



NEBRASKA CAREER TOURS

WHAT TO EXPECT...



INTERVIEWS

Each video contains interviews with employees and business representatives discussing work requirements, education levels, salary and job prospects.



TOURS

Experience virtual industry tours that provide a unique opportunity to get a glimpse inside Nebraska-based companies without leaving your home or classroom.



INFORMATION

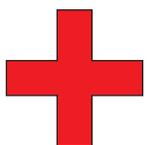
Throughout the videos you will find valuable information regarding job markets, salaries, and educational requirements to help you identify a possible career path.





NEBRASKA CAREER TOURS **HEALTH SCIENCES**

This cluster orients students to careers that promote health, wellness, and diagnosis as well as treat injuries and diseases. Some of the careers involve working directly with people, while others involve research into diseases or collecting and formatting data and information.



NOTE TO INSTRUCTOR:

Note to instructor: Below are suggested activities and questions to accompany the virtual industry tour. Each component may be used individually or modified to fit the needs of your classroom. For more information on this Career Cluster, visit these websites:

- <http://www.education.ne.gov/nce/CareerClustersResources.html>
- <http://h3.ne.gov/H3/>
- <http://www.nebraskacareerconnections.org>

BELL RINGER:



Post on a writing surface for students to answer as they enter the room. They will respond individually in their notes. Then have students share with a partner or discuss as a class.

“The leading cause of death in the United States is heart disease. A healthy diet and exercise can help prevent this illness. List all fruits and vegetables you consumed and exercise you completed yesterday.”

ANTICIPATORY SET:



Guide students to think about the importance of the Health Sciences Career Cluster by providing each with a “Health Science Bingo” worksheet. Give these instructions:

“Raise your hand if you have played “Bingo” before. Today we will be playing a form of human bingo.”

“In each box of the worksheet is a descriptor. When we begin, you will find individuals to whom the descriptors apply. Have the individual initial the box on the bingo sheet. A person may only sign your paper one time. When your worksheet is completed, return to your desk. Questions?”

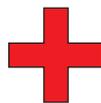
Allow about four minutes for this activity. Then ask these questions:

**“How many were able to complete the entire bingo sheet?
What boxes were the most challenging to get filled?
All of the descriptors are related to the Health Science Career Cluster. Most of us have interacted with professionals in this area at one time or another.”**

INTRODUCTORY QUESTIONS:



Ask the following questions to students in journal form or aloud. If asking aloud, have students share with a partner first, then ask two or three students to share. Responses will vary. Remember these responses are based on the students’ knowledge prior to watching the virtual tour.



“When you think of Health Sciences, what types of jobs come to mind?”

Are these careers YOU might be interested in?”

CONTENT:



Show the 15-minute virtual industry tour, which features three businesses to the class: www.necareertours.com Students may individually view the video online as well. Have students complete the guided notes worksheet as they learn about the Career Cluster. Introduce the virtual tour by saying:

“Today we will watch a video highlighting three different businesses in the Health Sciences Career Cluster. Each business will describe their involvement in the industry, as well as the different careers associated with this area.”

FOLLOW-UP QUESTIONS:



Ask the following questions to students after they view the virtual industry tour. Questions can be given as journal questions or asked aloud. Questions can also be assigned individually or in groups.

1. How would you define this Career Cluster?

- The Health Sciences Cluster involves careers that promote health, wellness and diagnosis as well as treat injuries and diseases. Some careers work directly with people while others involve research into disease or collecting and formatting data and information.

2. What surprised you about this Career Cluster?

- Answers will vary.

3. What types of careers are included in this Career Cluster?

- Doctor, nurse, phlebotomist, radiologist, pharmacist, dietician, food service, psychology, social work and CNA.
- Other careers not mentioned in the video: Biomedical engineer, lab technician, medical scientist, quality assurance technician, quality control technician, cardiovascular technologist, exercise psychologist, medical technologist, nuclear medicine technologist, radiologic technologist, data analyst, health care administrator, health information coder, health service manager, medical records technician, dietary technician, facilities manager, food service, hospital maintenance engineer, dental hygienist/assistant, fitness trainer, home health aides, registered nurse and surgical technician.
- A few careers mentioned in the virtual tour are not technically part of the Health Sciences Career Cluster. However, these jobs are an essential part of the industry. They include: Assembly line worker, electrical engineer,



mechanical engineer, management, housekeeping, finance, marketing and drafting.

- o Note to instructor: This would be a good time to explain to students that this Career Cluster can be divided into five Career Pathways including:
 - Biotechnology research and development
 - Diagnostic services
 - Health informatics
 - Supportive services
 - Therapeutic services
- o Each Career Pathway has a more narrow skill set for the occupations within this pathway.
- o For more information about these careers, have students visit: <http://h3.ne.gov/H3/h3ByCluster.xhtml?param=8.0000>

4. What careers and jobs in this Career Cluster could be obtained immediately after high school graduation?

- o Housekeeping, food service, and certified nurse's assistant (CNA). Many jobs in this Career Cluster require some type of degree.
- o Other examples: Data entry, dietary manager, dental assisting, health aide, medical assistant and equipment repair
- o For more information about these careers, have students visit: <http://www.education.ne.gov/nce/careerclusters/2013/HEALTH.pdf>

5. The video mentioned an increase in jobs in this Career Cluster, especially nursing and residential care facilities. What factors contribute to this increase?

