing or examinations C. Tentative diagnosis D. Preventive measures needed E. Type of treatment II. Length and detail At times the patient's history may need to be in great detail. For example, when a patient goes to see a specialist the patient may be asked to fill out a very lengthy form about any problem in the past looking for a pattern. But,
<i>Students should be able to accurately take a pulse and temperature.</i>	

They should understand safety procedures related to patient contact.

Estimated time

4 ½ - 6 hours

- many times a simple history is all that is needed to give the physician a good idea about what is going on with the patient and the best way to treat it such as a patient seeing a doctor for a sore throat or broken arm.
- III. Common components of the patient's history
- A. Chief Complaint (CC) - a brief statement made by the patient describing the nature of the illness (signs and symptoms) and the duration of the symptoms. Why the patient came to see the physician.
 - B. History of present illness (HPI) – detail each symptom and looks at the order of the symptoms to occur and the length of each.
 - C. Past History (PH) – all prior illness the patient has had and date of occurrence.
 - 1. Childhood diseases
 - 2. Operations
 - 3. Admission to the hospital
 - 4. Serious injuries and disabilities
 - 5. Shot record (immunizations)
 - 6. Allergies (all kinds including drug reaction)
 - 7. For women only – number of pregnancy, number of live births, and date of last menstrual cycle
 - D. Family History (FH) – the summary of the health status and age of immediate relatives (parents, siblings, grandparents and in some cases children); if deceased, the date, age at death, and the cause are noted. Diseases among relatives that are thought to have hereditary tendency are also recorded. Examples are cancer, diabetes, heart problems, kidney problems, mental conditions and any infectious diseases
 - E. Social and occupational history (SH) – includes information related to the type of job, where the patient lives, recent travels to the patient's personal habits and lifestyle.
 - 1. Use of tobacco, alcohol, drugs, coffee, etc.
 - 2. Diet, sleep, exercise, and hobbies
 - 3. Marital history, children, home life, occupation, religious convictions
 - 4. resources and support
- IV. Physical Exam
- Most of the time, the physical portion of the exam is performed by the physician. Part or all of the exam may be performed by a nurse, therapist, PA or other trained person working under the doctor. Example: a nurse or paramedic may check victim's eyes to see if they are dilated or note that the patient has multiple cuts and bruises.
- A. Types
 - 1. Inspection – visual observation of the body. Note any signs of rashes, scars, trauma (such as cuts and bruises), deformities or

swelling. Many times instruments are used to assist in getting a better look such as an otoscope or a tongue blade.

2. Palpation – by applying the tips of the fingers, the whole hand, placing both hands to a body part to feel for abnormalities and noting any pain or tenderness.
3. Percussion – done by tapping the body lightly but sharply with the fingers when looking for the presence of pus or fluid in a cavity, or done by the percussion hammer when checking the reflexes of a patient.
4. Auscultation – the process of listening to sounds produced internally. Generally a stethoscope is used.
5. Mensuration – the process of measuring. Clinical measurements include TPR, BP, Ht and Wt.
6. Diagnostic Testing – testing done to give the physician a better look at what is going on inside, most likely done after the other parts of the exam. Examples include lab work, x-rays or more invasive type procedures such as a heart cath.

B. Preparing the patient for the exam

Patients are usually asked to undress and put on a gown when preparing for a physical examination. Always drape patients so they are covered except for the area to be examined. It is your responsibility to maneuver draping to maintain maximum cover for the patient as the doctor examines various areas of the body. The more commonly positions used for examinations:

1. Horizontal recumbent (supine) – the patient lies flat on back, with or without a head pillow, legs, extended, arms across chest or at side.
2. Prone – the patient lies facedown, legs extended, face turned to one side and arms above head or along side.
3. Dorsal recumbent – the patient lies on back, knees flexed, with soles of feet flat on bed
4. Knee-chest – the patient is on the knees with chest resting on the bed. The thighs are straight up and down; the lower legs are flat on the bed. The face is turned to one side.
5. Sim's (lateral) – the patient lies on the left side with the left arm and shoulder front-side down on the bed. The right arm is flexed comfortably. The right leg is flexed against the abdomen; the left knee is slightly flexed.
6. Fowler's – the back rests against the bed, which is adjusted to a sitting position. The bed section is raised under the knees. A pillow is placed between the patient's feet and the foot of the bed.
7. Lithotomy – the patient lies on the back. The knees are well separated and flexed. Sometimes the feet are placed in

stirrups.

8. Anatomic position (vertical) – the patient stands upright with feet together and palms forward.
9. Dangling (sitting) – the patient sits upright on the side of the bed, facing the doctor. The feet are resting on a stool or dangling. (This is the most common position and depending on the patient's chief complaint, they may not be required to remove clothing.)

C. Equipment

The equipment needed for examination will depend upon the type of exam. Some commonly used instruments:

1. tongue depressor
2. otoscope
3. nasal speculum
4. percussion hammer
5. ophthalmoscope
6. stethoscope
7. sphygmomanometer (blood pressure cuff)
8. tape measure
9. gloves
10. emesis basin
11. thermometer
12. cotton balls in antiseptic solution
13. knife handle
14. knife blade
15. hemostat
16. curved scissors (Metzenbaum)
17. sponge forceps
18. tissue forceps
19. suture scissors
20. needle holder
21. hypodermic needle
22. syringe
23. mosquito forceps
24. towel clips
25. towels
26. gauze strips
27. drape or sheet

Activity

- I. Complete **Positioning and Equipment Worksheet**.
- II. Conduct a history and physical on a partner. **Clinical Epidemiology Lab**

Assessment

Completion of **Positioning and Equipment Worksheet**

Successful completion of Clinical Epidemiology Lab

Materials

History and Physical Form

Clinical Procedures for Medical Assistant 3rd edition by Shannon M. Zakus Mosby

Positioning and Equipment Worksheet

Latex gloves

- Face masks
- Thermometers
- Sanitary covers for the thermometers
- Rubbing alcohol and cotton balls
- Tongue depressors

Accommodations for Learning Differences

For reinforcement, the student will outline the components of the history and physical exam.

For enrichment, the student will compare and contrast health histories of two or more patients with the same disease/disorder.

National and State Education Standards

National Health Science Cluster Standards

HLC 10.01 Health Care Workers will apply technical skills required for all career specialties. They will demonstrate skills and knowledge as appropriate.

TEKS

130.205 (c) (1)(A) interpret data from various sources in formulating conclusions;

130.205 (c) (2)(A) accurately describe and report information, according to facility policy, observations, and procedures;

130.205 (c) (3)(A) demonstrate proficiency in medical terminology and skills related to the health care of an individual;

130.205 (c) (8)(A) describe pre-procedural preparations;

130.205 (c) (8)(B) observe therapeutic or diagnostic procedures;

130.205 (c) (8)(C) identify care indicators of health status; and

130.205 (c) (8)(D) record health status according to facility protocol.

Texas College and Career Readiness Standards

English Language Arts

I. A. 2. Generate ideas and gather information relevant to the topic and purpose, keeping careful records of outside sources.

II. A. 4. Draw and support complex inferences from text to summarize, draw conclusions, and distinguish facts from simple assertions and opinions.

V. A. 2. Explore a research topic.

V. B. 1. Gather relevant sources.

V. B. 2. Evaluate the validity and reliability of sources.

V. B. 3. Synthesize and organize information effectively.

V. B. 4. Use source material ethically.

Science

I. A. 1. utilize skepticism, logic and professional ethics in science.

Social Studies

I. E. 4. Identify and evaluate the sources and consequences and social conflict.

Cross Disciplinary

I. B. 3. Gather evidence to support arguments, findings or line of reasoning.

Positioning and Equipment Worksheet

1. Complete the following statements:

- A. A tongue depressor is used to hold down the _____.
- B. An instrument used to examine the eye is called a _____.
- C. An instrument used to examine the nasal cavity is called a _____.
- D. _____ is a fluid used to lubricate.
- E. Gloves are used to protect the _____.
- F. The _____ is an instrument used to wrap around the arm to aid in detecting the blood pressure.
- G. _____ is an instrument used to hear the heart beat.
- H. The oroscope is an instrument used to examine the _____.
- I. Cotton balls are soaked in _____.

2. Answer each statement by placing a (T) for true or an (F) for false in front of each.

- _____ a. Assemble instruments needed for the examination.
- _____ b. Be present in the room unless otherwise instructed.
- _____ c. Assist the patient only if necessary.
- _____ d. Follow the general examination rules of the medical facility.
- _____ e. Stand by to help position or hold the patient as the doctor requests.
- _____ f. All used or soiled equipment must be placed in the proper place according to the policies of the medical facility.
- _____ g. Report time, date, and the extent of the examination for charting.

3. Match the terms on the right with the definition on the left in relation with positioning the patient.

- | | |
|--|-------------------------|
| _____ a. The patient lies flat on the abdomen with head turned right or left | 1. Horizontal recumbent |
| _____ b. This position is also called the knee-chest position | 2. Prone |
| _____ c. Standing upright with good posture and arms at ease by the sides. | 3. Sim's |
| _____ d. Lying flat on the back without a pillow and the knees slightly apart. | 4. Supine |
| _____ e. Outstretched on the back. | 5. Dorsal recumbent |
| _____ f. Lying on the back with one pillow under the head and with the knees flexed (bent) and separated. | 6. Jackknife |
| _____ g. Lying on the left side with left arm behind the back and right leg drawn up and apart from the left | 7. Fowler's |
| _____ h. With the head and back elevated to quite a high angle on the bed and the knees flexed. | 8. Dangling |
| _____ i. With the head and back somewhat elevated and the knees flexed slightly. | 9. Vertical |
| _____ j. Sitting in the side of the bed with the feet hanging. | 10. Semi-Fowler's |

Positioning and Draping The Patient For The Medical Examination **Key**

1.
 - a. Tongue
 - b. Ophthalmoscope
 - c. Nasal speculum
 - d. Lubricant
 - e. Hands
 - f. Blood pressure cuff
 - g. Stethoscope
 - h. Ear
 - i. Antiseptic solution

2.
 - a. True
 - b. True
 - c. False
 - d. True
 - e. True
 - f. True
 - g. True

3.
 - 2 a.
 - 6 b.
 - 9 c.
 - 1 d.
 - 4 e.
 - 5 f.
 - 3 g.
 - 7 h.
 - 10 i.
 - 8 j.

Clinical Epidemiology Lab

Objectives

1. To learn about symptoms and risk factors for various infectious diseases.
2. To record patient data based on exams and patient history.
3. To diagnose an illness based on clinical findings.
4. To record diagnostic testing and treatments for your diagnosed disease.

Materials

- Patient Record Form
- Disease Description Card
- Gloves and face masks
- Thermometer and sanitary covers
- Tongue depressors
- Rubbing alcohol and cotton balls

Directions

1. Choose a partner and decide who will be the “Health Care Worker” and “Patient.”
2. Get a Disease Description Card from your instructor.
3. As a patient, follow the “role” of your disease carrier. As a health care worker, record the data your patient gives you on the Patient Record Form.
4. Collect materials for the patient exam. Record the data under Patient Exam and Observations. Be sure to record two sets of data where indicated on the form (student and patient roles).
5. Wearing your gloves and face mask, complete the following:
 - Pulse Recording. Record your patient’s *radial pulse* by taking their pulse on their wrist. Count the “beats” for 1 minute (or for 30 seconds and multiply by 2).
 - Temperature Recording. Use the digital thermometer. Be sure to use a sanitary cover. Record the temperature. Wipe off the thermometer with rubbing alcohol before giving it to the next group.

- Throat Description. Using a tongue depressor, (gently) look inside your patient's mouth at the color of the throat. Record descriptions like pink, red, blotchy, white patches, etc.
 - Lymph nodes (neck). Swollen? Tender? Record findings.
 - Respiration. Count how many times the patient "breathes" in 1 minute.
6. Once you have recorded all of the exam and history data, get a Symptoms and History Checklist from your instructor. Examine the checklist and search for your patient's disease. Try to find the disease that matches all of the descriptions you recorded about symptoms and patient history (risk factors).
 7. Turn in your patient's information with diagnosis. Keep the Symptoms and History Checklist in your notes. Return the Disease Description Cards to your instructor.

Disease Information

Now that you have arrived at a preliminary diagnosis for your patient, there is additional information about the disease that you will want to have. Research your disease in order to answer the following questions:

What diagnostic testing is available for this disease?

What is the pathogen associated with this disease? How is the disease transmitted?

What are the major treatments for this disease?

How can individuals avoid contracting this disease?

Patient Record Form

Healthcare Worker (your name)_

Patient (partner's name)

PART I—Patient Information

Disease (A–N)_____ Age_____

Complaints/Symptoms

Questionnaire (history):

1. Have you eaten anything differently in the last 48 hours? _____ no _____ yes _____ unknown

if yes, what? _____

2. Have you traveled anywhere recently? _____ no _____ yes _____ unknown

where? _____

3. Do you own a pet? _____ no _____ yes

what kind? _____

4. Have you gone hiking or camping recently? _____ no _____ yes _____ unknown

5. Are you up to date on your vaccinations? _____ no _____ yes _____ unknown

6. Have you shared a soda or drinking glass with anyone recently? _____ no _____ yes _____ unknown

7. Do you live in the countryside or near wildlife? _____ no _____ yes _____ unknown

8. Do you have any recent cuts or bites on your skin? _____ no _____ yes

9. Do you work in a healthcare setting? _____ no _____ yes _____ unknown

10. Have you had any injuries or accidents recently? _____ no _____ yes _____ unknown

what type of injury? _____

11. Other important information? _____

PART II–Patient Exam and Observations

Pulse of student _____ Pulse of patient _____

Temperature of student _____ Temperature of patient _____

Description of throat (student) _____

Lymph nodes (student) _____

Respiration of student _____ (optional)

PART III–Diagnosis and Treatment

1. Your diagnosis _____

2. Pathogen (infectious agent) _____

3. Diagnostic tests _____

4. Types of treatment or cures _____

5. Public health preventions _____

Symptoms and History Checklist

Symptoms																	
DISEASE	headaches	fever	rash	skin irritation	nausea	vomiting	abdominal pain	muscle aches	chest tightness	fatigue	sore throat	joints hurt	uncoordination	mental confusion	anxiety	low blood count	diarrhea
Lyme	X	X	X	X						X		X					
Pneumonia		X							X	X						X	
Influenza	X	X						X		X	X					X	
Malaria	X	X			X							X				X	
Salmonella	X	X			X	X	X									X	
Giardia		X			X	X	X			X	X					X	
Tetanus				X				X								X	
Mononucleosis	X	X	X					X		X	X						
Rabies	X	X		X				X			X	X	X	X	X		X
Hantavirus	X	X						X					X		X		X
Hepatitis A					X		X			X							X
Bovine spongiform	X								X		X		X	X	X		X
Meningitis	X	X	X			X		X		X				X	X		X
Pertussis	X	X							X							X	X
Toxoplasmosis	X	X					X				X		X	X			X

History																	
DISEASE	hiking or camping	food—eggs & chicken	mouse exposure	mammal bite	insect bite	crowds or airborne	food—beef	contaminated fruit or water	soil infection, rusty objects	saliva transmission	high risk age group	brain infection	vaccination available	possible pet exposure	respiratory system affected	digestive system affected	stress adds to illness
Lyme	X				X												X
Pneumonia						X					X				X		X
Influenza						X					X		X		X		X
Malaria	X				X							X					X
Salmonella		X						X			X						
Giardia	X							X	X								
Tetanus	X								X				X		X		
Mononucleosis						X				X	X				X		X
Rabies	X		X	X								X	X	X			
Hantavirus	X		X														
Hepatitis A		X						X					X			X	X
Bovine spongiform							X					X					X
Meningitis						X				X		X	X				
Pertussis						X					X		X		X		
Toxoplasmosis	X								X					X			X

Disease Description Cards

<p>Disease Description Card #1</p> <p>You are seeking medical attention because your stomach hurts and you feel a lot of nausea. You've been very tired lately, and your skin is looking a little bit yellowish. Your temperature has been normal though. You were recently on vacation in Thailand, where you sampled a variety of foods sold on the street. You are unsure whether you are up-to-date on your vaccinations.</p>	<p>Disease Description Card #2</p> <p>You are 72 years old and live in a crowded nursing home. You are seeking medical attention because you have a persistent fever (101 degrees) and a cough that hurts and makes your chest feel tight. The illness makes you very tired and worried. You are unsure whether or not your vaccinations are current.</p>
<p>Disease Description Card #3</p> <p>You are urgently seeking medical attention because of extreme discomfort. You have a fever (102 degrees) and some new red-purple spots on your arms and back. In the last 24 hours you have vomited twice, and you have a bad headache. When the HCW asks you questions, you get confused and anxious, which is not normal for you. You have just started work at an elementary school and have not had a chance to get up-to-date on your vaccinations.</p>	<p>Disease Description Card #4</p> <p>You have just come back from a visit to your uncle's farm in Ireland and are not feeling very well. Your throat is sore, your head aches, and you have dizzy spells. When the HCW asks you questions, you are confused and anxious, which is not normal for you. Also, you have become uncoordinated and your balance is poor. Your temperature is normal, and you are up-to-date on all of your vaccinations.</p>
<p>Disease Description Card #5</p> <p>You are seeking medical attention because your left leg muscles ache badly and your jaw is very stiff. You have a hard time chewing and swallowing. Your temperature and pulse are normal. You think the leg muscle ache has something to do with an injury you had a week ago while camping—you accidentally got stabbed in the leg by a large metal skewer when making S'mores over the campfire. You have had all your childhood vaccinations, but haven't had any shots for the last 10–15 years.</p>	<p>Disease Description Card #6</p> <p>You are cancer patient who is currently undergoing chemotherapy, which weakens your immune system. You are seeking medical attention today because you have a fever (101.7 degrees), a bad headache, and your throat hurts. Your stomach hurts more than normal. When the HCW performs the balance test, you get somewhat dizzy, and overall you have been less coordinated and mentally aware than usual. When you come home from chemotherapy, you like to seek comfort from your two cats that spend a lot of time outside. You do not remember whether your vaccinations are current.</p>

