

# 5. Unit 5: Health Related Professions

Content Area: **Science**  
Course(s):  
Time Period: **Semester**  
Length: **12 blocks**  
Status: **Published**

## **General Overview, Course Description or Course Philosophy**

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This course provides an orientation to health care services and their delivery. It presents an interdisciplinary perspective, focusing on process skills such as critical thinking, ethical reasoning, effective communication and ways to continue independent learning throughout life. The course shows how all health care providers acquire professional competence in dealing with the issues and problems they face as well as the role they play as informed consumers.

## **OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS**

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1. List steps for planning a career in health care.
2. Define and differentiate licensure, registration, and certification.
3. Describe the typical work responsibilities, education, training, trends and legal requirements; employment; outlook; and average earnings of selected occupations in therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
4. List and explain the benefits of membership in a professional organization.
5. State the education, training, and legal requirements for becoming the various healthcare professionals in this unit.
6. Describe the typical work responsibilities in each profession.
7. .List desirable personal characteristics of the various healthcare professionals.
8. .Identify employment opportunities and key trends for these occupations.
9. Gain a better understanding of each field discussed in this unit.

## **CONTENT AREA STANDARDS**

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| 12.9.3.HL.2     | Explain the healthcare workers' role within their department, their organization and the overall healthcare system. |
| 12.9.3.HL-DIA.1 | Communicate key diagnostic information to healthcare workers and patients in an                                     |

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|                 | accurate and timely manner.   |
| 12.9.3.HL-DIA.4 | Explain procedures and goals to the patient/client accurately and effectively, using strategies to respond to questions and concerns.                   |
| 12.9.3.HL-HI.1  | Communicate health information accurately and within legal and regulatory guidelines, upholding the strictest standards of confidentiality.             |
| 12.9.3.HL-HI.2  | Describe the content and diverse uses of health information.  |
| 12.9.3.HL-HI.3  | Demonstrate the use of systems used to capture, retrieve and maintain confidential health information from internal and external sources.               |
| 12.9.3.HL-SUP.1 | Describe, differentiate and safely perform the responsibilities of healthcare support services roles.   |
| 12.9.3.HL-SUP.3 | Follow established internal and external guidelines in order to provide high-quality, effective support services in the healthcare facility.            |
| 12.9.3.HL-THR.3 | Utilize processes for assessing, monitoring and reporting patient's/clients' health status to the treatment team within protocol and scope of practice. |

## **RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)**

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| 12.9.3.ST.2    | Use technology to acquire, manipulate, analyze and report data.  |
| 12.9.3.ST-ET.4 | Apply the elements of the design process.  |
| 12.9.3.ST-ET.5 | Apply the knowledge learned in STEM to solve problems.   |
| 12.9.3.ST-ET.6 | Apply the knowledge learned in the study of STEM to provide solutions to human and societal problems in an ethical and legal manner. |
| 12.9.3.ST-SM.3 | Analyze the impact that science and mathematics has on society.  |

## **STUDENT LEARNING TARGETS**

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Refer to the 'Declarative Knowledge' and 'Procedural Knowledge' sections.

### **Declarative Knowledge**

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Students will understand that:

- The steps for planning a career in health care.
- How the typical work responsibilities, education, training, trends and legal requirements; employment; outlook; and average earnings of selected occupations in therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.
- The benefits of membership in a professional organization.
- State the education, training, and legal requirements for becoming the various healthcare professionals in this unit.
- The characteristics in the fields discussed in these units.

## **Procedural Knowledge**

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Students will be able to:

1. Differentiate licensure, registration, and certification.
2. Recognize the benefits of membership in a professional organization.
3. Describe the typical work responsibilities in each profession.
4. Recognize the desirable personal characteristics of the various healthcare professionals.
5. .Identify employment opportunities and key trends for these occupations.

## **EVIDENCE OF LEARNING**

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Refer to the 'Formative Assessments' and 'Summative Assessments' sections.

## **Formative Assessments**

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- Read Chapter(s) and complete chapter check point questions
- Complete Career Chart
- Chapter Wrap Up Question
- Study Guide for each chapter in unit

## **Summative Assessments**

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- Benchmarks – departmental benchmark given at the end of MP1, MP2, and MP3 based on lab practices
- Alternative Assessments

- Lab inquiries and investigations
- Lab Practicals
- Exploratory activities based on phenomenon
- Gallery walks of student work
- Creative Extension Projects
- Build a model of a proposed solution
- Let students design their own flashcards to test each other
- Keynote presentations made by students on a topic
- Portfolio

#### Overview of Healthcare Careers:

- Students are placed in groups of 4. On each corner of a paper, they each write their names, career choice, education necessary, expected job description (what would happen on an ordinary day) Students are to discuss the four individuals represented on the corners of their papers and invent a scenario in which each would be professionally involved. Scenarios will be shared with the class.
- Students will take the "How do you see yourself" survey on a career interest inventory key. Discussion after .
- Students will be assigned the "Career Research" assignment to be started in class and finished at home. They will be asked to find out the following information: responsibilities, education, advanced degrees available licensing, professional organizations, Salary, job outlook and work environment.

