

P₂H_C

Month 2: 4 hours

Big Idea: High Visibility-I can see clearly now.

CTE Standards

3.0	Career Planning and Management
3.5	Understand the past, present and future trends that affect careers, such as technological developments and societal trends, and the resulting need for life long learning.
4.0	Technology
4.1	Understand past, present and future technological advances as they related to chosen pathway.
6.0	Health and Safety
6.3	Understand the appropriate use and standard precautions and infection control, as appropriate.
8.0	Ethics and Legal Responsibilities
8.2	Understand the concept and application of ethical and legal behavior consistent with workplace standards.
8.3	Understand the role of personal integrity and ethical behavior in the workplace standards.
8.4	Understand the ways in which ethical considerations affect emerging technologies and their impact on society.
C	Health Informatics Pathway
C1.1	Know the process for managing the timely transfer of information accurately and effectively to the appropriate parties.
C1.2	Know the legal and regulatory requirements for the transfer of information.
E	Therapeutic Services Pathway
E1.2	Use appropriate communications strategies with patients and clients.
E1.3	Use appropriate responses to the health care needs of patients and clients.

Vocabulary

echocardiogram	claustrophobia	lead shield
radiology fields	computed radiology	radiology
stress test	electromagnetic waves	osteoporosis
radioisotope scans	virtual communities	barium
3-D	Computerized tomography	densitometer
ultrasonography	positron emission tomography	telemedicine
Nuclear medicine	flurosocopy	angiogram
dye	magnetic resonance imaging	cardiac catheterization
confidentiality	patient privacy	Patient Bill of Rights
Health Insurance Portability and Accountability Act		informed consent
Patient Safety and Quality Improvement Act		disclosure

Text Book & Supplementary materials:

Health Science Career Exploration (Simmers, Louise) Chapters 5 and 9.

Exploring Health Careers (McCutcheon, Maureen & Phillips, Mary) Chapter 4.



Cal-HOSA and HOSA Connections:

1. Students will be responsible for co-authoring articles for a fall P2HC (Pathways to Health Careers) newsletter. Students will share information about P2HC and Cal-HOSA. Ideas for topics should be generated and written by students. The newsletter should contain information about the **Cal-HOSA** officers and a brief description of their responsibilities. Some ideas include: interviewing a health care provider and highlighting the interview; prevention efforts to address influenza, tobacco use, obesity; Cal-HOSA and student involvement; volunteer opportunities in the community; President's or Cal-HOSA officer welcome. Students can search websites for ideas.
2. Develop an information sheet/classroom poster board on each Cal-HOSA officer that includes a picture, their title and a brief description of their role in **Cal-HOSA** and the local chapter. This information will also need to be added to the **Cal-HOSA** scrapbook that may be entered into the **Cal-HOSA** and HOSA "Outstanding Chapter". For more information please visit, <http://www.hosa.org/natorg/sectb/cat-v/ohc.pdf>

Please note: Materials that are referenced in this section of the document were gathered from the following sources:

Cal-HOSA office Cal-HOSA, Inc Headquarters, 7945 Vineyard Ave D4, Rancho Cucamonga, CA 91730, Phone: 909-987-1012 x114; email: headquarters@cal-hosa.org or website <http://www.cal-hosa.org/> HOSA National HOSA 6021 Morriss Road, Suite 111, Flower Mound, TX 75028 ,Phone: (800) 321-HOSA Fax: (972) 874-0063 or Website <http://www.hosa.org/>

Materials and Supplies needed

Computer
Internet Access
Active Board

The Right to Remain Silent: Worksheet 2-1; one for each student (can be ran back to back with worksheet 2-2.)

The Big Picture: Worksheet 2-2; one for each student (can be ran back to back with worksheet 2-1).

Instructional strategies used:

Discussion
Brainstorming
Lecture
Small Group
Jigsaw

Class Activities

1. Collect *Health Careers Pathways for Me* writing assignments from the prior class.
2. Radiology exploration and patient privacy (60 minutes). Ask students to raise their hands, if they have had or know someone who has had any of the following radiological diagnostic tests:
 - a. X-Ray
 - b. CT Scan
 - c. MRI
 - d. Ultrasound
 - e. PET Scan
 - f. nuclear scan
4. Ask the students if they have heard of X-Ray vision? Ask them the meaning (some students may relate to super heroes such as Superman). Explain to students that Radiology is a field in the health science industry that allows for more of an in-depth study of bones and tissues in the body through different types of X-Ray vision. Over the years, technological advances have taken place that have allowed for greater study of people and disease processes in the area of Radiology. Ask them if they have studied this topic in their science class.
5. Share with students that in the area of Radiology, sometimes as a practitioner like in many health care industry fields, they become aware of private patient information. They may learn of a patient diagnosis or see something as a practitioner that the patient might not even be aware of. Maybe a person has a health condition such as cancer. Share with the students that it is important to understand their role in protecting patient privacy and not disclosing information. Share with students that there are laws that protect patient privacy and it is important to understand early on that this information can not be shared with others without the patient's approval or consent.

6. Ask students how they would feel if private information was shared about them, to a stranger, a family member, a friend? Highlight those individuals who would recognize that sharing of private information might be hurtful, embarrassing or painful, if someone knew the information before they even did.
7. Distribute the worksheet **The Right to Remain Silent**. In a jigsaw exercise, divide groups and have students look up the following terms (one term for each student group).
 - Patient's Bill of Rights*
 - Health Insurance Portability and Accountability Act*
 - Patient Safety and Quality Improvement Act*
 - Informed Consent*
 - Privileged communications*
 - Invasion of privacy*
8. Students should have about 15 minutes to look up the information and then share out to the large group in a brief presentation of 5-10 minutes what each term means.
9. Next, share with the students that as they move to the next section, they will be learning about radiology methods and you would like them to consider the terms that were just discussed when thinking about the radiology methods that they will be researching.
10. Refer to **The Big Picture** (Worksheet 2-2). **The Big Picture** (Worksheet 2-2) will be assigned as homework, but students will be allowed to complete the information during group presentations.
11. **The Big Picture** groups (2 hours). Divide students into small groups and assign one of the radiology methods studies on the **The Big Picture**.
 - a. Each student group will develop a presentation that will be shared as a group presentation with the class. It is encouraged that students use as much technology as possible.
 - i. The name of the radiology method.
 - ii. Describe the “who, what, when, where and why” of their radiology method.
 - iii. Describe what measures would need to be taken to “clean” machinery after patient’s use.
 - iv. What patient privacy information would need to be considered with this radiology method.
 - v. Students must provide two examples from Google images of their radiology method in their presentation.
12. Cal-HOSA (60 minutes)
 1. Students will conduct their Cal HOSA meeting.
 2. Students should begin to search for community outreach activities for their chapter. Some ideas include: Assisting public health with local influenza outreach clinics in their schools; volunteering at local hospitals, providing health presentation to a classroom.
 3. Students work on newsletter articles researching health related information to share with students.

Core Subject Matter Connections	
Social Studies	Life Science
	Using light
	Waves and Electromagnetism
	Reflection, Refraction & Absorption

**Subject matter of Life Science and Social Studies that will be discussed and may support the 7th and 8th health pathway program.*

Homework: The Right to Remain Silent (Worksheet 2-1)

The Big Picture (Worksheet 2-2)

Cal HOSA Fall newsletter article

Next reading assignments:

Health Science Career Exploration (Simmers, Louise) Chapter 2, & 14.

Exploring Health Careers (McCutcheon, Maureen & Phillips, Mary) Chapter 1 & 3, 17 and Appendix B.

Additional Teacher Resources

American Society of Radiologic Technologists www.asrt.org

Patient Bill of Rights

www.cancer.org/docroot/MIT/content_3_2_patients_Bill_of_rights.asp

Health Information Portability Protection Act (HIPPA)

www.hhs.gov/ocr/privacy/hipaa/understanding/index.html

Worksheet 2-1

The Right to Remain Silent

Below are some terms listed below are used to describe measures to protect patient privacy. In your group, look up a term and be prepared to share with the class what your term means.

Term	What does this mean?
1) Patient's Bill of Rights	
2) Health Insurance Portability and Accountability Act	
3) Patient Safety and Quality Improvement Act	
4) Informed Consent	
5) Privileged communications	
6) Invasion of privacy	

Worksheet 2-2

The Big Picture

Below are common radiological test used. Write out what each term stands for and then provide a definition of the test as well as why it might be used.

Term Stands for:	Definition and Use
1) X-Ray	
2) CT scan	
3) MRI	
4) Ultrasound	
5) PET Scan	
6) Echocardiogram	
7) Nuclear Scan	
8) Bone Density	
9) MDCT	