<p>Disease Description Card #7</p> <p>You have recently returned from a camping trip in the Appalachian Mountains, where you did a lot of hiking through the woods. You are seeking medical attention because you are having a hard time recovering from the trip. Your joints are sore, and you feel tired all the time as though you have the flu. You are running a fever (100.6 degrees) and have a headache. When the HCW checks your lymph nodes, they are swollen, and there is a red bump on your leg where you think an insect bit you. You are up-to-date on all of your vaccinations.</p>	<p>Disease Description Card #8</p> <p>You are seeking medical attention because you have been suffering from nausea for several days, and last night you vomited. You've been having stomach cramps and diarrhea as well, and have generally been feeling run down and tired. You live near a lake that you like to swim in each morning, but have been too tired to do it for the past week. It often has a lot of kids and pets playing in it. You updated your vaccinations about 6 months ago.</p>
<p>Disease Description Card #9</p> <p>You are seeking medical attention because for the past 3 days you have been feeling very under the weather. You have a sore throat, cough, headache, and your muscles ache. Your body temperature is 101.4 degrees. You work in an office where a lot of employees have been calling in sick lately. The shortage in staff has made your job pretty stressful for the past couple of weeks. The last time you got your vaccinations up-to-date was 2 years ago.</p>	<p>Disease Description Card #10</p> <p>You are seeking medical attention for a combination of symptoms you've never had before. Your hand and arm itches, and sometimes there is a shooting pain there. You have a fever (101.8), headache, and muscle soreness. When the HCW asks you questions, you show signs of some confusion and you complain that you can't think straight because you feel anxious a lot. Sometimes your throat is sore and you feel like you are thirsty more than usual. When asked if anything unusual has happened to the hand and arm that is irritated, the only thing you can think of is that you adopted a dog 6 months ago and he used to nip that hand a lot. You don't remember whether or not your vaccinations are current.</p>
<p>Disease Description Card #11</p> <p>Last week you started to suffer from what you thought was the common chest cold, but this week the coughing has become a lot worse, especially at night. You start to cough very violently and then have to struggle to get enough air after the coughing bout is over. It makes your chest feel tight and gives you a headache. You still have a fever (101.2 degrees) and are usually thirsty. You are a recent immigrant from a country that doesn't require childhood vaccinations, and so you did not have many of them.</p>	<p>Disease Description Card #12</p> <p>You think you have a bad case of the flu, but are seeking medical attention because it doesn't seem to be getting any better. For the past 2 days you've had a fever, and today your temperature is 102.3 degrees. Your muscles ache, you get chills, and have a headache. Sometimes you have a dry cough. The balance test reveals that you are somewhat less coordinated than you usually are, and the entire experience with the HCW makes you a lot more anxious than you normally would be. You are an engineer and have been spending your weekends for the past month helping your grandmother clean her attic, which had a mouse infestation. You are current on all of your vaccinations.</p>

<p>Disease Description Card #13</p> <p>You are seeking medical attention because last night you started having a fever, and today your temperature is 103.4 degrees. Your head and muscles ache, you feel very tired, and you get dizzy easily. Two weeks ago you returned from the rainforest in Brazil, where you spent a month conducting research on orchid species. You camped half of the time, and despite all your efforts, were bitten many times by mosquitoes and spiders. You were updated on all of your vaccines before you left on your research trip.</p>	<p>Disease Description Card #14</p> <p>Last night your mother-in-law had you over for a chicken dinner and now you feel very sick. You vomited soon after you came home, and today you are suffering from stomach cramps and severe diarrhea. You have a temperature of 101.6 and a slight headache. You are a teacher and haven't traveled in the past 6 months. Your vaccinations are all up-to-date. You have two pets, a dog, and a parrot.</p>
<p>Disease Description Card #15</p> <p>You are seeking medical attention because for the past week you have been extremely tired and do not seem able to feel completely rested. Whenever you try to work, you feel worse and have to lie down. Your throat is sore, and the HCW discovers that your lymph nodes are swollen. You have a temperature of 100.8 degrees, head and muscle aches, and are developing small, red, raised bumps on your chest and neck. You have very recently started to date a new person and often share food and drinks.</p>	<p>Disease Description Cards: Key</p> <p>Card # Disease</p> <ul style="list-style-type: none"> 1 Hepatitis A 2 Pneumonia 3 Meningitis 4 Bovine spongiform 5 Tetanus 6 Toxoplasmosis 7 Lyme disease 8 Giardia 9 Influenza 10 Rabies 11 Pertussis 12 Hantavirus 13 Malaria 14 Salmonella 15 Mononucleosis

ENTREPRENEURSHIP IN HEALTHCARE

Course	Rationale
<i>Practicum in Health Science</i>	There are many opportunities in health care for entrepreneurship.
Unit VII	Objectives
<i>Career Preparation and Employability</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Examine steps necessary to plan and start a business • Recognize that there are costs and benefits associated with any new project • Recognize strategies involved in a workable business plan • Develop a health care business by utilizing available resources
Essential Question	Engage
<i>If I am a healthcare provider, how can I be my own boss?</i>	As a class, discuss the following questions: How hard is it to own your own business? Why would I want to work for myself?
TEKS <i>130.205 (c) 3C, 3D</i>	Or
Prior Student Learning	Complete the <u>AM I AN ENTREPRENEUR? ENTREPRENEURIAL SELF ASSESSMENT</u> – there are no right or wrong answers to this quiz.
<i>Career preparation and Employability skills</i>	Key Points
Estimated time <i>6 hours</i>	<ol style="list-style-type: none"> I. An entrepreneur represents basic American values. A small business owner must have initiative, persistence, and inventiveness to succeed and show a profit. <ol style="list-style-type: none"> A. Entrepreneur is a person who organizes, manages, and assumes the risks of a business enterprise, including taking a profit when successful and a loss if business fails. II. Characteristics of an entrepreneur include <ol style="list-style-type: none"> A. Well-motivated

- B. Persistent
- C. Self confident
- D. Responsible
- E. Creative / inventive
- F. An independent thinker
- III. Several factors influence success
 - A. Estimate of finances involved, capital outlay, operating expenses, hidden costs, and living expenses
 - B. Competition of other businesses
 - C. Advertising and marketing of the business
 - D. Accurate record keeping
 - E. Maintaining supplies and materials
 - F. Updating or improving methods of operation
- IV. Classification of business opportunities (entrepreneurship glossary)
 - A. Ownership
 - 1. sole proprietorship
 - 2. general partnership
 - 3. limited partnership
 - 4. corporation
- V. Entrepreneurs must develop a plan of action
 - A. Business Plan
 - 1. The product or service to be sold
 - 2. The customers who will make the purchases
 - 3. The competition
 - 4. The kind of financing necessary and the method to obtain
 - 5. The time commitment required to make it work
 - 6. What it takes to keep a business going
 - B. Marketing strategies
 - 1. Targeting a customer base with advertising, meeting supply and demand with a quality product, competitive, and providing quality services
 - 2. Successfully completing a product or service by a work force
 - 3. Maintaining a plan of action throughout the business venture
- VI. Starting and operating a successful, small business requires a thorough understanding of the endeavor.

Activity

- I. Organize and create a business. (Entrepreneurship Guidelines)

Assessment

Evaluation Form

Oral Presentation Rubric

Materials

Notebook

Colored pencils and markers

Computer with Internet access

Entrepreneurship: Starting Your Own Business by Roger Hunt

Video - Getting Started in Your Own Business by Max Fallek

<http://www.sba.gov/smallbusinessplanner/index.html> - Small Business

Administration

Student Information Sheet

Business Choice Sheet

Business Plan

Location Sheet

Start-Up Costs

Teacher Note:

Teacher should approve project ideas.

Set deadlines for students to keep them on task.

Accommodations for Learning Differences

For reinforcement, the student will list the components of a successful company.

For enrichment, the student will present finished product to local advisory committee.

National and State Education Standards

National Health Science Cluster Standards

HLC05.01 Systems

Health care workers will understand how their role fits into their department, their

organization and the overall health care environment. They will identify how key systems affect services they perform and quality of care.

TEKS

130.205(c)(3)(C) describe the steps necessary for entrepreneurship in a free enterprise system; and

130.205(c)(3)(D) develop new problem-solving strategies based on previous knowledge and skills.

Texas College and Career Readiness Standards

CROSS-DISCIPLINARY STANDARDS

I. Key Cognitive Skills

A. Intellectual curiosity

1. Engage in scholarly inquiry and dialogue.
2. Accept constructive criticism and revise personal views when valid evidence warrants.

B. Reasoning

1. Consider arguments and conclusions of self and others.
2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.
3. Gather evidence to support arguments, findings, or lines of reasoning.
4. Support or modify claims based on the results of an inquiry.

C. Problem solving

1. Analyze a situation to identify a problem to be solved.
2. Develop and apply multiple strategies to solving a problem.
3. Collect evidence and data systematically and directly relate to solving a problem.

D. Academic behaviors

1. Self-monitor learning needs and seek assistance when needed.
2. Use study habits necessary to manage academic pursuits and requirements.
3. Strive for accuracy and precision.
4. Persevere to complete and master tasks.

E. Work habits

1. Work independently.
2. Work collaboratively.

F. Academic integrity

1. Attribute ideas and information to source materials and people.
2. Evaluate sources for quality of content, validity, credibility, and relevance.
3. Include the ideas of others and the complexities of the debate, issue, or problem.
4. Understand and adhere to ethical codes of conduct.

II. Foundational Skills

B. Writing across the curriculum

1. Write clearly and coherently using standard writing conventions.
2. Write in a variety of forms for various audiences and purposes.
3. Compose and revise drafts.

C. Research across the curriculum

2. Explore a research topic.
3. Refine research topic based on preliminary research and devise a timeline for completing work.
4. Evaluate the validity and reliability of sources.

5. Synthesize and organize information effectively.

6. Design and present an effective product.

7. Integrate source material.

8. Present final product.

D. Use of data

2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.

3. Present analyzed data and communicate findings in a variety of formats.

E. Technology

1. Use technology to gather information.

2. Use technology to organize, manage, and analyze information.

3. Use technology to communicate and display findings in a clear and coherent manner.

4. Use technology appropriately.

ENTREPRENEURSHIP ACTIVITY STUDENT INFORMATION

- I. Develop a business plan. The plan gives a path to follow and a communication tool to bankers and manufacturers
 - A. The business plan consists of an outline of the considerations for the start up of a business (See business plan form)
 1. Name of business
 2. Field of activity
 3. Location
 4. Products or services
 5. Competition
 6. Customer benefits
 7. Management expertise
 8. Personnel needed
 - B. When putting the plan into action, it must be kept up to date in order to offset changes. Start up costs and continuing costs must be taken into consideration. (See start up costs form)
 - C. Most companies today set up a mission statement or philosophy, it is important to consider what the goals are for the company and how it will serve the community. After considering the mission statement, the development of a company policy and rules and regulations must be established. In order for a company to function properly, these policies must be enforced and apply to all employees.
- II. Development of Market Analysis

The market refers to groups of people, business or organizations seeking the types of products or services you sell. Identify the location of your business. Many times the location determines the success of a business.

 - A. Using the location sheet as a guide, do a comparison of the competitors in the area. This may involve visiting the place of business or researching through the Better Business Bureau or Internet
 - B. After selecting the location, take a picture of the location including directions or draw a map.
- III. After the location has been found, begin the organization of the facility
 - A. Create a floor plan and design an illustration of the front of the building.
 - B. Develop an advertisement for the business. Make an ad for the newspaper.
 - C. Design a business card and logo
- IV. In order to operate a business, it is necessary to develop forms and requisitions to be used. Take into consideration what types of transactions will be occurring in the business and develop three different forms, checks, requisitions, etc. to be included in the notebook
- V. In the final analysis, hypothetically consider the success or failure of the business and what plans need to be made for the future success of the business.
 - A. Describe a plan after a negative experience, such as, damage to the facility, loss of an employee, or decreased profit
 - B. Describe plans after a positive experience, such as, increased profit, need for more space.

Entrepreneurship Project Guidelines

All the information below must be placed in a binder/scrapbook and turned in at the designated dates.

Due Dates _____

1. Business Choice Sheet (Done in Class)
2. Final Copy Business Plan
3. Mission Statement (Philosophy) (Done in Class)
4. Geographic Marketing Area of Business (Location Sheet)
(Picture with directions or map drawn)
5. Design a Logo and Business Card
6. Advertisement of Business
(Make an ad for the newspaper or a display)
7. Develop Company Rules and Policies
(Make a Chart)
8. Start up Expenses/Budget
(List all items and place in notebook)
9. Make a Floor Plan of Business
10. Design a Front Illustration of Facility
11. Samples of Forms, Requisitions, Checks that will be used in business
12. Evaluate how you would measure the success of your business and how you would plan for expansion.

Completed Notebook is Due: _____

You will be graded on the above items; also on neatness, originality, creativity, and overall quality of work. Have fun with this!!!! See yourself as an entrepreneur!!!!

Business Choice Sheet

My choice for a field of business: _____

Reasons for my choice: _____

[illegible]

Business Plan

Prepared by

Name of Enterprise:

Field of Business Activity:

Location:

Products or Services:

Competition:

Customer Benefits:

Management Expertise:

Personnel:

LOCATION

The location for my enterprise is

I chose this location because

COMPARISON OF COMPETITORS

Elements to Be Completed	Competitor A	Competitor B	Competitor C
Market share percentage	_____%	_____%	_____%
Product or service quality	Good Fair Poor	Good Fair Poor	Good Fair Poor
Location	Good Fair Poor	Good Fair Poor	Good Fair Poor
Size of Facility	Large Medium Small	Large Medium Small	Large Medium Small
Prices	High Average Low	High Average Low	High Average Low
Reputation	Good Fair Poor	Good Fair Poor	Good Fair Poor
Number of Years in business	____years	____years	____years
*			
*			

*Use these spaces for additional elements.

Start-Up Costs

One-Time Costs

Equipment, machinery, fixtures	\$ _____
Charges for installation	_____
Decorating and remodeling	_____
Beginning inventory	_____
Deposits for utilities	_____
Fees for accountants and lawyers	_____
Licenses and permits	_____
Promotion methods at "grand opening"	_____
Cash for unexpected needs	_____
TOTAL ONE-TIME COSTS	\$ _____

Continuing Costs for Three Months

All wages and salaries	\$ _____
Rent	_____
Advertising and sales promotion	_____
Delivery expenses	_____
Supplies and materials	_____
Utilities	_____

Insurance of all types	_____	
Taxes (federal, state, local)	_____	
Interest on debt	_____	
Repairs and maintenance	_____	
Fees for accountants and lawyers	_____	
Employee training costs	_____	
Unexpected needs	_____	
TOTAL CONTINUING COSTS FOR THREE MONTHS		\$ _____
TOTAL START-UP COSTS		\$ _____

Am I an Entrepreneur?

ENTREPRENEURIAL SELF ASSESSMENT

The following list of personal characteristics is designed to help you determine if you have what it requires to be a successful entrepreneur. Analyze yourself carefully and honestly as you answer each question.

There are no right or wrong answers in this checklist. However, if most of your answers are yes, you probably have what it takes to become an entrepreneur. If you answered no to about half of the questions, you may need assistance to reinforce the areas where you are weak. If the majority of your answers are no, then entrepreneurship is likely **not** for you.

	YES	NO
Do I really have the desire to be my own boss rather than work for someone else?	_____	_____
Am I a self-starter?	_____	_____
Do I have management skills (managing finances, employees, and other aspects of the business)?	_____	_____
Do I have experience in the type of business I am interested in owning and operating?	_____	_____
Can I accept the responsibility of seeing things through the end?	_____	_____
Am I a well-organized person?	_____	_____

Do I have the desire to lead and direct others?

Can I make decisions quickly if I have to?

Do I have good health and the high level of energy necessary to be
an entrepreneur?

Do I have the financial resources, as well as future credit
resources I need to begin?

Can I sustain my business through the early, formative years?

Can people (customers and employees) trust what I say?

Do I have the need to set and achieve difficult goals and move on to
other challenges?

Do I have the desire to be innovative and creative?

Do I prefer having a plan of action (business plan) before I begin an
activity?

Is my partner and / or family supportive of my plan?

YES

NO

Am I on time for appointments?

Am I willing to work the long hours it takes to be an entrepreneur?

Do I have the desire to stick with the business even in troubled times?

Am I willing to do **all** the tasks necessary for the successful operation of the business?

Even though its scary to try something new, am I the kind who tries it?

If I want something, do I ask for it rather than wait for someone to notice and just give it to me?

Even though people tell me it can't be done, do I have to find out
for myself?

I want to be financially independent.

I'll speak up for an unpopular cause if I believe in it.

Can I take risks with money, that is, invest, and not know the
outcome?

Have I taken a risk in the last 6 months?

Do I like trying new food, new places, and totally new
experiences?

Can I walk up to a total stranger and strike up a conversation?

Have I ever intentionally traveled on an unfamiliar route?

Sources: Sandra Winston, *The Entrepreneurial Woman* (New York: Newsweek Books, 1979), 34-35.