#### Therapy/Alternative Therapies

- Students will choose an alternative therapy (massage, hippo therapy, aquatic, etc.) and will do research and present to the class a synopsis of this therapy and if it is available in this area.
- Students will complete on going chart of careers

#### Diagnostic and Imaging:

- Investigate it #2 on page 145 in class discussion on the tremendous growth in the number and cost of imaging procedures performed. Students will evaluate why there has been an increase in incidence. How can we control costs of these procedures?
- Students will watch a short video on the increase of diagnostic test.  
<http://www.youtube.com/watch?v=YGPYe2Qe7p0> 4)
- Discussion of the definitions of the various fractures from "Identifying Fractures" Class will view various fractures on smartboard and will try to identify the fracture.
- Students will be given the packet of "Identifying Fractures" and will be asked to identify the various fractures from the pictures. 5) Students will watch a short video about a day in the life of a radiologist

technician. <http://www.youtube.com/watch?v=HvPA-ipmvUQ>

- Students will create their own x-ray using images from the internet and black scratch paper.
- Students will view the website with images of how iphones are being used for diagnostic testing. <http://internetmedicine.com/2012/12/14/top-ten-medical-uses-of-the-iphone/>
- Students will need to research a diagnostic procedure and create a google doc that includes pictures and a brief explanation of dx achieved by diagnostic tests. They will then present their findings to the class.
- Students will complete ongoing chart of careers

### Lab and Pharmacy

- Students will participate in a powerpoint review of chapter.
- Students will review and discuss Emily's Law (Pharmacy tech ruling) <http://emilyjerryfoundation.org/emilys-story/> <http://www.youtube.com/watch?v=iru56ZO9tKc> (interview with pharmacist) Interview with Mr Jerry [http://www.youtube.com/watch?v=9jmULQ\\_m04o](http://www.youtube.com/watch?v=9jmULQ_m04o) 3)
- Students will watch the following video on Lab Technologist <http://www.youtube.com/watch?v=AqNAXCyTh-c>
- Students will discuss job overview of the following occupations: \* Clinical laboratory technologists \* Clinical laboratory technicians \* Laboratory assistants \* Pharmacists \* Pharmacy technicians
- Students will be broken up into groups of 2-3 and will discuss common blood work and interpretation of the blood work: Students are to use a class powerpoint in which each group will find a copy of a lab report of their designated lab test. <http://labtestsonline.org/> -CBC -Chem Screen -Lyme Titer -Sed Rate -LFT's -Lipid panel
- Students will use the class before the assessment to play other students board games to review for unit test.
- Students will complete ongoing chart
- A stethoscope is an instrument that is utilized by health care providers to listen to the internal sounds of a patient. For example, a nurse might use a stethoscope to amplify the sound of a patient's pulse if it is faint.
- Hospitals are facilities for patients who are acutely ill, have severe injuries or require surgery and overnight care. Women who are giving birth are also commonly hospitalized.
- Sub-acute care facilities are places for patients who have complicated medical and rehabilitative needs. In general, these patients are not sick enough to require the intense care of a hospital, but they are not recuperated well enough to be cared for at home. In addition, patients who are unable to tolerate the intense level of therapy in a rehabilitation center may be transferred to a sub-acute facility

to continue rehabilitation after a hospital stay.

- An extended care facility provide health care and assistance with activities of daily living for individuals who are unable to care for themselves at home. Patients may have relatively short stays of a few days or weeks or they may stay in a facility (e.g. a nursing home) for the rest of their lives. Patients may live in an assistive care facility (ACF) because they need help with some activities of daily living (e.g., meal preparation, medication monitoring). Patients in an ACF may be independent in their other activities.
- Rehabilitation centers provide patients with extended rehabilitation. In general, a medical or post-surgical patient must be able to tolerate at least 3 hours of intensive physical, occupational and/or speech therapy per day to qualify for a rehabilitation center. A patient who has difficulty walking may spend a few weeks in a rehabilitation center in order to improve walking ability. Such a patient would return to the community after a stay in the rehabilitation center. In addition, rehabilitation centers are available for individuals with drug dependency, emotional problems, mental or psychiatric illness who require a long-term intensive care program without the distractions of their normal life issues. In either case, a team of health professionals works with the patient so that (s)he is able to return to the community as an independent member of society.
- Hospice care is provided for individuals who need assistance with pain and symptom reduction and stress-relief. In general, patients who are in hospice have a change in focus from aggressive medical care to supportive medical care. In the past, hospice care was provided for patients who had a limited lifespan from a serious illness like cancer. However, that is no longer the case. Patients are supported in an improved quality of life. Families often have an active role in hospice care.
- Complementary therapies that use holistic methods promote healing through nutrition, exercise or relaxation.

## **RESOURCES (Instructional, Supplemental, Intervention Materials)**

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- Health Informatics and Health Information Management careers
- <http://www.ahima.org/careers>
- <https://www.cahiim.org/accreditation/hi-and-him-accreditation>
- [https://www.payscale.com/research/US/Job=Health\\_Informatics\\_Specialist/Salary](https://www.payscale.com/research/US/Job=Health_Informatics_Specialist/Salary)

- Health Information Management in a Hospital Setting
- <https://www.youtube.com/watch?v=fI6tuW3-tek&feature=youtu.be> (2014, 45:15)
- Clinical Research Coordinators
- <https://www.careeronestop.org/videos/careeronestop-videos.aspx?videocode=1191210> 1
- (downloaded 4-14-21, 1:35)
- Clinical Research Profession
- <https://acrpnet.org/professional-development/launching-your-career/>
- Medical Health Services Managers
- <https://www.bls.gov/OOH/management/medical-and-health-services-managers.htm#tab-1>

## **INTERDISCIPLINARY CONNECTIONS**

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- Group and partner activities are assigned when possible
- Students will be grouped based on learning styles and approach to processing content

## **ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS**

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See link to Accommodations & Modifications document in course folder.