- o Aging population, overall population increase, increasing health risk factors including stress and obesity and national health care reform to increase service to all individuals

6. Fifty percent of student interns obtain full-time employment at the place of their internship. Why? What are other benefits of internships?

- o The benefit for the business is that it is very expensive to hire people for jobs. Companies like the opportunity to "try out" an employee without having to fully hire them. If the intern fits into the culture of the company, they are more likely to hire them.
- o Work experience to include on resume and for future jobs, gain knowledge and experience, exposure to real



tasks of the job to help determine if this is a future career, some internships are paid, potential to earn college credit, network with professionals in the career field, develop new skills, and develop confidence.

7. The Mary Lanning Healthcare pharmacist mentioned job shadowing in the 7th grade. What is the difference between a job shadow and an internship? Where in our local community could you complete a job shadow in this Career Cluster?

- o Answers will vary. Local opportunity responses will be based on local community and area. Could include: Veterinary offices, physical and occupational therapy centers, dialysis centers, nursing home and hospital.
- o Job shadowing is generally short (one or two days), unpaid, usually observing and watching. Internships are generally a summer or semester experience, can be paid, and involve completion of tasks with supervision.

8. The Scanned tour demonstrated soldering a port to a coil. How is this job part of the Health Sciences Career Cluster? What other careers are essential to the industry?

- o While assembly line work and engineering are not technically part of the Career Cluster, they are essential careers in the industry. Many careers cross over between the Career Clusters. The creation of medical tools is imperative to health care.
- o Answers will vary: Lawyer, insurance, banking, communications, marketing, education, information technology and more.

9. Core academic skills include reading, written communication, listening, speaking, and mathematical reasoning with problem solving. How might these core academic skills be used in this Career Cluster?

- o Answers will vary.
- o Here are a few examples: Pharmacist must be proficient at reading labels for side effects, dosing instructions and more. Nurses must be able to write and type descriptions of patient observations and stats. Listening and speaking is very important for a care provide to communicate effectively with the family of patient. Math and problem solving is used daily by design engineers to create and improve medical devices.

10. The virtual industry tour mentioned three traits employers seek when hiring. What other Career Readiness Skills should a desirable applicant possess?

- o Answers will vary.



11. The Mary Lanning Healthcare CEO discussed the broadness of their business. What benefits exist for a healthcare company to have several components and services?

- o Improved communication between all doctors and physicians in all aspects of treatment and care, coordination for scheduling appointments between different departments, closer location of services for patients and opportunity to share employees and administration.

12. A majority of Health Science careers are considered high skill occupations. What does this mean?

- o High skill occupations require some form of training and education beyond high school.
- o For more information, have students visit:
<http://h3.ne.gov/H3/>

**EXTENDED
LEARNING
ACTIVITIES:**



The following are suggested activities that will increase student learning and exposure to this career cluster.

- Visit a nursing home.
- Organize a community blood drive.
- Take a CPR or first aid course.
- Complete CNA (Nursing Assistant Certification) or EMT (Emergency Medical Technical Basic) training.
- Job shadow or assist the sports therapist at sports activities. Duties can include helping tape ankles
- Select a career from this Career Cluster. Research the career and present information to the class in the form of an oral presentation, poster, PowerPoint, iMovie or Prezi presentation. Information to find includes: Salary, education required, typical day schedule, positive aspects of the job and negative aspects of the job.
- Make a list of the Career Readiness Skills that are personal strengths. Then make a list of the skills and behaviors required for a career in Health Sciences. Compare the list to determine what Career Readiness Skills need to be strengthened for employment in this Career Cluster.
- Complete a mock job application and job interview with a local Health Sciences employer.
- Construct a resume for a specific career in this Career Cluster.
- Meet with the school counselor to discuss classes that would help prepare a student for careers in this Career Cluster. Also, discuss certifications that can be obtained during high school.
- Identify a post-secondary institution that offering certifications or degrees that could be utilized in this Career Cluster. Obtain and complete admissions and scholarship applications for the school or program.



HEALTH SCIENCE

Has been to the dentist this year	Has been to the doctor this year	Has taken medicine in the past month	Has received a shot this year
Has had a broken bone	Brushed teeth today	Has had an x-ray	Visited someone in the hospital this year
Visited someone in a nursing home	Has had a vision test	Has had a hearing test	Has exercised this week



HEALTH SCIENCES

Name: _____

*Instructions: Questions 1, 2 and 3 should be answered by watching all three sections of the virtual industry tour. **www.necareertours.com***

1. List eight careers mentioned during the virtual industry tour:

- | | |
|----|----|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | 8. |

2. List three Career Readiness Skills employers want to use everyday on the job:

- 1.
- 2.
- 3.