Pickle, H.B. & Abrahamson, R.L., *Small Business Management* (5th Edition, 1990) 656-657.

http://www.breitlinks.com/careers/business_pdfs/amiantentrepreneur.pdf

EMERGING TECHNOLOGIES IN MEDICINE

Course	Rationale
<i>Practicum in Health Science</i>	In order to ensure the best care for their patients, health care professionals need to stay informed of the latest advances in medicine as well as staying alert to methods and technologies that have been found to cause harm in patients.
Unit VII	Objectives
<i>Career Preparation and employability</i>	<p>Upon completion of this lesson, the student will be able to:</p> <ul style="list-style-type: none"> • Explore and analyze emerging technologies in health science • Recognize and plan on the continuing need for education advancement and training to keep up with new discoveries and technology in medicine
Essential Question	Engage
<i>What's new in medicine?</i>	Have you ever watched a sci-fi movie and thought, "Wow, that would be cool if it was real!" (Allow students to give answers). If you were to look at the history of medicine, more advances have occurred in the last 50 years than in all the time before that put together. Keeping up with changes in medicine and technology can be a daunting task for the health care professional, but it is important to make sure your patient is receiving the best treatment possible.
TEKS <i>130.205(c) 3B, 3D, 3E, 7B, 7C</i>	
Prior Student Learning	Key Points
<i>Computer in Medicine Lesson</i>	<p>I. What are some of the most common IT (computer) applications used in the workplace?</p> <ol style="list-style-type: none"> A. Word processing B. Spreadsheet C. Desktop publishing D. Presentation E. Database F. Graphics G. Communication H. Monitoring/security
Estimated time	
<i>3-12 Hours</i>	

- I. Networking
 - J. GPS
 - K. Games
 - L. Music
 - M. Web design
 - N. Search engines
- II. What do the applications do?
- A. Word processing -- letters, reports, documents, mail merge documents
 - B. Spreadsheet -- data analysis, financial analysis, accounting
 - C. Desktop publishing -- brochures, flyers, manuals
 - D. Presentation -- educational presentations, business presentations
 - E. Database -- employee information, company inventory, sales history, customer information
 - F. Graphics -- photo enhancement, graphic design, animation, create digital artwork
 - G. Communication -- email, instant messaging, record messages
 - H. Monitoring/security -- ensure secure environment, prevent hacking, troubleshooting, manage service issues
 - I. Networking -- enable devices to communicate
 - J. GPS -- location finder, directions, mapping
 - K. Search engines -- find information on the internet
 - L. Games -- fun, leisure activities, educational activities, work simulation
 - M. Music -- store recorded music, create music
 - N. Web design -- manage webpages, create and edit web content
- III. Computers in health care
- A. Health informatics – intersection of information technology and health care
 - B. Electronic Health Record (EHR) – an electronic version of a patient’s medical history that is maintained by a provider over time
 - 1. May include:
 - a. patient demographics
 - b. progress notes
 - c. problems
 - d. medications

- e. vital signs
 - f. past medical history
 - g. immunizations
 - h. laboratory data
 - i. radiology reports
- 2. Generated and maintained within an institution, such as a hospital, clinic, or physician office
Contains information from all the clinicians involved in the patient's care
- 3. The information moves with the patient to the specialist, the hospital, the nursing home, or to a different state
- C. Administrative applications
- D. Billing and coding
- E. Clinical and special purpose systems
- F. Radiology and digital imaging
 - 1. X-rays
 - a. Traditional vs. digital x-ray
 - b. Mammography
 - 2. Ultrasound
 - 3. Digital imaging
 - a. Computerized tomography
 - b. Magnetic resonance imaging
 - c. Positron emission tomography
 - 4. Bloodless surgery
 - a. Interventional radiology
 - b. Stereotactic radiosurgery
 - c. Focused ultrasound surgery
- G. Other applications
 - 1. Computer-assisted surgery
 - a. Computer-assisting surgical planning
 - b. Robotics
 - c. Minimally invasive surgery
 - i. endoscopic surgery
 - ii. laparoscopic surgery
 - 2. Prosthetics
 - a. Myoelectric limbs
 - b. Microprocessors
 - c. Computer technology for vision and hearing
 - 3. Pharmacy
 - a. Prescription processing
 - b. Computers and drug errors
 - c. Access to patient and medicine data

4. Telemedicine – the use of telecommunications and information technologies to provide health care from a distance

IV. Health Science Pathways

- A. Therapeutic Services – Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time.
 1. Pharmacist – How does electronically prescribing medication improve the pharmacy?
 2. Physician’s Assistant – How do computers improve the patient’s experience in the physician’s office? How has technology contributed to more accurate and less invasive methods of diagnosis and treatment?
- B. Diagnostic Services – Careers in the Diagnostic Services pathway use tests and evaluations that aid in the detection, diagnosis, and treatment of diseases, injuries, or other physical conditions.
 1. Radiologic Technologist -- How has technology contributed to more accurate and less invasive methods of radiologic exams?
 2. Medical Technologist – How are various computer applications used in the laboratory?
- C. Health Informatics – Careers in the Health Informatics pathway include many different levels of health care-related employment. This pathway includes health care administrators who manage health care agencies, as well as those individuals who are responsible for managing all of the patient data and information, financial information, and computer applications related to health care processes and procedures.
 1. Medical Records/ Health Information Manager -- How do computers improve the patient record?
 2. Hospital Administrator -- How has the use of computer technology in this area changed over the last 15 years? What have been the advantages to the agency and to the patients?
- D. Support Services -- Careers in the Support Services pathway provide a therapeutic environment for the delivery of health care. Support Services offers a full range of career opportunities from entry level to management, including technical and professional careers.
 1. Computer programmer -- How are various computer applications used in this agency? How do these applications improve healthcare for patients?
 2. Facilities Manager – How has technology impacted quality control?
- E. Biotechnology Research and Development -- Careers in the Biotechnology Research and Development pathway involve bioscience research and development as it applies to human health. These scientists may study diseases to discover new treatments or invent medical devices used to directly assist patients or to improve the accuracy of diagnostic tests.

1. Biomedical Equipment technician -- What are examples of computerized medical instruments and equipment?
2. Biostatistician – How has technology impacted the statistical analysis of data?

V. Health Information Management Careers

- A. Health Information Technology (HIT) -- The application of information processing involving both computer hardware and software that deals with the storage, retrieval, sharing, and use of health care information, data, and knowledge for communication and decision making.
- B. Health Information Management -- An allied health profession responsible for ensuring the availability, accuracy, and protection of the clinical information needed to deliver healthcare services and make appropriate healthcare-related decisions. ***END USER***
 1. The practice of maintenance and care of health records by paper-based and electronic means in hospitals, physician office clinics, health departments, health insurance companies, and other facilities that provide healthcare or maintenance of health records
 2. Professionals who plan information systems, develop health policy, and identify current and future information needs. In addition, they may apply the science of informatics to the collection, storage, use, and transmission of information to meet the legal, professional, ethical, and administrative records keeping requirements of healthcare delivery. They work with clinical, epidemiological, demographic, financial, reference, and coded healthcare data.
- C. Health Informatics -- A discipline at the intersection of Information science, computer science, and healthcare. It deals with the resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in health and medicine. Health informatics tools include not only computers but also clinical guidelines, formal medical terminologies, and information and communication systems.
 1. Using technology to store, share, and analyze health information
 2. The management and communication of data, information, knowledge and wisdom

Activity

- I. Choose an area of health care and research how new technology is being used in that field. Complete the “Researching Technology Questionnaire” form and report to the class.

- II. In groups of 2-3, choose an area of health care from the list and research and develop a side-by-side timeline for that area: one for the technology and advancements for that field and one for the educational requirements needed in order to work with the developed technology.

Assessment

Successful completion of the “Researching Technology Questionnaire” form and report to class

Project Rubric for side-by-side timeline

Materials

Copy of “Research Technology Questionnaire” form and internet access

Copy of list of fields students may choose from for side-by-side timeline and internet access

Accommodations for Learning Differences

For enrichment, the student will develop a new and innovative product that would benefit an area of technology/medicine. Development should include advertisement clarifying how product will benefit patient and area of medicine.

For reinforcement, the student will contact and interview a professional organization in a selected area of medicine to discuss how they research new technology being introduced into that field of medicine. Discuss the advantages and disadvantage of technology to the patient and the profession.

National and State Education Standards

National Health Science Cluster Standards

HLC 10.01 Technical Skills

Healthcare workers will apply technical skills required for all career specialties. They will demonstrate skills and knowledge as appropriate.

TEKS

130.205(c)(3)(B) research academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees

130.205(c)(3)(D) develop new problem-solving strategies based on previous knowledge and skills

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science

130.205(c)(7)(B) plan academic achievement for advancement in the health science industry

130.205(c)(7)(C) analyze emerging technologies in the health science industry.

College and Career Readiness Standards

English/Language Arts- V. Research

A. Formulate topic and questions

2. Explore a research topic
3. Refine research topic and devise a timeline for completing work

B. Select information from a variety of sources

1. Gather relevant sources
2. Evaluate the validity and reliability of sources
3. Synthesize and organize information effectively
4. Use source material ethically

C. Produce and design a document

1. Design and present an effective product
2. Use source material ethically

Researching Technology Questionnaire

Research an area of medicine using the internet, professional magazines, and if possible by interviewing a seasoned professional:

Give a clear description of the area of medicine:

Current types of certifications or licensures required for job entry to the area of medicine:

Advance degrees and continuing education requirements for the area of medicine:

Research what technology was used 10-20 years ago:

What type of training did employees need in order to run equipment/technology?

Research what technology is currently being used:

Benefits of new technology for the professional:

Benefits of new technology for the patient:

Are there any disadvantages for either the professional or the patients?

What methods can a professional use to get continuing education hours?

Side-By-Side Timeline Project

In groups of 2-3, choose an area of medicine from the list below and research and develop a side-by-side timeline for that area. Do one for the technology and advancements for the field and one for the educational requirements needed in order to work with the developed technology.

Professional List

Acupuncture

Athletic trainer/Sports medicine

Audiologist

Occupational Therapy

Physical Therapy

Prosthetics

Respiratory Therapy

Clinical Laboratory Scientist

Dentist

Forensic Science

Nursing-(pick a specialty area)

Pharmacy

Biotechnologist

Radiology

Oncology

Surgical Technology

Vision Care

ER/Trauma Medicine

Cardiology

Health Information Management

Project Rubric

Student: _____

Date: _____

Scoring criteria	4 Excellent	3 Good	2 Needs Some Improvement	1 Needs Much Improvement	N/A
Clearly/effectively communicates the main idea or theme.					
Reflects application of critical thinking.					
Information clearly provided in an organized and thoughtful manner.					
Strong examples used to describe the theme or objective.					
Illustrations follow a logical reasoning.					
Each image and font size is legible to entire audience.					
No spelling, grammatical or punctuation errors.					

NOTE: N/A represents a response to the performance which is "not appropriate."

COMPUTERS IN MEDICINE

Course	Rationale
<i>Practicum in Health Science</i>	In order to ensure the best care for their patients, health care professionals need to stay informed of the latest advances in medicine.
Unit VII	Objectives
<i>Career Preparation and Employability</i>	<p>Upon completion of this lesson, the student will be able to:</p> <ul style="list-style-type: none"> • Explore and analyze emerging technologies in health science • Recognize and plan on the continuing need for education advancement and training to keep up with new discoveries and technology in medicine
Essential Question	Engage
<i>What's new in medicine?</i>	<p>Ask students to write as many answers they can think of in 1 minute to the following question: "How are computers used each day in your life?" Then list on the board the different answers they came up with. After getting the basic answers begin giving them additional possibilities they most likely did not put on their list; examples might be traffic lights, heating and air conditioning at the school, their car, school attendance and grade book.</p>
TEKS 130.205 (c) 1A,B,C 3B,E 4B 7B,C	Key Points
Prior Student Learning	
<i>None</i>	<p>I. In the United States computers are used in everyday life so seamlessly that we don't even give them a second thought. Advances in medicine have also seen an incredible amount of growth in the last 30 years because of computer advances. For many students, all their memories of going to a physician include medical personnel using computers; however, some elderly patients do not always trust computers or understand how they work. Regardless of which type of patient you are working with, it is important for health care workers to keep up with new advances being made in medicine as well as having a basic understanding of how computers work in order to help your patients comfort zone.</p> <p>II. While it would be difficult to find an area of medicine not touched by the computer age certain areas are seeing really rapid growth:</p> <p>A. Medical Information systems -- patient record keeping</p>

Estimated time

2-6 hours

1. Accessibility of records from multiple locations and professionals
 2. Access and storage to large files
 3. Files are more updated with treatments and diagnostics
 4. Increased ease in coding and billing
- B. Computer-assisted surgery
1. Microscopic/ Minimally invasive surgery reducing healing time and pain
 - a. Endoscopy -- an instrument used to examine the interior of a hollow organ or cavity of the body; it consists of a flexible or rigid tube containing a light source, camera and medical instruments
 - b. Laparoscopy -- allows physicians to perform both minor and complex surgeries with a few small incisions in the abdomen using a miniature video or digital cameras and surgical instruments
 2. Image Guided Surgery -- used on the sinuses
 3. Computers assisted -- heart/lung machines, cauterizing to regulate bleeding
- C. Bloodless surgery
1. Interventional radiology -- performed using needles and catheters, rather than by making large incisions into the body Examples: stents, angioplasty
 2. Stereotactic radiology surgery -- use of gamma knife to remove tumors
 3. Focused ultrasound surgery -- uses high doses of focused ultrasound waves to destroy tissue Example: uterine fibroids
- D. Prosthetics
1. Myoelectric limbs -- bionics
 2. Microprocessors -- internal organs
 3. Computer technology for vision and hearing
- E. Pharmacy
1. Computers and drug errors
 2. Automated community pharmacy
 3. Hospital pharmacy robot and barcodes
 4. Point-of-use drug dispensing
- F. Radiology and Digital Imaging
1. X-rays
 - a. traditional x-rays use electromagnetic gamma waves
 - b. new imaging uses computers to produce digital x-rays using mathematical information
 - c. physicians are using a combination -- while mammography is still being done as a screening, ultrasound is being added to distinguish between cyst and tumors

2. Ultra-sound uses high frequency sound waves to form a picture; big benefit -- no gamma radiation
3. Digital Imaging
 - a. Computerized tomography (CT or CAT) scan -- uses x-rays along with digital technology to produce cross-sectional images of the body. May be enhanced by using contrast dye
 - b. Magnetic resonance imaging -- produces images of soft tissue within the body using a magnetic field that is 25,000 times stronger than the earth's magnetic field rather than gamma rays
 - c. Positron emission tomography -- uses a nuclear medical imaging technique that produces a three-dimensional image of tracer concentrations within the body; used to study brain disorders such as Parkinson's and Alzheimer's
 - d. Capsule Endoscopy -- records digital images of the digestive tract: patient swallows a tiny camera that is the size and shape of a pill; the pill can examine areas that cannot be seen by other types of endoscopy
 - e. Advantages to digital imaging -- no developing process, copies are as good as originals, viewed on computer screen, can be transmitted over phone lines, less radiation, more flexible, can be highlighted and/or enhanced
- G. Telemedicine- the use of computers, the internet and other communication technology to provide medical care to patients at a distance
 1. Forms of telemedicine:
 - a. voice
 - b. data
 - c. stills images
 - d. motion pictures
 2. Current usage
 - a. diagnoses
 - b. patient monitoring
 - c. treatments
 - d. education
 3. Advantages of telemedicine
 - a. brings high quality medical care to anyone regardless of distance
 - b. Medical Assistants at the remote sites may be useful
 - c. in prisons, telemedicine has led to decreased costs and improved health care for inmates
 - d. decreases patient wait time
 - e. decreases patient travel time
 4. Branches of Telemedicine
 - a. Teleradiology -- using computers and telecommunications
 - b. Interactive video conferencing -- allows professionals and

patients to consult in real-time, using telephones and video screen

- c. Telepathology -- transmission of microscopic images over telecommunications lines allowing the pathologist to view images on a monitor instead of under a microscope
 - d. Telepsychiatry -- uses teleconferencing to deliver psychotherapy. May not be suitable for some types of mental illness
 - e. Remote monitoring devices -- example: *Telespirometry* used with asthma patients; information is transmitted over phone lines to remote location. *Arrhythmia monitoring* ECG telemetry.
 - f. Cell phone scanners -- cell phone scanner apps can be used in mass casualty events to identify patients and treatments that have been performed
 - g. Emergency medicine -- data can be transmitted from the ambulance to ER
 - h. Home health -- elderly (homebound) and patients with chronic illnesses can receive medications reminders at home or be monitored using electronic devices
 - i. Neonate -- allows families of high risk newborns to watch babies' hospital care from home
5. Disadvantages of Telemedicine
- a. Examining the patient at a distance is not the same as examining that patient face to face
 - b. Small hospitals and clinics may find hardware costs prohibitive
 - c. Insurance may not cover all telemedicine
6. Technical issues
- a. Appropriate telecommunications infrastructure must be in place
 - b. Not available in some rural and urban areas
 - c. Requires high bandwidth (cable modem)
7. Legal and Privacy Issues
- a. Licensing laws differ in each state
 - b. Liability is not clear
 - c. Electronic medical record subject to misuse
 - d. HIPPA requirements harder to protect

Activity

- I. Complete the "Introduction to Medical Computers" Work Sheet
- II. Complete the "Use of Computers in Health Care-Interview." See Teacher Guidelines.
- III. Students choose one of the different technologies to research further and make a "Brochure" or "Multimedia Presentation" to present to the class.

Assessment

Successful completion of the “Introduction to Computers in Medicine” Work Sheet.

Successful completion of the “Use of Computers in Health Care-Interview.”

Brochure Rubric

Multimedia Rubric

Materials

Copy of the “Introduction to Computers in Medicine” Work Sheet for each student and copy of Keynotes

Copy of the “ Use of Computers in Health Care-Interview”

Copy of either Brochure Rubric or Multimedia Rubric and computers

Accommodations for Learning Differences

For reinforcement, the student will find pictures of the different types of technology discussed and present to class.

For enrichment, the student will partner with an engineering or digital graphic student to produce a futurist machine to be used in medicine.

National and State Education Standards

National Health Science Cluster Standards

HCL 10.01 Technical Skills

Healthcare workers will apply technical skills required for all career specialties. They will demonstrate skills and knowledge as appropriate.

TEKS

130.205(c)(1)(A) interpret data from various sources in formulating conclusions;

130.205(c)(1)(B) compile information from a variety of sources to create a technical report;

130.205(c)(1)(C) plan, prepare, and deliver a presentation;

130.205(c)(3)(B) research academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees;

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science.

130.205(c)(4)(B) integrate legal and ethical behavior standards such as Patient Bill of Rights, Advanced Directives, and the Health Insurance Portability and Accountability Act into the scope of practice;

130.205(c)(7)(B) plan academic achievement for advancement in the health science industry; and

130.205(c)(7)(C) analyze emerging technologies in the health science industry.

College and Career Readiness Standards

English/Language Arts -- V. Research

B. Formulate topic and questions

2. Explore a research topic
3. Refine research topic and devise a timeline for completing work

B. Select information from a variety of sources

1. Gather relevant sources
2. Evaluate the validity and reliability of sources
3. Synthesize and organize information effectively
4. Use source material ethically

C. Produce and design a document

1. Design and present an effective product
2. Use source material ethically

Introduction to Computers in Medicine Work Sheet

1. Traditional x-rays use _____ to make pictures. New imaging techniques use _____ to generate pictures of internal body organs.
2. Computers can make _____ using mathematical information.
3. Examples of how computers are used in the pharmacy include:

4. Advantages of digital imaging include:

5. A major imaging area currently dominated by traditional x-rays is _____. However, _____, which can distinguish between cysts and tumors, is being used along with _____.
6. Ultrasound (does, does not) use radiation, but uses _____.
7. Computerized tomography (CT) uses x-rays and digital technology to produce a _____ image of the body. Enhanced CT's use _____.
8. Magnetic Resonance Imaging (MRI) produces images of soft tissue within the body. The image is produced by a computer and a _____ that is 25,000 times stronger than the earth's magnetic field. MRIs (do, do not) use radiation.
9. Positron emission tomography (PET) scans use _____ technology. Images are (two, three) dimensional. PET scans have _____ been used to study _____ and _____. PET scans produce pictures of activity and function.

10. Some surgical biopsies have been replaced with needle biopsies. This is called _____
_____.
11. The gamma knife is a painless device used in stereotactic _____.
12. Focused ultrasound surgery use _____ waves, which create a powerful ultrasonic beam.
13. Three advantages of Telemedicine include:

Introduction to Computers in Medicine Work Sheet

KEY

1. Traditional x-rays use electromagnetic waves to make pictures. New imaging techniques use computers to generate pictures of internal body organs.
2. Computers can make pictures using mathematical information.
3. Examples of how computers are used in the pharmacy include:
Computers and drug errors, Automated community pharmacy, Hospital pharmacy robot and barcodes, Point-of-use drug dispensing
4. Advantages of digital imaging include:
No developing process, copies are as good as originals, viewed on computer screen, can be transmitted over telephone lines, less radiation, more flexible, can be highlighted and/or enhanced
5. A major imaging area currently dominated by traditional x-rays is mammography . However, ultrasound, which can distinguish between cysts and tumors, is being used along with mammograms .
6. Ultrasound (does, does not) use radiation, but uses high frequency sound waves .
7. Computerized tomography (CT) uses x-rays and digital technology to produce a cross-sectional image of the body. Enhanced CT's use dye .
8. Magnetic Resonance Imaging (MRI) produces images of soft tissue within the body. The image is produced by a computer and a magnetic field that is 25,000 times stronger than the earth's magnetic field. MRIs (do, do not) use radiation.
9. Positron emission tomography (PET) scans use radioscope technology. Images are (two, three) dimensional. PET scans have been used to study Alzheimer's and Parkinson's Disease. PET scans produce pictures of activity and function.
10. Some surgical biopsies have been replaced with needle biopsies. This is called interventional radiology .

11. The gamma knife is a painless device used in stereotactic **radiosurgery** .
12. Focused ultrasound surgery uses **sound** waves, which create a powerful ultrasonic beam.
13. Three advantages of Telemedicine include:
Brings high quality medical care to anyone regardless of distance
Medical Assistants at the remote sites may be useful
In prisons, telemedicine has led to decreased costs and improved health care for inmates
Decreases patient wait time
Decreases patient travel time

Use of Computers in Health Care Interview Teacher Guidelines

Choose one of the following options:

1. Take a fieldtrip to a local hospital and meet with various professionals to learn about the uses of technology in medicine:
 - A. Biomedical Equipment technician -- What are examples of computerized medical instruments and equipment?
 - B. Medical Records/Health Information Manager -- How do computers improve the patient record?
 - C. Computer programmer from Information Technology -- How are various computer applications used in this agency? How do these applications improve healthcare for patients?
 - D. Hospital Administrator -- How has the use of computer technology in this area changed over the last 15 years? What are the advantages to the agency and to the patients?

Students should be prepared to discuss their reaction to the activity in class.

2. Visit a medical office and have students compare what they have learned about computers in health care with their use of computers in the office
3. Ask students to interview three to five health care employees using the Use of Computers in Health Care Interview Guide. They should summarize their findings in a short essay or PowerPoint presentation.

USE OF COMPUTERS IN HEALTH CARE

INTERVIEW GUIDE

	Interview #1	Interview #2	Interview #3
Type of Job			
Type of Facility			
Use of Computers in this Job			
Effects on Patient Care			
Most Significant Computer Advancement			
Predict future advancement in this type of facility			
What additional training or education is needed to operate this technology			

Brochure Rubric

CATEGORY	4	3	2	1
Writing - Organization	Each section in the brochure has a clear beginning, middle, and end.	Almost all sections of the brochure have a clear beginning, middle and end.	Most sections of the brochure have a clear beginning, middle and end.	Less than half of the sections of the brochure have a clear beginning, middle and end.
Content - Accuracy	All facts in the brochure are accurate.	99-90% of the facts in the brochure are accurate.	89-80% of the facts in the brochure are accurate.	Fewer than 80% of the facts in the brochure are accurate.
Graphics/Pictures	Graphics go well with the text and there is a good mix of text and graphics.	Graphics go well with the text, but there are so many that they distract from the text.	Graphics go well with the text, but there are too few and the brochure seems "text-heavy".	Graphics do not go with the accompanying text or appear to be randomly chosen.
Spelling & Proofreading	No spelling errors remain after one person other than the typist reads and corrects the brochure.	No more than 1 spelling error remains after one person other than the typist reads and corrects the brochure.	No more than 3 spelling errors remain after one person other than the typist reads and corrects the brochure.	Several spelling errors in the brochure.
Attractiveness & Organization	The brochure has exceptionally attractive formatting and well-organized information.	The brochure has attractive formatting and well-organized information.	The brochure has well-organized information.	The brochure's formatting and organization of material are confusing to the reader.

Multimedia Rubric

Student: _____ Class: _____

Title: _____ Other Group Members: _____

Date: _____

Scoring criteria	5 Excellent	4 Good	3 Needs Some Improvement	2 Needs Much Improvement	1 N/A
Clearly and effectively communicates an introduction of the theme/objective of the project.					
Clearly and effectively communicates the content throughout the presentation.					
Integrated a variety of multimedia resources to create a professional presentation (transition, graphics).					
Presentation holds audience attention and relates a clear message.					
Timing between slides is beneficial for the viewer to read or observe content.					
Each image and font size is legible to entire audience.					

Scale:

26-30 A Excellent

21-25 B Good

16-20 C Needs Some Improvement

11-15 D Needs Much Improvement

6-10 F Not Appropriate

TOTAL=

Comments

Course	Rationale
<i>Practicum in Health Science</i>	Setting goals provides a method for identifying, planning, and working towards personal and professional growth.
Unit VII	Objectives
<i>Career Preparation and Employability</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Apply concepts of personal development using the goal-setting concept to create short-term goals and long-term goals for the current school academic year. • Understand what goal-setting is and its importance in Personal Management. • Identify the benefits of goal-setting. • Determine short-term goals and long-term goals. • Develop <i>S.M.A.R.T. Goals Planner</i>. • Sign a <i>Personal Development Mentor/Mentee Partnership Agreement</i>.
Essential Question	
<i>Why is it necessary to establish short-term goals and long-term goals?</i>	<p>Engage</p> <p>Share with the students a goal that you had when you were in high school.</p> <p>Let them know what you did to achieve your goal and whether you were successful or not. Ask the students to share with you some of their goals for this year and for after they graduate from high school.</p>
TEKS 130.205(c) 1AB 3E 7B	Key Points
Prior Student Learning	<ol style="list-style-type: none"> I. To achieve your goals, you must choose the best path and make a commitment to it, while remaining flexible enough to deal with changes and new opportunities. II. Personal Management <ol style="list-style-type: none"> A. What is Personal Management? <ol style="list-style-type: none"> 1. <i>Personal management</i> is about mapping a plan for your life that will involve setting <i>short-term</i> and <i>long-term</i> goals and investigating different ways to reach those goals. 2. Education, training, and experience all help make your goals become a reality. 3. To achieve your goals, you must choose the best path and make a commitment to it, while remaining flexible enough to deal with
Estimated time	
<i>3-5 days</i>	

changes and new opportunities.

B. What is Goal Setting?

1. Goal-setting is a powerful technique for helping you develop a solid foundation for future planning and organization.
2. Goal-setting helps you to know where you want to concentrate and what to improve.

C. Benefits of Goals

1. Goals provide clarity and importance.
2. Goals improve self-confidence.
3. Goals increase the motivation to achieve.
4. Goals help improve performance.
5. Goals help increase pride and satisfaction in reaching achievements.
6. Goals help decrease negative attitude.
7. Goals provide challenges and standards.
8. Students who use goal-setting effectively suffer less from stress, are better able to concentrate, show more self-confidence, and seem to feel happier.
9. Successful students begin with goals, then set their priorities to accomplish their goals. Furthermore, successful students are able to manage their time according to their priorities.

D. S.M.A.R.T. Goals

1. **S** = Specific Make your goal very precise. For example, a goal of graduating from high school is too general. Specify how this will be accomplished. (Study more in order to receive better grades.)
2. **M** = Measurable Make your goal one that can be measured with numbers to see if you have hit it. Establish criteria for how a goal is to be achieved. Measurable does not refer to a timeline; it means determining a way to measure your success in completing the long-range goal.
3. **A** = Achievable Make your goal something you can accomplish. Be proactive in taking action that will result in reaching the desired goal
4. **R** = Realistic Make your goal something in the realm of possibility.
5. **T** = Timely - Make your goal have a time limit or target. Allow reasonable time to complete each goal, but not so much time that you lose focus or motivation.

E. Short-Term Goals

1. Short-Term Goals are goals you want to do in the *near future*. The near future can mean today, this week, this month, or even this year.
2. Short-Term Goals are things you want to accomplish soon. Things that will take you a long time to accomplish are called long-term goals.

- F. Long-Term Goals
 - 1. Long-Term Goals are something you want to accomplish in the *future*.
 - 2. Long-Term Goals require time and planning. They are not things you can do this week or even this year.
 - 3. Long-Term Goals are usually at least several years away.
 - 4. Sometimes it takes many steps to complete Long-Term Goals.
 - 5. Long-Term Goals are important for a successful career.
- III. Weekly S.M.A.R.T. Goals Planner A planner is used to manage your time, prioritize assignments, and track grades for every six weeks during the academic school year.
 - A. How do you use your planner?
 - 1. You will use your *S.M.A.R.T. Goals Planner* to record *monthly* activities.
 - a. Holidays and Birthdays
 - b. Important Events
 - c. Games/Activities
 - d. Goal Setting
 - e. Appointments, Meetings, etc.
 - 2. You will use your *S.M.A.R.T. Goals Planner* to record *weekly* activities.
 - a. Weekly Goals
 - b. Homework Assignments
 - c. Tests and Quizzes
 - d. Projects
 - e. Tutoring
 - f. Work Time on Assignments
 - 3. Planner Expectations
 - a. Planners are filled out each class period.
 - b. Write NO HW if no homework is given.
 - c. Feel free to color-code assignments, classes, days of the week, etc.
 - d. Place stars, highlight, or underline major assignments, as well as your plan for completing them.
 - e. Include times and dates you need to study/work on assignments.
 - f. Set S.M.A.R.T. Goals: Specific, Measurable, Achievable, Realistic, and Timely.
 - g. Check off assignments that have been completed, rather than cross them off.
 - h. Set new goals, plan, or get ahead on an upcoming assignment.
 - i. Keep this planner in your binder/backpack.
 - j. Check your planner for assignments and tasks every night and every morning.

- k. Check in with your school mentor every Wednesday.
- IV. Mentor and Mentee Partnership
 - A. What is a mentor? A mentor is a wise and trusted counselor or teacher.
 - B. A mentor is an influential senior sponsor or supporter.
 - C. What is a mentee? A mentee is a person who is guided by a mentor.

Activity

- I. Determine short-term goals and long-term goals.
- II. Design Life Goals Collage.
- III. Establish Six Weeks S.M.A.R.T. Goals Planner.
- IV. Sign *Personal Development Mentor/Mentee Partnership Agreement*.
- V. Present *Life Goals Collage* to the class.

Assessment

Successful completion of all activities.

Materials

Handouts for each student

- *Personal Management Terms and Definitions*
- *Note Taking Form*
- *Short-Term Goals*
- *Long-Term Goals*
- *Life Goals Collage*
- *Six Weeks S.M.A.R.T. Goals Planner*
- *Personal Development Mentor/Mentee Partnership Agreement*

Supplies listed in each activity

Pencils and Pens

Computer and Internet access for teacher and students

Projector (for digital presentation)

Accommodations for Learning Differences

For reinforcement, the student will make an immediate goal, one to be accomplished within one week, then evaluate the process at the end of the week.

For enrichment, the student will make a goal map for their life, making goals for family, relationships, education, career, hobbies, and physical fitness.

National and State Education Standards

National Health Science Cluster Standards

HLC09.01 Employability and Career Development

Evaluate need for personal growth and development: Engage in continuous self-assessment and goals modification for personal and professional growth

TEKS

130.205(c)(1)(A) interpret data from various sources in formulating conclusions;

130.205(c)(1)(B) compile information from a variety of sources to create a technical report;

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science; and

130.205(c)(7)(B) Plan academic achievement for advancement in the health science industry.

Texas College and Career Readiness Standards

English Language Arts

II. B. Understand new vocabulary and concepts and use them accurately in reading writing and speaking.

Personal Management Terms and Definitions

1. **Goal Setting** - a powerful technique for helping you develop a solid foundation for future planning and organization.
2. **Short-Term Goals** - goals you want to do in the *near future*; the near future can mean today, this week, this month, or even this year.
3. **Long-Term Goals** - something you want to accomplish in the *future*; they require time and planning; they are not things you can do this week or even this year; they are usually at least several years away.
4. **Personal Management** - is about mapping a plan for your life that will involve setting short-term and long-term goals and investigating different ways to reach those goals; education, training, and experience all help make your goals become a reality.
5. **Mentee** - a person who is guided by a mentor.
6. **Mentor** - a wise and trusted counselor or teacher, an influential senior sponsor or supporter.
7. **Planner** - used to manage your time, prioritize assignments, and track grades for every six weeks during the academic school year.
8. **S.M.A.R.T.** - guidelines to help you set effective goals; S = Specific; M = Measurable; A = Achievable; R = Realistic; T = Timely.

NAME _____ DATE _____ PERIOD _____

NOTE TAKING FORM

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS VOCABULARY TERMS:	NOTES:

SUMMARY: WHAT HAVE I LEARNED TO ANSWER THE ESSENTIAL QUESTION?

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS VOCABULARY TERMS:	NOTES:

SUMMARY: WHAT HAVE I LEARNED TO ANSWER THE ESSENTIAL QUESTION?



Name _____ Date _____

Activity 1 - Short-Term Goals

Project Determine your short-term goals for the current academic school year.

Activity It is important to understand and determine your goals. In this activity you will understand the difference between short-term goals and long-term goals. You will determine your short-term goals for the current academic school year. Keep a copy of your *Activity 1 - Short-Term Goals* handout to remind yourself to stay focused on your goals during the current academic year.

Supplies *Activity 1 - Short-Term Goals* handout, pen or pencil

Deliverable *Activity 1 - Short-Term Goals* handout completed (including reflection)

Reflection Write a short paragraph listing your short-term goals and why it is important to set short-term goals.

How Your Grade will be Calculated

Graded Elements	Total Points
<i>Activity 1 - Short-Term Goals</i>	50
Difference Between Short-Term and Long-Term Goals Activity	15
Shows depth of thought	20
Reflection	15
Total	100

Part 1

Practice identifying short-term goals. *NOTE:* Sometimes accomplishing short-term goals may help you achieve one big long-term goal.

Directions

Place a checkmark next to the phrases you think are short-term goals.

Checkmark	Short-Term Goals
	1. Talk to a teacher after school concerning a class assignment.
	2. Go to a university or a community college.
	3. Get married and have a family.
	4. Apply for a job.
	5. Learn how to speak English fluently.
	6. Deposit a check into your bank account.
	7. Purchase healthy foods from the grocery store.
	8. Purchase a home within the next five years.
	9. Become a manager at your job.
	10. Raise your mathematics grade from 80% to 90% by the end of the semester.