3. Where is each business located?

Business	Location
Mary Lanning Healthcare	
Tabitha	
Scanmed	

Instructions: The following questions are specific to the Mary Lanning Healthcare section.

4. Describe what Mary Lanning Healthcare does:

5. By 2022, pharmacy related careers are expected to increase by what percent? _____

6. How many colleges in Nebraska offer programs in Medicine, Pharmacy and Pharmacy Tech? _____

7. How many years of education beyond high school are required to become a pharmacist? _____

8. Describe the responsibilities of a pharmacist within a healthcare facility:

9. What percentage of pharmacists are male? _____ Female? _____

10. What percent of interns become full-time employees at the place of their internship? _____

Instructions: The following questions are specific to the Tabitha section.

11. Describe the services provided by Tabitha:

12. How many people are employed by Tabitha? _____

13. By 2022, nursing and residential care facilities employment is expected to increase by what percentage? _____

14. How many counties in Nebraska are served by Tabitha? _____

15. How many Social Work programs are offered in Nebraska colleges? _____

Instructions: The following questions are specific to the Scanned section.

16. Describe what Scanned does:

17. On averagem how much are mechanical and electrical engineers paid per hour? _____

18. What percent of Health Science occupations are considered high skill? _____



HEALTH SCIENCE

Instructions: Questions 1, 2 and 3 should be answered by watching all three sections of the virtual industry tour. www.necareertours.com

1. List eight careers mentioned during the virtual industry tour:

- | | |
|---------------------------------|-------------------------------|
| 1. Doctor/physician | 5. Pharmacist |
| 2. Nurse Assistant (CNA) | 6. Nurse |
| 3. Phlebotomist | 7. Electrical engineer |
| 4. Radiology technician | 8. Mechanical engineer |

(Others: housekeeper, dietary staff, homemaker, manager, hospice aid, assembly line worker, painter, carpenter)

2. List three Career Readiness Skills employers want to use everyday on the job:

1. **Share knowledge**
2. **Provide customer service**
3. **Establish and execute plans to completion**

3. Where is each business located?

Business	Location
Mary Lanning Healthcare	Hastings, Nebraska
Tabitha	Lincoln, Nebraska
Scanmed	Omaha, Nebraska

Instructions: The following questions are specific to the Mary Lanning Healthcare section.

4. Describe what Mary Lanning Healthcare does:

Includes a hospital, cancer center and imaging center.

5. By 2022, pharmacy related careers are expected to increase by what percent? 13.2%

6. How many colleges in Nebraska offer programs in Medicine, Pharmacy and Pharmacy Tech? 4

7. How many years of education beyond high school are required to become a pharmacist? 8

8. Describe the responsibilities of a pharmacist within a healthcare facility:

In addition to "counting pills," examining drug interactions and health history of patients, studying patient charts, making recommendations of medicine and deciding correct dosages.

9. What percentage of pharmacists are male? 44% Female? 56%

10. What percent of interns become full-time employees at the place of their internship? 50%

Instructions: The following questions are specific to the Tabitha section.

11. Describe the services provided by Tabitha:

Long and short term care, living community, independent living, assisted living, private duty services, homecare, adult day services, hospice and meals on wheels.

12. How many people are employed by Tabitha? 1000

13. By 2022, nursing and residential care facilities employment is expected to increase by what percentage? 20.7%

14. How many counties in Nebraska are served by Tabitha? 28

15. How many Social Work programs are offered in Nebraska colleges? 8

Instructions: The following questions are specific to the Scanmed section.

16. Describe what Scanmed does:

High tech, manufacturing, engineering, design and repair of medical devices and instruments. MRI machines are their speciality.

17. On averagem how much are mechanical and electrical engineers paid per hour? \$36-39

18. What percent of Health Science occupations are considered high skill? 83.3%



NEBRASKA CAREER TOURS

ABOUT THIS PROJECT

The virtual industry tours provide a unique opportunity for students, parents and job-seekers to experience Nebraska-based industries without leaving the home or classroom.

The videos showcase different businesses and industries in each of the sixteen Career Clusters in the Nebraska Model. In addition to the tour of the business or industry, the videos also contain interviews with employees and managers discussing work requirements, education levels, salary and job prospects. The videos provide an accurate picture of today's workplace, breaking down stereotypes and assumptions while emphasizing the knowledge and skills required to be successful.

The teacher and student guides are designed to enhance student learning for each virtual tour. For the students, a guided notes worksheet is included to help them record important information about the career cluster. The teacher's guide includes a lesson plan complete with anticipatory set, introductory questions, and discussion questions to follow the virtual tours.

SPONSORS



It is the policy of the Nebraska Department of Education not to discriminate on the basis of sex, disability, race, color, religion, marital status, age, or national origin in its education programs, admission policies, employment, or other agency programs.

www.necareertours.com