Part 2

Directions

Determine your five short-term goals and list in the space provided below.

My SHORT-TERM Goals

Something Achievable in the Next Month!

1. My Short-Term Goal is
2. My Short-Term Goal is
3. My Short-Term Goal is
4. My Short-Term Goal is
5. My Short-Term Goal is

Actions to Take to Achieve My Short-Term Goals!

1.
2.
3.
4.
5.

Reflection

Directions

Write a short paragraph listing your short-term goals and why it is important to set short-term goals.



Name _____ Date _____

Activity 2 - Long-Term Goals

Project Determine your long-term goals for the current academic school year.

Activity It is important to understand and determine your goals. In this activity you will understand the difference between short-term goals and long-term goals. You will determine your long-term goals for the current academic school year. Keep a copy of your *Activity 2 - Long-Term Goals* handout to remind yourself to stay focused on your goals during the current academic year.

Supplies *Activity 2 - Long-Term Goals* handout, pen or pencil

Deliverable *Activity 2 - Long-Term Goals* handout completed (including reflection)

Reflection Write a short paragraph listing your Long-Term Goals and why it is important to set Long-Term Goals.

How Your Grade will be Calculated

Graded Elements	Total Points
<i>Activity 2 - Long-Term Goals</i>	50
Difference Between Short-Term and Long-Term Goals Activity	15
Shows depth of thought	20
Reflection	15
Total	100

Part 1

Practice identifying long-term goals. *NOTE:* Sometimes accomplishing long-term goals may help you achieve one big long-term goal.

Directions

Place a checkmark next to the phrases you think are long-term goals.

Checkmark	Long-Term Goals
	1. Talk to a teacher after school concerning a class assignment.
	2. Go to a university or a community college.
	3. Get married and have a family.
	4. Apply for a job.
	5. Learn how to speak English fluently.
	6. Deposit a check into your bank account.
	7. Purchase healthy foods from the grocery store.
	8. Purchase a home in within the next five years.
	9. Become a manager at your job.
	10. Raise your mathematics grade from 80% to 90% by the end of the semester.

Part 2

Determine your five long-term goals and list in the space provided below.

My LONG-TERM Goals

Something that will take longer than a month to achieve!

1. My Long-Term Goal is
2. My Long-Term Goal is
3. My Long-Term Goal is
4. My Long-Term Goal is
5. My Long-Term Goal is

Actions to Take to Achieve My Long-Term Goals!

1.
2.
3.
4.
5.

Reflection

Directions

Write a short paragraph listing your long-term goals and why it is important to set long-term goals.

S.M.A.R.T. Questions to Ask Yourself

Directions

Answer *YES* or *NO* to the following questions.

1. Is the goal achievable? _____
 - A. Can I accomplish my goal in the time-span I have set? _____
 - B. Does achieving this goal depend only on me and not on conditions outside of me? _____
2. Do I believe I can achieve this goal? _____
 - A. Are my skills and abilities equal to this goal? _____
3. Will I know when I have reached my goal? _____
 - A. Have I set my goal in specific terms? _____
4. Do I want to do what it takes to reach my goal? _____
 - A. Is the goal one that interests me? _____
5. Is the goal presented with an alternative? _____
 - A. Have I made a firm decision? _____
 - B. Am I focused on what I need to be doing? _____
 - C. Do I have an alternative if I cannot reach my goal? _____
6. Am I motivated to pursue my goal? _____
 - A. Do I have a support system? _____
 - B. Have I set up a timeline towards my goal? _____
 - C. Do I have a reward system in place? _____
7. Is the goal of value to me? _____
 - A. Is the goal compatible with my values? _____
 - B. Does my goal have longevity? Do I need to consider more education? _____

NOTE: If you have answered "YES" to the questions listed above, you have selected valid goals.

Activity 3 - Life Goals Collage



Project Create a collage depicting 10-12 Life Goals

Activity It is important to set goals and develop an action plan to achieve those goals. In this activity, think about 10 goals that you want to achieve in the next 10 years. Find photos that represent those goals. For example, if one of your goals is to graduate from college, find a photo of a person in cap and gown to represent that goal. Use a photo of something from the college of your choice, such as a banner or mascot, to identify the college. If one of your goals is to have a new car, find a photo of the car. Create a new 8.5"x11" document when you have all of your photos that represent your life goals. You can create this document in any photo editing software program for this project. Create the best arrangement and resize the photos as needed. Finally, add text to the collage. The text can be as simple as, "Elizabeth's Life Goals." Choose something meaningful.

Print your collage and keep it to remind you to stay focused on your goals.

Remember the action plan. If graduating from college is one of your life goals, take action in high school to prepare for college by taking more than the required classes and plan ahead. Good luck with the project and with achieving your goals.

Supplies Internet access, photo editing software, printer

Deliverable An 8.5"x 11" collage representing 10 life goals with text (including reflection)

Reflection Write a short paragraph listing your life goals and why it is important to set goals and develop an action plan.

How Your Grade will be Calculated

Graded Elements	Total Points
8.5"x 11" collage with 10 life goals	50
Descriptive text	10
Shows depth of thought	15
Creativity in design	15
Reflection	10
Total	100

Name _____ Date _____

Activity 4 - Six Weeks S.M.A.R.T. Goals Planner
MONTHLY Activities

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1					
2					
3					
4					
5					
6					
SIX WEEKS PRIORITIES					

Six Weeks S.M.A.R.T. Goals Planner

My #1 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Six Weeks S.M.A.R.T. Goals Planner

My #2 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Six Weeks S.M.A.R.T. Goals Planner

My #3 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Six Weeks S.M.A.R.T. Goals Planner

My #4 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Six Weeks S.M.A.R.T. Goals Planner

My #5 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Six Weeks S.M.A.R.T. Goals Planner

My #6 Weekly S.M.A.R.T. Goal is					
Signature <hr style="border: none; border-top: 1px solid black; width: 100%;"/>	Monday	Tuesday	Wednesday	Thursday	Friday
English					
Math					
Science					
Social Studies					
Saturday			To-Do List		
Sunday					

Mentor Teacher Comments:

Activity 5 - Personal Development Mentor/Mentee Partnership Agreement

A successful mentee and mentor relationship requires a commitment on the part of both partners. The following agreement is intended to provide a starting framework for the partnership. Either party should understand that they may withdraw from the relationship at any time by contacting each other. Each partner should keep a copy of this agreement and make every effort to fulfill the terms of the agreement.

Mentor _____ Room Number _____

Subject Taught _____ Email Address _____

Mentee _____ Email Address _____

Mentor and mentee are encouraged to share additional contact information as needed.

MENTEE GOALS

The mentee should establish with the mentor at least four personal development short-term goals and long-terms goals. ***Goals should be Specific, Measurable, Achievable, Relevant, and Timely (S.M.A.R.T.).***

GOAL # 1 _____

GOAL # 2 _____

GOAL # 3 _____

GOAL # 4 _____

CONTACT AGREEMENT

The duration of the formal mentoring program is 10 months during the school session. Mentors are encouraged to continue the relationship on a voluntary basis. Contacts with mentee must be in person each Wednesday.

Mentee and Mentor agree to meet at least once each week for 10 months.

Mentee and Mentor to provide a final evaluation of the relationship at the end of the formal program.

Mentee Signature and Date

Mentor Signature and Date

MENTEE FINAL EVALUATION

Mentee _____

Mentor _____

Mentor Title _____

Email Address _____

Number of Mentee Contacts with Mentor _____

Type of Contacts _____

Overall, how would you rate the mentoring experience?

5 - Excellent 4 - Good 3 - Satisfactory 2 - Fair 1 - Poor

Comments

Rate the following statements on the scale of 1 - 5.

5 - Strongly Agree 4 - Agree 3 - Disagree 2 - Strongly Disagree 1 - Don't Know

_____ I feel that I have reached all or some of my short-term goals for personal growth.

_____ I feel that I have reached all or some of my long-term goals for personal growth.

_____ I feel more self-confident since completing the Mentor/Mentee program.

_____ My Mentor played an important part in my growth and development.

_____ I plan to continue my training and education.

_____ I plan to continue to work on reaching current and future career goals.

_____ I feel the training I received had a positive effect on my academic success.

My Mentor and I plan to continue our relationship. Yes _____ No _____ Don't Know _____

I would like to serve as Mentor in the future. Yes _____ No _____ Don't Know _____

Mentee's Signature and Date

MENTOR FINAL EVALUATION

Mentor _____ Email Address _____

School _____ Subject Taught _____

Number of Mentor Contacts with Mentee ____ Type of Contacts _____

Mentee _____ **Email Address** _____

Overall, how would you rate the mentoring experience?

5 - Excellent 4 - Good 3 - Satisfactory 2 - Fair 1 - Poor

Comments

Rate the following statements on the scale of 1 - 5.

5 - Strongly Agree 4 - Agree 3 - Disagree 2 - Strongly Disagree 1 – Don't Know

_____ I feel that the Mentee reached all or some of his/her goals for personal short-term goals and long-term goals growth.

_____ I feel better about his/her potential for professional growth after completing the mentoring program.

_____ I see in the Mentee a greater self-confidence since we began the mentoring relationship.

_____ I feel I played an important part in the academic and personal development of the Mentee.

_____ I think the Mentee will become a long-term productive student.

_____ I feel that I have gained from the mentoring relationship.

_____ I would encourage others to serve as mentors.

_____ I would like to mentor others in the future.

_____ I found the mentor role to be too demanding.

My Mentee and I plan to continue our relationship. Yes _____ No _____ Don't Know _____

Mentor's Signature and Date

Course	Rationale
<i>Practicum in Health Science</i>	In the health care industry, professionals face aggressive competition for the most desired positions. It is essential to be able to use a variety of online tools to research careers and occupations.
Unit VII	Objectives
<i>Career Preparation and Employability</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Investigate O*NET to prepare for a future career • Assess necessary skills for employment • Select a prospective career • Compare one's skills with job requirements • Probe techniques prospective employers use in the hiring process
Essential Question	Engage
<i>What are employers looking for in job applicants?</i>	<ul style="list-style-type: none"> • Ask students to raise their hand if they currently have a job. Ask them if they intend to keep that job until they retire. <ul style="list-style-type: none"> ○ What was the process when they were hired? ○ Did they fill out an application or were they also required to submit a resume? • Explain that once students graduate from high school, often they will be required to submit a resume when seeking employment. • Ask students what they think should be on a resume. List their answers on the board. • Ask students what qualifies as Social Media. Ask for a show of hands if they have Face book, Twitter, Instagram or YouTube accounts. • Ask them if they have ever deleted questionable material from their accounts. • Explain the importance of maintaining a professional image on all social media when applying for a job (and college too!)
TEKS 130.205(c) 9A	Key Points
Prior Student Learning	I. O*NET
<i>The student should be able to identify employer expectations of punctuality, attendance and time management</i>	A. O*NET is the nation's primary FREE source of occupational information which contains hundreds of occupation-specific career descriptions. This site may be used throughout your life in the event you decide to change jobs later on.

Estimated time

7-9 hours

- B. Helps to evaluate or investigate career options
- II. HOW DO I SHOW OFF MY SKILLS?
 - A. Resumes are used to “sell” your abilities to prospective employers
 - B. Cover Letter is used to “introduce” you and give an overview of your qualifications.
 - C. Resumes may be hand delivered, mailed or sent via email.
 - D. Some sites allow for immediate uploading
- III. RESUME TIPS
 - A. Why do I need one?
 - B. Keep the design simple
 - C. Keep it to one page
 - D. Use brief phrases; no complete sentences
 - E. Make sure you have a professional email address (Gmail. Stay away from cute or suggestive addresses
- IV. MORE RESUME TIPS
 - A. Use bullet points where applicable
 - B. Capitalize or use bold font on section headings
 - C. Single space within sections; Double space between sections
 - D. No “fluff”; be honest or it could haunt you
 - E. Stress your achievements
 - F. If printing, use good, quality bond paper
 - G. Do not include references on resume. List on a separate sheet
- V. TWITTER
 - A. Emerging job search tool
 - B. 140 (or less) characters
 - C. Be careful who you follow and who you allow to follow you!
 - D. Some recruiters use Twitter because it is brief
 - E. Link Twitter to your personal web page so recruiters can see more details of your skills
- VI. PERSONAL WEB PAGE
 - A. Increasingly popular
 - B. Can be linked to your resume, LinkedIn, etc.
 - C. Display qualifications in detail, including video, pictures, samples of your work, etc.

Activity

- I. Complete the Would You Hire *YOU?*” Students’ Notes Handout
- II. Complete the O*NET Scavenger Hunt
- III. Complete the O*NET Part II
- IV. Complete the Career Research Project.

Assessment

Successful completion of “Would You Hire *YOU?*”, O*NET Scavenger Hunt, and O*NET Part II.

Career Project Rubrics (2 rubrics; one for resume, cover letter, and letter of resignation and one for project presentation)

Materials

Paper

Internet

Computers with word processors and multimedia software

<http://www.mynextmove.org/explore/ip>

<http://www.mynextmove.org>

References

O*NET (<http://www.onetonline.org>)

Accommodations for Learning Differences

For reinforcement, the student will list and define the components of a résumé.

For enrichment, the student will write their resume using only 140 characters.

Hint: they can do a word count in MS Word, using the Review Tab then selecting “word count.”

National and State Education Standards

National Health Science Clusters Standards

HLC09.01 Employability and Career Development

Health care workers will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

130.205 (9) (A) update a professional portfolio to include:

- (i) technical skill competencies;
- (ii) licensures or certifications;
- (iii) awards and scholarships;
- (iv) extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations;
- (v) abstract of technical competencies mastered during the practicum;
- (vi) resumé;
- (vii) samples of work; and
- (viii) evaluation from the practicum supervisor; and

Texas College and Career Readiness Standards

CROSS-DISCIPLINARY STANDARDS

I. Key Cognitive Skills

A. Intellectual curiosity

2. Accept constructive criticism and revise personal views when valid evidence warrants.

D. Academic behaviors

1. Self-monitor learning needs and seek assistance when needed.
2. Use study habits necessary to manage academic pursuits and requirements.
3. Strive for accuracy and precision.
4. Persevere to complete and master tasks.

E. Work habits

1. Work independently.

F. Academic integrity

1. Attribute ideas and information to source materials and people.
2. Evaluate sources for quality of content, validity, credibility, and relevance.
4. Understand and adhere to ethical codes of conduct.

II. Foundational Skills

A. Reading across the curriculum

1. Use effective pre-reading strategies.
2. Use a variety of strategies to understand the meanings of new words.
3. Identify the intended purpose and audience of the text.
4. Identify the key information and supporting details.
5. Analyze textual information critically.
6. Annotate, summarize, paraphrase, and outline texts when appropriate.
7. Adapt reading strategies according to structure of texts.
8. Connect reading to historical and current events and personal interest.

B. Writing across the curriculum

1. Write clearly and coherently using standard writing conventions.
2. Write in a variety of forms for various audiences and purposes.
3. Compose and revise drafts.

C. Research across the curriculum

1. Understand which topics or questions are to be investigated.
5. Synthesize and organize information effectively.
6. Design and present an effective product.
7. Integrate source material.
8. Present final product.

E. Technology

1. Use technology to gather information.
2. Use technology to organize, manage, and analyze information.
3. Use technology to communicate and display findings in a clear and coherent manner.
4. Use technology appropriately.

Would YOU Hire YOU?

Student NOTES

I. OBJECTIVES:

1. _____
2. _____
3. _____
4. _____
5. _____

II. O*NET:

6. O*NET is _____ and contains _____ of _____-specific _____.
7. It helps to _____ or _____ career _____.
8. The Main Web site is: _____
9. The on-line survey link is: _____
10. If you already have a career in mind, use this link: _____
11. The average person changes jobs _____ times in a lifetime.
12. The average _____ age is _____ years.
13. _____ doesn't end with _____ or _____.
14. _____ -level skills: _____ skills.
15. _____ skills: require _____ knowledge pertaining to the job or could be previous _____ experience.
16. A _____ is used to " _____ " abilities to _____.
17. A _____ Letter is used to " _____ " the applicant and give an overview of one's _____.

18. Resumes may be _____, _____, or sent via _____.
19. Some sites allow for _____.
20. Keep the resume to _____ page.
21. Use _____ phrases; no complete _____.
22. No more than _____ to _____ words per statement.
23. Make sure to have a professional _____ address.
24. Use _____ where applicable.
25. _____ or use _____ font on section headings.
26. _____ space within sections; _____ space between sections.
27. Be _____.
28. Stress your _____.
29. If printing, use good, quality _____.
30. Do not include _____ on the resume.
31. _____% of companies research candidates via _____.
32. Delete _____ pictures.

Would YOU Hire YOU?

Student NOTES

ANSWER KEY

NOTE: It is the instructor's option to use this activity as a daily grade or a completion grade.

III. OBJECTIVES:

1. Investigate the O*NET Website
2. Assess necessary skills for employment
3. Select a prospective career
4. Compare one's skills with job requirements
5. Probe techniques prospective employers use in the hiring process

IV. O*NET:

6. O*NET is free and contains hundreds of occupation-specific careers.
7. It helps to evaluate or investigate career options.
8. The Main Web site is: <http://www.onetonline.org>
9. The on-line survey link is: <http://www.mynextmove.org/explore/ip>
10. If you already have a career in mind, use this link: <http://www.mynextmove.org/>
11. The average person changes jobs 11 times in a lifetime.
12. The average retirement age is 67 years.
13. Education doesn't end with high school or college graduation!
14. Entry-level skills: basic skills.
15. Advanced skills: require direct knowledge pertaining to the job or could be possible work experience.
16. A resume is used to "sell" abilities to prospective employers.
17. A Cover Letter is used to "introduce" the applicant and give an overview of one's qualifications.

18. Resumes may be hand delivered, mailed, or sent via e-mail .
19. Some sites allow for immediate uploading.
20. Keep the resume to one page.
21. Use brief phrases; no complete sentences.
22. No more than 10 to 12 words per statement.
23. Make sure to have a professional email address.
24. Use bullet points where applicable.
25. Capitalize or use bold font on section headings.
26. Single space within sections; Double space between sections.
27. Be honest.
28. Stress your achievements.
29. If printing, use good, quality bond paper.
30. Do not include references on the resume.
31. 37% of companies research candidates via social media.
32. Delete questionable pictures.

O*NET Scavenger Hunt

(Learn to Navigate O*NET)

DIRECTIONS: Using the Internet, go to www.onetonline.org to complete this activity. Be prepared to discuss your answers!

1. What is the definition of O*NET?
2. List **THREE** occupations that fall into the “Rapid Growth” Sector:
 - a. _____
 - b. _____
 - c. _____
3. How many categories fall under the “Rapid Growth” Sector?
4. Looking back at the **three** occupations you listed in Question #1, list the median wages and the skills that are necessary for each:

Occupation	Median \$\$\$	Skills

--	--	--

5. How many “New & Emerging” fields are listed under “Bright Outlook” occupations?
6. How many STEM Disciplinary categories are there?
7. The _____ will cause a change in _____ employment demand.
8. Green Occupations are linked to _____
9. List the **NINE** categories one could research using the Advance Search feature:

_____	_____	_____
_____	_____	_____
_____	_____	_____

10. List the **SIX** categories to search occupations under the “Crosswalk” category (section)

_____	_____
_____	_____
_____	_____

O*NET Scavenger Hunt

(Learn to Navigate O*NET)

Answer Key

DIRECTIONS: Using the Internet, go to www.onetonline.org to complete this activity. Be prepared to discuss your answers!

1. What is the definition of O*NET? **Answers will vary**; however, it is a free website that contains hundreds of occupation-specific careers. It helps to evaluate or investigate career options.
2. List **THREE** occupations that fall into the “Rapid Growth” Sector: **Answers will vary**
 - a. _____
 - b. _____
 - c. _____
3. How many categories fall under the “Rapid Growth” Sector? **69**
4. Looking back at the **three** occupations you listed in Question #1, list the median wages and skills that are necessary for each:

Occupation	Median \$\$\$	Skills
Answers will vary based	on answers in question 1	Answers will vary

5. How many “New & Emerging” fields are listed under “Bright Outlook” occupations? **147**
6. How many STEM Disciplinary categories are there? **8**
7. The **GREEN ECONOMY** will cause a change in **OCCUPATION'S** employment demand.
8. Green Occupations are linked to **GREEN ECONOMY SECTORS.**
9. List the **NINE** categories one could research using the Advance Search feature:

(Answers Will Vary)

_____	_____	_____
_____	_____	_____
_____	_____	_____

10. List the **SIX** categories to search occupations under the “Crosswalk” category (section)

(Answers Will Vary)

_____	_____
_____	_____
_____	_____

O*NET Search, Part II

Congratulations! You are now ready to refine your employment search on O*NET.

1. Go to the O*NET website (www.onetonline.org)
2. Click on “Advanced Search”; next click “Go to Skills Search” which is right under “Skills Search”. Check the boxes that you think apply to you in each category, then click, “GO”.

Note the assortment of occupation titles that represent your skills interests. Are any titles tagged “Bright Outlook” or “Green”? _____ Yes _____ No

This is one way to use O*NET to direct you toward a prospective career. Another way to search is to browse under “Find Occupations”. If you select this method, you will notice a wide variety of choices which will assist you in your career search.

Career Project

Instruction Sheet

PART I

Use a **word processor** to compose a report, using the research material you gather from the O*NET website. (www.onetonline.org)

FORMAT FOR PAPER:

Use a **word processor** to prepare the report. Begin the report, with the main title centered, on the first line, Double Space, and then type your name. Triple space after your name. Double space the entire report and indent paragraphs.

OUTLINE OF PAPER:

Paragraph 1- Introduce the three careers you researched.

Paragraph 2- Career 1 (with explanation)

Paragraph 3- Career 2 (with explanation)

Paragraph 4- Career 3 (with explanation)

Paragraph 5- Conclusion (summary and the career you will most likely pursue and why)

The following information **MUST** be included in each of the three career paragraphs:

- Definition or nature of work
- Requirements for employment
- Opportunities for experience and/or exploration
- Related occupations (at least four)
- Methods of entering the field
- Advancement

- Employment outlook
- Earnings (wages) and prospective pay increases
- Conditions of work
- Whether or not this is designated as a “Bright Outlook” or “Green” occupation

All of your research will be done using the Internet, but you may also use other sources, if approved by your instructor. ***Remember: all work must be cited at the end of this project, so keep track of your sources!***

PART II

Once you have complete the essay, you will select one of the careers you explored to complete the next assignments. You may assume you are a college graduate in order to meet the qualifications. Use the Internet to find samples of a resume, cover letter, and letter of resignation. Make sure you print the samples!

Follow these next directions:

1. Type a **Cover Letter** to introduce yourself to your prospective employer.
2. Type a **Resume** that reflects skills required of the career you selected.
3. Assuming you are currently gainfully employed, you will type a **Letter of Resignation** to your current employer.

PART III

Multimedia Presentation:

Prepare a presentation with illustrations and a minimum of FIVE slides. (You will more than likely have more than 5 slides.)

Include the following:

1. What to wear/not to wear (Male & Female)
2. How to prepare for the interview?
3. Five Interview tips you have researched
4. How to know when it is time to change jobs?
5. How to change jobs?
6. Compile a list of 15 questions which one could be asked on a job interview
7. Compile a list of at least 5 questions which are considered illegal and cannot be asked on an interview
8. Compile a list of 5 questions one might ask the person conducting the interview
9. Works cited slide (does not count toward the 5 slide minimum)

****If you prefer, you may make a video; however, you must address the same requirements for the multimedia presentation.**

Career Project Checklist

Use the checklist below to make sure you have completed all the requirements for this project.

SUMMARY CHECKLIST:

- _____ All documents are typed in a word processor
- _____ Career Essay typed in proper format (did you check your spacing?)
- _____ Resume completed for career selected
- _____ Cover letter completed for career selected (goes on top of resume)
- _____ Letter of Resignation completed
- _____ Sample of resume from your research (print it and include it)
- _____ Sample of cover letter from your research (print it and include it)
- _____ Was cover letter customized to the qualifications for the career?
- _____ Sample Letter of Resignation (for your “current job”)
- _____ Multimedia Presentation (or Video)
 - _____ At least 5 slides
 - _____ What to wear/not to wear (male/female)
 - _____ How to prepare for the interview
 - _____ 5 Interview tips
 - _____ When to know to change jobs
 - _____ How to change jobs
 - _____ 15 questions which could be asked on an interview
 - _____ 5 questions which are considered illegal
 - _____ 5 questions an applicant might ask
- _____ Works Cited (include **all research** for this project.)

Career Project Rubric

Resume, Cover Letter, and Resignation Letter

Name: _____

Teacher: _____

Date Submitted: _____

Title of Work: _____

	Criteria				Points
	0-5	6-12	13-17	18-20	
Organization	Sequence of information is difficult to follow.	Reader has difficulty following work because student jumps around.	Student presents information in logical sequence which reader can follow.	Information is logical, interesting; spacing and format directions were followed.	_____
Content Knowledge	Student does not have grasp of information; student work does not demonstrate completion.	Student is uncomfortable with content and is able to demonstrate basic concepts.	Student is at ease with content, but fails to elaborate/ 1-2 elements are missing.	Student demonstrates full knowledge of topic; required paragraphs were present.	_____
Grammar and Spelling	Work has four or more spelling errors and/or grammatical errors.	Presentation has three misspellings and/or grammatical errors.	Presentation has no more than two misspellings and/or grammatical errors.	Presentation has no misspellings or grammatical errors.	_____
Neatness	Work is Illegible or incomplete.	Work has three or four areas that are sloppy.	Work has one or two areas that are sloppy.	Work is neatly typed in Microsoft Word.	_____
Attachments	Required samples were not submitted with completed work.	Work does not have the appropriate number of required attachments included with completed work.	Required samples were present, but were attached out of order.	Required samples were attached and entire packet was submitted in proper order.	_____
				Total---->	_____

Teacher Comments:

Name: _____

Date: _____

Career Project Rubric

Multimedia Presentation

Process	Below Avg.	Satisfactory	Good - Excellent
1. Has clear vision of final product; Followed directions	1, 2, 3	4, 5, 6	7, 8, 9, 10
2. Properly organized to complete; Presentation was easy to follow	1, 2, 3	4, 5, 6	7, 8, 9, 10
3. Managed time wisely	1, 2, 3	4, 5, 6	7, 8, 9, 10
4. Acquired needed knowledge base ** <i>Works Cited</i> was included	1, 2, 3	4, 5, 6	7, 8, 9, 10
5. Communicated efforts with teacher	1, 2, 3	4, 5, 6	7, 8, 9, 10
Product (Project)	Below Avg.	Satisfactory	Good - Excellent
1. Format (Correct # of slides)	1, 2, 3	4, 5, 6	7, 8, 9, 10
2. Mechanics of speaking/writing	1, 2, 3	4, 5, 6	7, 8, 9, 10
3. Organization and structure	1, 2, 3	4, 5, 6	7, 8, 9, 10
4. Creativity	1, 2, 3	4, 5, 6	7, 8, 9, 10
5. Demonstrates knowledge	1, 2, 3	4, 5, 6	7, 8, 9, 10

Total Score: _____

Teacher(s) Comments:

WHAT A CHARACTER!

Enrichment Activity

By now you should be an expert in what it takes to pursue a career! Test your savvy resume writing skills!

DIRECTIONS: “Tweet” your resume in 140 characters or less. It’s that simple...*or is it?*

Using either a word processor or multimedia software, reproduce a tweet box, as seen on the twitter site. Include your picture, your twitter handle, etc. and then type in your resume.

Share your “tweet” with the class.

Name: _____

Date: _____

ENRICHMENT RUBRIC

Project Title:
"What a Character!"

Process	Below Avg.	Satisfactory	Good - Excellent
1. Has clear vision of final product; Followed directions	1, 2, 3	4, 5, 6	7, 8, 9, 10
2. Properly organized to complete Presentation was easy to follow	1, 2, 3	4, 5, 6	7, 8, 9, 10
3. Managed time wisely	1, 2, 3	4, 5, 6	7, 8, 9, 10
4. Acquired needed knowledge base	1, 2, 3	4, 5, 6	7, 8, 9, 10
5. Demonstrated knowledge of lesson	1, 2, 3	4, 5, 6	7, 8, 9, 10
Product (Project)	Below Avg.	Satisfactory	Good - Excellent
1. Format:140 characters or less	1, 2, 3	4, 5, 6	7, 8, 9, 10
2. Mechanics of speaking/writing	1, 2, 3	4, 5, 6	7, 8, 9, 10
3. Organization and structure	1, 2, 3	4, 5, 6	7, 8, 9, 10
4. Creativity in presentation	1, 2, 3	4, 5, 6	7, 8, 9, 10
5. Demonstrates knowledge	1, 2, 3	4, 5, 6	7, 8, 9, 10

Total Score: _____

Teacher(s) Comments:

CAREER PATHWAYS

<p>Course <i>Practicum in Health Science</i></p> <p>Unit VII <i>Career Preparation and Employability</i></p> <p>Essential Question <i>What are Career Pathways?</i></p> <p>TEKS <i>103.205(c)</i> <i>1AB</i> <i>3BE</i> <i>7AB</i></p> <p>Prior Student Learning <i>none</i></p> <p>Estimated time <i>5-6 hours</i></p>	<p>Rationale To achieve your Career Pathway success, you must choose the best career, college, and company paths and make a commitment to them, while remaining flexible enough to deal with changes and new opportunities.</p> <p>Objectives Upon completion of this lesson, the student will be able to:</p> <ul style="list-style-type: none"> • Define Career Pathways. • Identify the 16 Career Pathways – Programs of Study. • Research Income and Job Growth Projections 2011 – 2020. • Apply decision-making skills to career and educational planning • Analyze the skills and abilities required in a variety of career options, and relate them to his or her own skills and abilities <p>Engage Ask students about their current career interests. The answers will vary, from students who absolutely know what they want to do to those who have not thought much about it. Ask students what they have done to help themselves along in their career decision-making process.</p> <p>Key Points</p> <ol style="list-style-type: none"> I. Career Pathways is a workforce development strategy used in the United States of America to support workers’ transitions from education into and through the workforce. II. What are the Career Pathways? <ol style="list-style-type: none"> A. In the State of Texas, Career Pathways are offered through Career Clusters – Programs of Study in high school. B. Each Career Cluster – Program of Study is aligned with post-secondary/industry collaboration. III. Career Pathways – Programs of Study <ol style="list-style-type: none"> A. There are 16 Career Pathways - Programs of Study available in the State of Texas. B. All states recognize Career Pathways - Programs of Study are designed to provide skills to students enrolled in Career and Technical Education (CTE) high school courses. C. Career Pathways – Programs of Study D. Career Pathway Research IV. There are several resources available to assist you with learning about the
--	--

various Career Pathways. Please visit each website to learn more about each resource.

- A. **Bureau of Labor Statistics** <http://www.bls.gov/ooh/>
- B. **Department of Labor** <http://www.dol.gov/>
- C. **O-Net Online** <https://www.onetonline.org/>

Activity

- I. Complete My Career Pathway Activity.
- II. Complete Career Pathway Research Presentations.
- III. Complete College or University of Choice Presentation.
- IV. Complete College or University of Choice Presentation.

Assessment

Specific Activity Rubrics

Materials

Handouts for each student

- *Career Pathways Terms and Definitions*
- *Note Taking Form*
- *Activity 1 – My Career Pathway*
- *Activity 2 – Career Pathway Presentation*
- *Activity 3 – College or University of Choice Presentation*
- *Activity 4 – Companies of Interest Research Presentation*

Supplies listed in each activity

Pencils and pens

Computer and Internet access for teacher and students

Projector (for digital presentation)

Accommodations for Learning Differences

For reinforcement, the student will list steps used to gain entrance to a college or university.

For enrichment, the student will plan their schedule, including how many hours needed to complete their degree in a timely manner.

National and State Education Standards

National Health Science Cluster Standards

4: Employability Skills

Healthcare professionals will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

Accountability Criteria 4.3 Career Decision-making

4.31 Discuss levels of education, credentialing requirements, and employment trends in healthcare.

TEKS

130.205(c)(1)(A) interpret data from various sources in formulating conclusions;

130.205(c)(1)(B) compile information from a variety of sources to create a technical report;

130.205(c)(3)(B) research academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees;

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science.

130.205(c)(7)(A) interpret knowledge and skills that are transferable among health science professions;

130.205(c)(7)(B) plan academic achievement for advancement in the health science industry.

College and Career Readiness Standards

Cross-Disciplinary Standards

Research across the curriculum

1. Understand which topics or questions are to be investigated
2. Explore a research topic
6. Design and present effective product

Career Pathways Terms and Definitions

1. **Career Pathways** - is a workforce development strategy used in the United States to support workers' transitions from education into and through the workforce.
2. **Programs of Study** - is an academic and career plan developed by your school to help move you towards a college and career path.
3. **Bureau of Labor Statistics (BLS)** - is a United States government agency that produces economic data that reflects the state of the United States' economy. This data includes the Consumer Price Index (CPI), the unemployment rate, and the Producer Price Index (PPI).
4. **Department of Labor (DOL)** - is a United States government cabinet body responsible for standards in occupational safety, wages and number of hours worked, unemployment insurance benefits, re-employment services, and a portion of the country's economic statistics.
5. **O*NET Online** - is the Occupational Information Network (**O*NET**). It is a free online database that contains hundreds of occupational definitions to help students, job seekers, businesses, and workforce development professionals to understand today's world of work in the United States.

NAME _____ DATE _____ PERIOD _____

NOTE TAKING FORM

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS VOCABULARY TERMS:	NOTES:

SUMMARY: WHAT HAVE I LEARNED TO ANSWER THE ESSENTIAL QUESTION?

TOPIC:	ESSENTIAL QUESTION?
MAIN IDEA – QUESTIONS	NOTES:
VOCABULARY TERMS:	

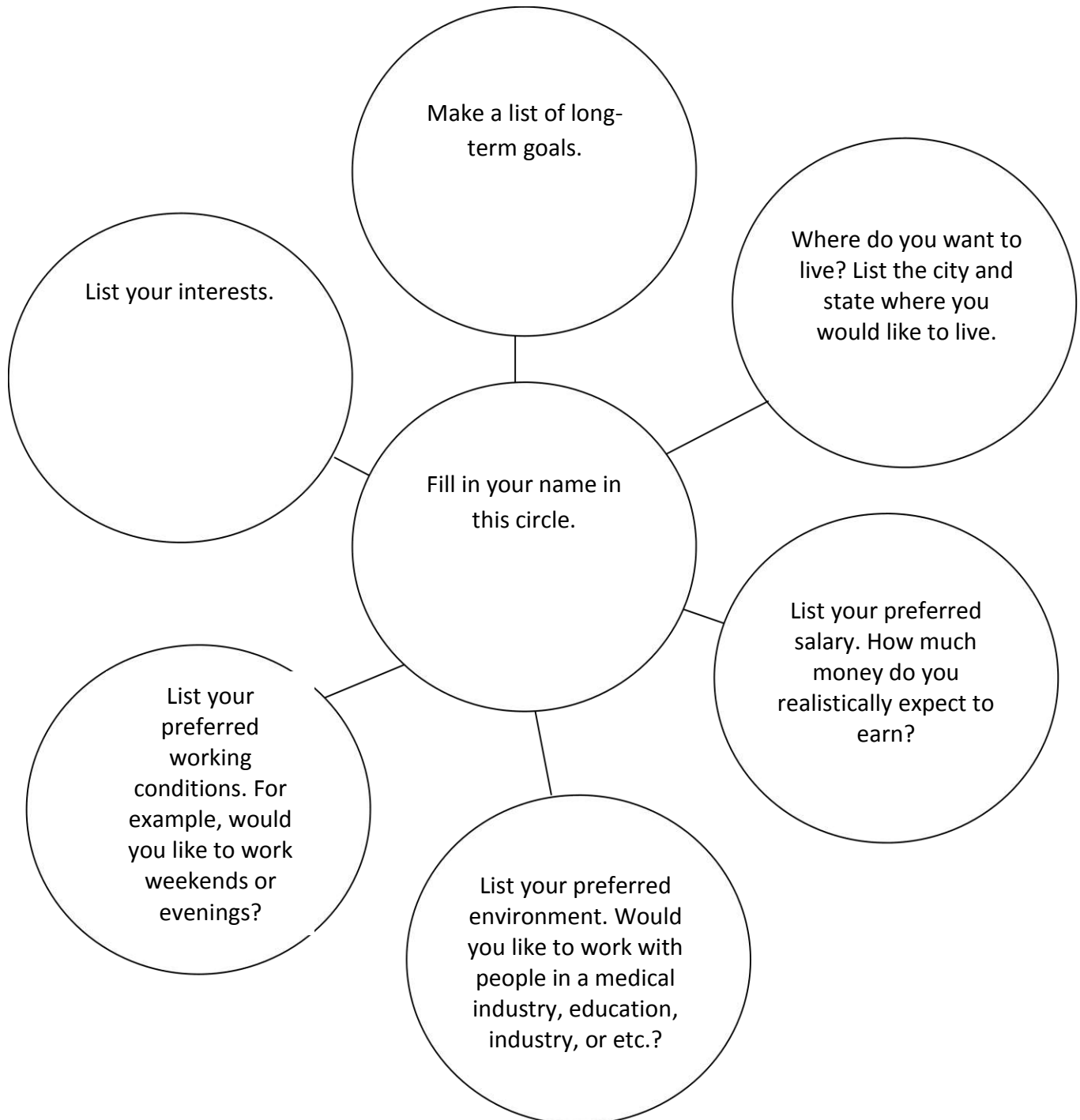
SUMMARY: WHAT HAVE I LEARNED TO ANSWER THE ESSENTIAL QUESTION?

Activity 1 – My Career Pathway

Name _____
Class Period _____ Date _____

Directions

Earn 10 points for each circle completed with responses.



Activity 1 – My Career Pathway

1. Which is the most important, salary or working environment? Why?

2. Visit the websites below to learn more about the 16 Career Clusters.

- <http://cte.unt.edu/other-clusters/>
- <http://www.texascaresonline.com/clusters/clusters.asp>

3. Now that you have thought about career choices, select a Career Pathway – Program of Study that matches your interests and preferred salary from the list below.

- ___ 1. Agriculture, Food & Natural Resources
- ___ 2. Architecture & Construction
- ___ 3. Arts, A/V Technology & Communications
- ___ 4. Business Management & Administration
- ___ 5. Education & Training
- ___ 6. Finance
- ___ 7. Government & Public Administration
- ___ 8. Health Science
- ___ 9. Hospitality & Tourism
- ___ 10. Human Services
- ___ 11. Information Technology
- ___ 12. Law, Public Safety, Corrections & Security
- ___ 13. Manufacturing
- ___ 14. Marketing
- ___ 15. Science, Technology, Engineering & Mathematics
- ___ 16. Transportation, Distribution & Logistics

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Rubrics

Graded Elements	Total Points
9-10 Responses	90-100
7-8 Responses	70-80
5-6 Responses	50-60
3-4 Responses	30-40
1-2 Responses	10-20
0 Responses	0

Activity 2 - Career Pathway Research Presentation

Project Research and create a presentation about a career that you are interested in pursuing after graduation.

Activity Research the career on the Internet and find the following information:

- A. Career
- B. Nature of the Work
- C. Working Conditions
- D. Educational Requirements
- E. Training and Other Qualifications
- F. Experience/Required Skills
- G. Salary/Income
- H. Job Market Outlook – Is this a career field with good future job prospects?
- I. Upside – What are the benefits of working in this career field?
- J. Downside – What are the detriments to this career?
- K. Related Occupation(s)
- L. Conclusion

Prepare a presentation to share this information with the class. Please cite the sources of your information in the footnote section of your presentation.

Use graphics, animation, and slide transitions to make your presentation engaging and interesting. Include at least one website hyperlink to use during the presentation for demonstration.

Supplies Computer, Internet access, presentation software

Deliverables Completed career research presentation and reflection response

Reflection How important do you think it is to research career choices? What are some of the benefits that you can obtain from this research?

Rubrics

Graded Elements	Total Points
Complete Presentation – Required Elements	30
Quality of Research	20
Correct use of spelling, grammar, and capitalization	15
Presentation Skills	15
Original and Creative Presentation	10
Reflection	10
Total	100

Activity 3 - College or University of Choice Research Presentation

<u>Project</u>	Research and create a presentation about a college or university of interests that will assist you with pursuing your Career Pathway.
<u>Activity</u>	<p>You will research the college or university of your choice and produce a presentation.</p> <ol style="list-style-type: none">1. Select a college or university that interests you.2. Locate the website (URL) for that college or university.3. Include the following in your presentation (you will find all of this information on the website):<ol style="list-style-type: none">A. Name of the College or UniversityB. Location (City and State)C. School banner, logo, or mascotD. School colorsE. Map of the campus if availableF. Photos of campusG. Estimated cost of attending one full year (this should include tuition, fees, housing, and meals)H. Number of students currently enrolled (can be an estimate)I. Degree of the most interest to you and whyJ. Important dates such as application deadlines and scholarship deadlinesK. Cite all of your sources in the footnote of each slide
<u>Supplies</u>	Computer, Internet, presentation software
<u>Deliverables</u>	You will prepare a presentation of your college or university research that includes all of the information listed above, along with anything else that you find interesting, and respond to the reflection question.
<u>Reflection</u>	Why did you choose this college or university? How will this college or university assist you in pursuing your Career Pathway? Please be prepared to answer this question during your presentation.

Rubrics

Graded Elements	Total Points
Complete Presentation – Required Elements	30
Quality of Research	20
Correct use of spelling, grammar, and capitalization	15
Presentation Skills	15
Original and creative presentation	10
Reflection	10
Total	100

Activity 4 - Companies of Interest Research Presentation

Project Research 10 companies of interest that will assist you in pursuing your Career Pathway.

Activity Using an Internet browser, use the search terms “find career jobs” to assist you in researching and locating 10 companies of interest.

Create a presentation and share your research with the class.

Slide 1: Introduce yourself and your Career Pathway

Slide 2: Rank the 10 companies in order from most desirable to least.

Slides 3-12: Write a brief description about each company you would choose to work for and explain the Career Pathway you wish to pursue.

Slide 13: Reflection

Slide 14: Resources

Present your research to the class!

Supplies Computer, Internet access, presentation software

Deliverables Presentation of 14 slides based on research and reflection

Reflection Please provide five reasons that are important to you when choosing a company/employer.

Rubrics

Graded Elements	Total Points
Complete Presentation – Required Elements	30
Quality of Research	20
Correct use of spelling, grammar, and capitalization	15
Presentation Skills	15
Original and Creative Presentation	10
Reflection	10
Total	100

ACADEMIC REQUIREMENT RESEARCH

Course	Rationale
<i>Practicum in Health Science</i>	The first step toward life-long success is making informed decisions about education and career options. It is important to gather information about what you can earn in a particular career, the requirements to gain and maintain certification/licensure, and possible professional advancements in the career.
Unit VII <i>Career Preparation and employability</i>	Objectives Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Explore the requirements for a specific career of choice • Recognize and plan on the continuing need for education advancement and training to keep up with new discoveries and technology in medicine
Essential Question <i>What happens if things don't go as planned?</i>	Engage <ul style="list-style-type: none"> • Begin by reading the story <i>"Oh the Places You'll Go"</i> by Dr. Seuss aloud. Pass out the Career Knowledge Worksheet to students. Ask students to write the answers to the following questions on their sheet of paper. <ul style="list-style-type: none"> ○ What career do you want to pursue? ○ Are there certifications/licensures you can get in the field along the way to earn a living? ○ Where do you want to go to college/university? ○ Is there a deadline for applications? ○ What does it cost for a semester at that college/university? ○ Are there other college/universities that offer your career of choice? ○ What city do you want to live in afterwards? ○ What is the cost of living in that city? ○ Is your certification/licensure transferable to another state? ○ What are the educational requirements needed to maintain your certification or licensure? ○ Where or how will you get those educational requirements?
TEKS <i>103.205 c 1A,B,C; 3B,D,E; 7A,B,C</i>	
Prior Student Learning <i>Basic career knowledge</i>	
Estimated time <i>4-8 hours</i>	Key Points Many upper classmen think they have researched careers and know how they are going to reach that goal. Helping students understand the bigger picture can help them prepare for possible roadblocks and detours in both life and careers. By searching for alternative pathways to reaching goals students will be better

prepared for the places they will go.

Activity

- I. Research and complete the *"Oh the Places You'll Go"* activity check list. Once the research is complete, place the information on a *"Cat in the Hat"* hat and decorate. The Information sheet will also be turned in with references listed with the information. Students will use their hat to report to the class on the places they will go.
- II. Make a "Career Road Map" that takes students with an entry level job for the field of their choice up to the professional level. Students should research the beginning level to the current top level to visualize what would be expected to reach that level. Then after researching the information students should place their findings on a poster board or in a multimedia presentation. The map should include several different routes the student could take to go from point A to point B. For example, what if they did on-the-job training; then went to a two year college; and, then finished at a university. Another route might be to start at the university level. Students need to verbalize the advantages and disadvantages of going each route when presenting their Road Map.

Assessment

Successful completion of research worksheet

Hat rubric

Oral Presentation Rubric

Project Rubric or Multimedia Rubric

Materials

"Oh the Places You'll Go" by Dr. Seuss

Career Questions

Research Question Worksheet

Hat Rubric

Oral Presentation Rubric

Computers with internet access

Copy of either the Project Rubric or Multimedia Rubric

Texas Reality Check -- <http://www.texasrealitycheck.com/>

Accommodations for Learning Differences

For reinforcement, the student will list steps used to gain entrance to a college or university.

For enhancement, the student will plan their schedule, including how many hours needed to complete their degree in a timely manner.

National and State Education Standards

National Health Science Cluster Standards

4: Employability Skills

Healthcare professionals will understand how employability skills enhance their employment opportunities and job satisfaction. They will demonstrate key employability skills and will maintain and upgrade skills, as needed.

Accountability Criteria

4.3 Career Decision-making

4.31 Discuss levels of education, credentialing requirements, and employment trends in healthcare.

TEKS

130.205(c)(1)(A) interpret data from various sources in formulating conclusions;

130.205(c)(1)(B) compile information from a variety of sources to create a technical report;

130.205(c)(1)(C) plan, prepare, and deliver a presentation;

130.205(c)(3)(B) research academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees;

130.205(c)(3)(D) develop new problem-solving strategies based on previous knowledge and skills; and

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science.

130.205(c)(7)(A) interpret knowledge and skills that are transferable among health science professions;

130.205(c)(7)(B) plan academic achievement for advancement in the health science industry; and

130.205(c)(7)(C) analyze emerging technologies in the health science industry.

College and Career Readiness Standards

Cross-Disciplinary Standards

Research across the curriculum

1. Understand which topics or questions are to be investigated
2. Explore a research topic
6. Design and present effective product

(Lesson idea borrowed from Sue Sanborn, Health Science Instructor for Amarillo ISD)

Engagement

Career Knowledge

What career do you want to pursue?

Are there certifications/licensures you can get in the field along the way to earn a living?

Where do you want to go to college?

Is there a deadline for applications?

What does it cost for a semester at that college/university?

Are there other colleges/universities that offer your career of choice?

What city do you want to live in afterwards?

What is the cost of living in that city?

Is your certification/licensure transferable to another state?

What are the educational requirements needed to maintain your certification or licensure?

Where or how will you get those educational requirements?

“OH THE PLACES YOU’LL GO”

PROJECT QUESTIONS

Research and answer the following questions:

The City you would like to live in:

This can be any city in the US or the world for that matter. You will need to develop a menu for one week so you can make out a shopping list for any food. Extrapolate the results for how much money you will need for food for this city for one month. You will need to find a local newspaper to gather prices. Calculate the cost of utilities for one month. Utilities include water, electric and or gas, cable (if you want it), internet service and phone service. Find the cost of an apartment/housing in the area. Find the current gas price for the area (this may be near the city you plan on living in). (Check out the App called “Texas Reality Check.”)

Food:

Utilities:

Housing:

Transportation cost:

The College/Career you would like to have:

List the name of the medical profession (or other if choosing not to go into the medical field).

Are there certifications/licensures you can get in the field along the way to earn a living?

Where do you want to go to college?

What does it cost for a semester at that college/university?

When is the admission application deadline for that college/university?

What is the high school GPA requirement for this college/university?

What is your Current class rank?

What is the SAT or ACT score requirement for this college/university?

Will this college accept “dual-credit” or AP credit?

How much are the admission fees?

What are the credit hour costs (include both In state and out of state)?

What are the room and board fees?

What is the semester tuition cost (based on recommended course plan)?

What are the prerequisites for enrollment?

What is your major area of study?

What is your minor area of study?

How many years of education are required?

What type of licensure will you obtain?

What is the projected income for this profession?

What is the projected job-outlook for this profession?

Are there other college/universities that offer your career of choice?

Is your certification/licensure transferable to another state?

What are the educational requirements needed to maintain their certification or licensure?

Where or how will you get those educational requirements?

“OH THE PLACES YOU’LL GO”

PROJECT RUBRIC

Category	4	3	2	1
Graphics- Claritys	Graphics are all in focus and the content easily viewed and identified	Most Graphics are in focus and the content easily viewed and identified	Some Graphics are in focus and the content easily viewed and identified	Most graphics are not clear or are too small
City you choose	The hat includes all required elements as well as additional information	All required elements are included on the hat	All but 1 of the required elements are included on the hat	Several required elements were missing
College you choose	The hat includes all required elements as well as additional information	All required elements are included on the hat	All but 1 of the required elements are included on the hat	Several required elements were missing
Career you choose	The hat includes all required elements as well as additional information	All required elements are included on the hat	All but 1 of the required elements are included on the hat	Several required elements were missing
Graphics- Originality	Several of the graphics used on the hat reflect an exceptional degree of student creativity	One or two of the graphics used on the hat reflect student creativity in their creation	The graphics are made by the student, but are based on the designs or ideas of others	No graphics made by the student are included
Content Accuracy	At least 7 accurate facts are displayed on the hat	5-6 accurate facts are on the displayed on the hat	3-4 accurate facts are displayed on the hat	Less that 3 accurate facts are displayed on the hat
Attractiveness	The hat is exceptionally attractive in terms of design, layout and neatness	The hat is attractive in terms of design, layout and neatness	The hat is acceptably attractive in terms of design, layout and neatness	The hat is distractingly messy or poorly designed. It is not attractive
Grammar	There are no grammatical mistakes on the hat	There is 1 grammatical mistakes on the hat	There are 2 grammatical mistakes on the hat	There are more than 2 grammatical mistakes on the hat

Oral Presentation Rubric

Student: _____

Date: _____

Scoring criteria	4 Excellent	3 Good	2 Needs Some Improvement	1 Needs Much Improvement	N/A
Clearly and effectively communicates the main idea or theme.					
Presenter is self-confident and clearly expresses ideas.					
Presenter answers questions with well thought out responses.					
Holds audience attention and maintains eye contact.					
Visual aids are clear and add to the presentation.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Project Rubric

Student: _____

Date: _____

Scoring criteria	4 Excellent	3 Good	2 Needs Some Improvement	1 Needs Much Improvement	N/A
Clearly/effectively communicates the main idea or theme.					
Reflects application of critical thinking.					
Information clearly provided in an organized and thoughtful manner.					
Strong examples used to describe the theme or objective.					
Illustrations follow a logical reasoning.					
Each image and font size is legible to entire audience.					
No spelling, grammatical or punctuation errors.					

NOTE: N/A represents a response to the performance which is "not appropriate."

Multimedia Rubric

Student: _____ **Class:** _____

Title: _____ **Other Group Members:** _____

Date: _____

Scoring criteria	5 Excellent	4 Good	3 Needs Some Improvement	2 Needs Much Improvement	1 N/A
Clearly and effectively communicates an introduction of the theme/objective of the project.					
Clearly and effectively communicates the content throughout the presentation.					
Integrated a variety of multimedia resources to create a professional presentation (transition, graphics).					
Presentation holds audience attention and relates a clear message.					
Timing between slides is beneficial for the viewer to read or observe content.					
Each image and font size is legible to entire audience.					

Scale:

26-30 A Excellent

21-25 B Good

16-20 C Needs Some Improvement

11-15 D Needs Much Improvement

6-10 F Not Appropriate

TOTAL=

Comments

Course	Rationale
<i>Practicum in Health Science</i>	The portfolio provides an alternative means of displaying skills and accomplishments. A benefit of using portfolios is to allow the students to engage in a self-reflection of their own progress.
Unit VII	Objectives
<i>Career Preparation and Employability</i>	Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Define a career portfolio • Articulate the importance of creating and maintaining a personal portfolio • Distinguish between the components employers want to see in a career portfolio • Prepare for post-secondary education and/or a career by creating a career portfolio • Maintain a career portfolio
Essential Question	
<i>What are employers looking for in job applicants?</i>	
TEKS	Engage
<i>130.205(c) 9A, B</i>	Students brainstorm what they think employers look for in the people they will hire
Prior Student Learning	Or
<i>The student should be able to identify employer expectations of punctuality, attendance and time management</i>	Discuss online pictures posted from parties, etc. Discuss email address names How could these affect getting a job?
Estimated time	Key Points
<i>3 – 6 hours</i>	The portfolio collection reflects a student's interests and achievements. It is a purposeful collection of student work that exhibits a student's efforts, progress, and achievements in one or more areas. The collection must include student participation in selecting the contents, the criteria for selection, the criteria for

judging merit, and evidence of student self-reflection.

I. Types of Portfolios

- A. Traditional Portfolio – hard copy portfolio
- B. CD Portfolio – categorized materials in CD format – utilizes digital platform
- C. Online Portfolio – showcases work samples online – utilizes digital platform

II. Student portfolios should include:

- A. Cover sheet – identifies the student
- B. Table of Contents – listing of entries
- C. Letter of Intent - introduces the student
- D. Application – practical exercise that displays "real world skills"
- E. Technical skill competencies -- skills sheets – rubrics or other documentation of skills the student has acquired in Health Science (may also include CNA skills evaluation)
- F. Licensures or certifications
- G. Awards and scholarships -- achieved in or outside of school; a vital part of a student's total package
- H. Extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations
- I. Abstract of technical competencies mastered during the practicum
- J. Résumé -- student qualifications
- K. Samples of work -- an entry from areas showcasing growth in content and real world skills with a reflection sheet for every item
- L. Evaluation from the practicum supervisor – shows how others view the student
- M. Transcript – provides the official record of a student's coursework and testing

III. Benefits of the portfolio process:

- A. Students will benefit from tangible proof of their abilities and achievements
- B. Intangible benefits come from closer self-assessment
- C. Students develop a sense of pride and ownership from collecting their best work

- D. A portfolio provides future employers, scholarship committees or entrance committees additional evaluation tools

IV. Maintaining the portfolio:

- A. Appearance – neat and clean
- B. Update – insert best work
- C. Evaluate – reflect on work collected in portfolio
- D. Replacement – insert new work displaying a greater skill mastery

Activity

- I. Create a student portfolio using the Portfolio Guidelines.
- II. Present portfolio to stakeholders such as practicum instructor, principal, clinical supervisor, etc.

Assessment

The assessment may be a student self-evaluation of his / her portfolio or assessed by the teacher or health care professional. Portfolio rubric.

Presentation of portfolio to stakeholders. Presentation Rubric

Materials

notebook
reflection sheet
paper protectors
dividers

computer

scanner

digital camera

Fontenot, Renee J. ***Tips on Creating a Career Portfolio.***

<http://marketing.gcsu.edu/rfontenot/Career%20Development/CareerPortfolio.pdf>

Mueller, Jonathan. ***Authentic Assessment Toolbox.***

<http://jonathan.mueller.faculty.noctrl.edu/toolbox/portfolios.htm>

Reese, Luke. ***Ditigal Portfolio.***

<https://www.msu.edu/course/tsm/251/DigitalPortfolioGuidebook.pdf>

Simmons, Angela & Lumsden, Jill. ***Preparing a Portfolio.***

<http://www.career.fsu.edu/experience/document/portfolio-guide.html>

Accommodations for Learning Differences

For reinforcement, students will list the components and describe the benefits of a portfolio.

For enrichment, students will create a web home page for their portfolios.

National and State Education Standards

National Health Science Standards

HLC02.01 Communications

Health care workers will know the various methods of giving and obtaining information. They will communicate effectively, both orally and in writing.

TEKS

130.205 (9) (A) update a professional portfolio to include:

- (i) technical skill competencies;
- (ii) licensures or certifications;
- (iii) awards and scholarships;

- (iv) extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations;
 - (v) abstract of technical competencies mastered during the practicum;
 - (vi) resumé;
 - (vii) samples of work; and
 - (viii) evaluation from the practicum supervisor; and
- 130.205 (9) (B) present the portfolio to all interested stakeholders such as in a poster presentation.

College and Career Readiness Standards

CROSS-DISCIPLINARY STANDARDS

I. Key Cognitive Skills

A. Intellectual curiosity

2. Accept constructive criticism and revise personal views when valid evidence warrants.

D. Academic behaviors

1. Self-monitor learning needs and seek assistance when needed.
2. Use study habits necessary to manage academic pursuits and requirements.
3. Strive for accuracy and precision.
4. Persevere to complete and master tasks.

E. Work habits

1. Work independently.

F. Academic integrity

1. Attribute ideas and information to source materials and people.
2. Evaluate sources for quality of content, validity, credibility, and relevance.

II. Foundational Skills

B. Writing across the curriculum

1. Write clearly and coherently using standard writing conventions.

2. Write in a variety of forms for various audiences and purposes.

3. Compose and revise drafts.

E. Technology

1. Use technology to gather information.

2. Use technology to organize, manage, and analyze information.

3. Use technology to communicate and display findings in a clear and coherent manner.

4. Use technology appropriately.

Teachers Note:

Inform students that it is expected they keep the portfolio for the following year.

Student Portfolio Guidelines

Student portfolios should include:

- A. Cover sheet – identifies the student
- B. Table of contents – listing of entries
- C. Application – practical exercise that displays "real world skills"
- D. Technical Skill Competencies -- Skills Sheets – Rubrics or other documentation of skills the student has acquired in Health Science (may also include CNA skills evaluation)
- E. Licensures or Certifications
- F. Awards and Scholarships (Special interests and awards) – special interests and awards achieved in or outside of school; a vital part of a student's total package
- G. Extended Learning Experiences -- Community Service Log – students club documentation of community service participation, active participation in career and technical student organizations, and professional organizations
- H. Abstract of Technical competencies mastered during the practicum; may be list of skills mastered during the clinical practicum
- I. Resume – student qualifications
- J. Samples of Work: (four work samples and reflection sheets) an entry from areas showcasing growth in content and real world skills with a reflection sheet for every item
- K. Evaluation from the practicum mentor/supervisor – may be copies of clinical evaluations
- L. Present the portfolio to all interested stakeholders – practicum instructor, principal, clinical supervisor, etc.

Work Sample Reflection Sheet

Describe the portfolio item

Explain the purpose for including the item:

Discuss what you learned, its importance to you, what improvement you can make:

Portfolio Rubric

Student: _____

Course: _____

Scoring criteria	5 Excellent	4 Good	3 Needs Some Improvement	2 Needs Much Improvement	1 N/A
Visual Appeal					
Cover Page					
Table of Contents					
Application					
Technical Skill Competencies					
Licensures or Certifications					
Awards and Scholarships					
Extended Learning Experiences					
Abstract of technical competencies					
Resume					
Work Sample 1 + Reflection					
Work Sample 2 + Reflection					
Work Sample 3 + Reflection					
Work Sample 4 + Reflection					
Evaluation from the practicum mentor/supervisor					

Scale: 90-100 A Excellent

80-89 B Good

70-79 C Needs Some Improvement

60-69 D Needs Much Improvement

0-50 F Not Appropriate

TOTAL = _____

Oral Presentation Rubric

Student: _____

Date: _____

Scoring criteria	4. Excellent	3. Good	2. Needs Some Improvement	1. Needs Much Improvement	N/A
Clearly and effectively communicates the main idea or theme.					
Presenter is self-confident and clearly expresses ideas.					
Presenter answers questions with well thought out responses.					
Holds audience attention and maintains eye contact.					
Visual aids are clear and add to the presentation.					
				TOTAL	

NOTE: N/A represents a response to the performance which is "not appropriate."

Scholarships for Post-Secondary Options

Course	Rationale
<i>Practicum in Health Science</i>	It is important to take the necessary steps to plan for post-secondary education. Scholarships are a great way to pay for post-secondary education, especially because it is money that does not have to be paid back.
Unit VII	
<i>Career Preparation and employability</i>	Objectives Upon completion of this lesson, the student will be able to: <ul style="list-style-type: none"> • Locate five scholarships that they meet the requirements for • Create an organized file system for the documents required by the scholarship • Write three essays appropriate to submit with scholarship applications • Request and collect at least three references to be submitted with scholarship applications • Write thank you letters to anyone who writes references • Create a calendar to track the due dates of the scholarships
Essential Question	
<i>Where are the best places to find scholarships?</i>	Engage Discuss the following question with the class: <p style="padding-left: 40px;">What do you think scholarship committees are looking for when they review resumes, essays, and letters of recommendations?</p>
TEKS 130.205(c) 3DE 7AB	
Prior Student Learning	Key Points
<i>none</i>	I. Explain different types of funding <ul style="list-style-type: none"> A. Apply for Financial Aid B. Scholarships C. National Grants D. Pell Grants E. Service Commitment: AmeriCorps, Peace Corps, ROTC, Military F. Local schools / living at home II. What Kinds of Scholarships? <ul style="list-style-type: none"> A. University / College B. National C. State D. Organizational E. Local
Estimated time <i>5-10 hours</i>	

- III. Scholarship Searches & Strategies
 - A. Search sites & aggregators
 - B. Professional organizations
 - C. Local organizations
 - D. School counselors
 - E. Lists
 - F. Emails
- IV. Scholarship Process
 - A. Key components
 - B. Personal information
 - C. Resume
 - D. Academic information
 - E. Community information
 - F. Essay
 - G. References
 - H. Transcripts
 - I. Due dates
- V. Organization
 - A. File types
 - B. USB flash drives or collaboration drives
- VI. Keeping Track of Time
 - A. Start early
 - B. December due dates
 - C. Documentation of enrollment / grades
- VII. Resume
 - A. Content types
 - B. Writing tips
 - C. Example
 - D. Content Ideas
- VIII. Reference letters
 - A. Reference process
 - B. Get more letters than you need
 - C. Write thank you notes
- IX. Scholarship Essays
 - A. Good writing
 - B. Flow / structure
 - C. Memorable
 - D. Tell your story
 - E. Share your heart
 - F. Stand out from other students
 - G. Essay ideas
- X. Transcripts
 - A. Ordering and organizing
- XI. Finalize Project
 - A. Self-review

- B. Finalize project pieces
- C. Submit

Activity

- I. Complete the Scholarship Project.

Assessment

Scholarship Planning Rubric

Materials

Scholarship Resources Handout

Peer Review for Essay

USB flash drives or collaborative drives

Computers (for students to complete project)

Projector (for digital presentation)

Scanner to scan recommendation letters

Accommodations for Learning Differences

For reinforcement, the student will define key terms.

For enrichment, the student will create a display to share the successes of each scholarship received.

National and State Education Standards

HLCO2 Communications

Health Care Workers will know the various methods of giving and obtaining information. They will communicate effectively both orally and in writing.

TEKS

130.205(c)(3)(D) develop new problem-solving strategies based on previous knowledge and skills;

130.205(c)(3)(E) evaluate performance for continuous improvement and advancement in health science.

130.205(c)(7)(A) interpret knowledge and skills that are transferable among health science professions;

130.205(c)(7)(B) plan academic achievement for advancement in the health science industry;

Texas College and Career Readiness Standards**Cross- Disciplinary Standards**

Research across the curriculum 1. Understand which topics or questions are to be investigated.

2. Explore a research topic

6. Design and present an effective product

Scholarship Resources Handout

You can search for scholarship listings and find many sites that include listings of scholarships. Here are a few to get you started.

- **Every Chance Every Texan**
 - <http://www.everychanceeverytexan.org/funding/aid/faidalphabet.php>
- **My College Options (Texas)**
 - <https://www.mycollegeoptions.org/TX/0/Texas/search-results-scholarship-search-by-location.aspx>
- **College Scholarships (Texas)**
 - <http://www.collegescholarships.org/states/texas.htm>
- **College Scholarships (Subjects)**
 - <http://www.collegescholarships.org/scholarships/subject-specific.htm>
- **Big Future by the College Board**
 - <https://bigfuture.collegeboard.org/scholarship-search>
- **Student Scholarships**
 - <http://www.studentscholarships.org/>

Some school districts have great scholarship listings too:

- **Austin ISD**
 - <https://www.austinisd.org/scholarships>
- **Arlington ISD**
 - <http://www.aisd.net/AISD/Default.aspx?alias=www.aisd.net/aisd/scholarships>
- **Mesquite ISD**
 - <http://www.mesquiteisd.org/college-scholarships/>
- **Fort Worth ISD**
 - http://www.fwisd.org/files/FFAsx/a22733bd372513063745a49013852ec4/scholarship_senior.pdf
- **Houston ISD**
 - <http://www.houstonisd.org/site/default.aspx?PageID=110473>
- **Waxahachie ISD**
 - <http://schools.wisd.org/default.aspx?name=whs.scholarships>

Scholarship Aggregators

There are many sites that help you find scholarships. You can use them to help find the scholarships, but we recommend that you use it only as a directory and submit *directly to the organization* instead of

through the aggregator site. There are many scams where you have to pay to get scholarships. You should never have to pay anything to receive a scholarship.

Scholarship Project

For this project, you will be setting up your own plan to apply for scholarships that you meet the requirements for. You will collect files and documents to do this.

There are two options for completing this task.

- A) **Collaborative Drives** – This option is valuable if you want to be able to work with your teachers and parents. You can share documents and get help with reviewing documents very easily.
- B) **A USB flash drive** – If your school limits the access to a collaborative drive or file sharing, then a USB flash drive is a good way to bring the documents back and forth to school and home.

Requirements

1. Identify at least five scholarships for which you meet the requirements.
2. For each scholarship, create a folder in either a USB flash drive or virtual drive. Name that folder to correspond to the name of the scholarship.
 - a. In each folder, create a document named **REQUIREMENTS** that lists with each of those requirements.
3. Create a folder called **ESSAYS**.
 - a. In this folder, you will put any essay that you have written as a scholarship essay or for a class that could be used as content in a scholarship essay.
 - b. Review the current essays in “Apply Texas” if you are planning on attending school in Texas.
 - c. Include at least three different essays in your folder.
4. Create a folder called **RECOMMENDATIONS**.
 - a. In this folder, you will file any letters of recommendations that you have been able to collect. These are best if they have been signed, scanned, and can be reprinted or sent digitally if needed.
 - b. Include at least three letters of recommendation.
 - i. A teacher
 - ii. An administrator
 - iii. A member of the community
5. Create a folder called **RESUMES**.
 - a. In this folder, you will file a copy of your resume. Some scholarships will require different lengths. Therefore, if you create a new version, keep any copies in this folder and save with the name of the file relevant to the type of resume that it is (For example, “One-Paged Resume” or “Two-Paged Resume”).
 - b. Include at least one resume in this folder.
6. Create a **CALENDAR** to document the due date of each scholarship.

- a. If you are using a collaborative drive with a calendar app, you can make this in a shared Calendar that you can share with your family.
- b. If you are using digital file share site or a USB flash drive, you can make a calendar in a table in a document, spreadsheet, or a calendar template for a slide.

Scholarship Planning Rubric

	0 Poor/Not Evident	1 Needs Improvement	2 Exemplary
Scholarship Identification	Scholarships were identified, however, they were not an appropriate match for the qualifications of the student.	Four scholarships were identified that match the qualifications of the student.	Five scholarships were identified that match the qualifications of the student.
Folders Created	The drive is not organized.	The drive includes a folder for each scholarship.	The drive includes a well-organized structure with a folder for each scholarship.
Requirements	The requirement listing is not included.	Some requirements for scholarships are missing in the folder structure.	Requirements for each scholarship are listed in each folder.
Essay 1	The first essay is missing or is too short to be considered for a scholarship.	The first essay does not align well to the prompt or may not be appropriate yet without revision for scholarship consideration.	The first essay aligns well with the prompt and would be an appropriate essay to submit for scholarship consideration.
Essay 2	The second essay is missing or is too short to be considered for a scholarship.	The second essay does not align well to the prompt or may not be appropriate yet without revision for scholarship consideration.	The second essay aligns well to the prompt and would be an appropriate essay to submit for scholarship consideration.
Essay 3	The third essay is missing or is too short to be considered for a scholarship.	The third essay does not align well to the prompt or may not be appropriate yet without revision for scholarship consideration.	The third essay aligns well to the prompt and would be an appropriate essay to submit for scholarship consideration.
Recommendations	Zero to one recommendation letters are included.	Two recommendation letters are included.	Three recommendation letters are included.
Resumes	A resume is not included in a folder.	A resume is included in a folder that needs revisions to be able to appropriately highlight the student's academic career for scholarship consideration.	A resume is included in a folder that appropriately highlights the student's academic career for scholarship consideration.
Calendar	A calendar is not included.	A calendar is created to document due dates for each of the scholarships identified, but the formatting is not clean and professional.	A professional, well-formatted calendar is created to document due dates for each of the scholarships identified.
Writing	The writing needs significant revisions with many errors in grammar or mechanics.	The writing needs revisions with some errors in grammar or mechanics.	The writing is exemplary with no errors in grammar or mechanics.

Peer Review for Essay

Writer: _____

Peer Reviewer: _____

Essay Prompt: _____

Scholarship Organization: _____

	Yes/No	Notes
Does the essay meet the prompt?		
Does the essay meet the goals of the scholarship organization?		
Does the essay convey a personal tone and voice?		
Does the essay maintain good organization, structure, and flow?		
Does the essay maintain correct writing grammar and mechanics?		
Is the essay unique and memorable?		