Slide 1: The logical place to begin a semester-long study of health is with a definition of HEALTH. HEALTH is a very complex concept and coming up with one universally accepted definition may be an impossible task!

slide 2: We ask HLTH 1000 instructors to share their definitions by describing characteristics of health college students. How do these definitions compare with yours?

Slide 3: Probably one of the most universally accepted definitions of HEALTH is the one developed by the World Health Organization (WHO). Which is: "HEALTH is not merely an absence of disease or infirmity but a complete state of physical, mental and social well being." There are many definitions of health, but I think the best definitions share several common components.

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Slide 5: Throughout this presentation you will be presented with questions to test your knowledge. At the end, you will have an opportunity to make changes to your original responses. Okay, here's your first question: Which of the following is not one of the 6 dimensions of health?

Slide 6: The multiple dimensions of health include: social, physical, spiritual, environmental, intellectual and emotional.

Slide 7: Most of us only think of health in terms of PHYSICAL HEALTH which includes functions of the body systems, physical fitness and minimum exposure to physical abuses like smoking and environmental pollution. But lets not limit our concept of HEALTH to just physical health. Let's include all the dimensions.

Slide 8: SOCIAL HEALTH refers to one's well-being in interacting with others. It is the ability to perform social roles effectively, comfortably, and without harming others.

Slide 9: EMOTIONAL HEALTH is the ability to recognize and accept a variety of feelings; it requires understanding emotions and coping with problems that arise in everyday life.

Slide 10: INTELLECTUAL HEALTH refers to how effectively we think. It involves having a mind open to new ideas and concepts and the ability to seek new experiences and challenges.
Slide 11: ENVIRONMENTAL HEALTH refers to an appreciation of the role a person plays in preserving, protecting and improving environmental conditions.

Slide 12: SPIRITUAL HEALTH is the ability to balance inner needs with the demands of the rest of the world and the ability to envision a purpose in life.

Slide 13: Okay, here's another question for you: True or false: In 1900, the average life expectancy was half of what it is today.

Slide 14: What we consider "good health" has changed significantly over time. Early in the 20th century, if you weren't sick, you were not only considered lucky, but also regarded as HEALTHY. The average life expectancy was half of what it is today, mainly because deadly epidemics such as influenza, TB and pneumonia killed millions of people. Those that survived these diseases were believed to be hearty and healthy.

Slide 15: Another quick question: What do you think was the leading cause of death in 1900?

Slide 16: From 1900 until around 1940, the leading causes of death were TB, flu, and pneumonia. What these disease have in common is that they are all considered "infectious communicable" diseases.

Slide 17: What are infectious communicable diseases? Infectious means that the disease is caused by a pathogen. A pathogen is any disease causing organism...a "bug," if you will. There are several major classifications of pathogens including: viruses, bacteria, fungi, parasites, and protozoa.

Slide 18: "Communicable" means that the pathogen can be spread from one person to another. In other words, it is contagious. Infectious communicable diseases are transmitted from one person to another through a series of steps—a CHAIN OF INFECTION.

Slide 19: Okay, here's a tough one. In the Chain of Infection, which of the following is defined as "the natural environment in which the pathogen typically resides?"

Slide 20: The CHAIN OF INFECTION has six major links. It begins with the PATHOGEN. As an example, let's use one we are all familiar with, the rhinovirus, which causes the common cold.

So our pathogen is the rhinovirus. It's RESERVOIR, or natural environment, is the human body, particularly the dark damp mucus membranes like the nose, throat and sinuses. Let's say I have a cold, if I'm to pass it to you, it must leave my body somehow. That is the PORTAL OF EXIT. For the rhinovirus it's nose or throat discharges, but for other pathogens it could be saliva, mucus, blood or feces. The MEANS of TRANSMISSION for my rhinovirus could be a cough or a sneeze. With some infections, transmission can also occur indirectly with
animals, insects serving as what is called vectors or they can be transmitted from soil, food, water and inanimate objects like doorknobs or tissues. The PORTAL of ENTRY is how the pathogen enters the body. Pathogens can enter through penetration of the skin, inhalation through the mouth or nose or ingestion of contaminated food or water. Once in the NEW HOST, a variety of factors will determine whether or not the pathogen will be able to establish itself and cause an infection including strength of the host's immune system, and the number and strength of the pathogens that entered the body.

Slide 21: Back to our rhinovirus for just a minute...unfortunately, there is no way to escape the common cold. The average adult has two to five colds per year. But there are a few things you can do to reduce your chances of getting sick:

Wash your hands. Because cold viruses are mainly passed through hand contact, washing up with soap will help reduce the spread of infection.

Get rid of tissues. Used tissues carry germs and increase the possibility of you becoming infected. So toss them in the trash right after you use them.

Clean with disinfectant wipes. In the office or at home, wipe down hard surfaces like telephones or doorknobs where viruses can live for up to three hours.

Reduce your stress. Ever notice how you seem to get more colds right around exam time? Recent studies have shown that high levels of stress can lower your body's ability to fight off a cold.

Slide 22: During the first third of the 20th century, most public health efforts concentrated on the reducing the spread of infectious communicable diseases, because they were the leading causes of death. Here is a health education film from 1940 instructing its viewers in how to protect themselves from the perils of infectious disease.

Slide 23: Do you know this one? Who invented penicillin thereby ushering in what is called the "Age of Medicine?"

Slide 24: England's Sir Alexander Fleming was a young bacteriologist in 1928 when an accidental discovery led to one of the greatest developments of modern medicine. Having left a plate containing a culture of staphylococcus bacteria uncovered, Fleming noticed that a mold that had fallen on the culture had killed many of the bacteria. He identified the mold as penicillium notatum, similar to the kind found on bread. This discovery lead to the development of penicillin. With the development of penicillin, and other antibiotics and vaccines against most deadly infectious diseases, many of the leading causes of death were wiped-off the list.

Slide 25: Take a close look at this "Leading Causes of Death" graph. You see that in 1900 and 1920, infectious disease (represented here by the dark blue and yellow) accounted for a large percentage of the deaths. But beginning around 1940, what trend do you notice?
By 1940 the percentage of deaths from infectious disease has been surpassed by deaths resulting from chronic disease (represented in turquoise and green on the graph). Yes, by 1940 the leading causes of death were no longer infectious diseases.

Slide 26: What is the leading cause of death in 2005?

Slide 27: In fact, the leading causes of death in 1940 were the same as they are today: heart disease, cancer and stroke. So "infectious communicable diseases" have been replaced by "chronic degenerative diseases" as the leading causes of death in the U.S.

Slide 28: What are Chronic Degenerative Diseases? Chronic means that it doesn't go away; it is yours for the long term. Degenerative means the disease worsens over time.

Slide 29: Time for another question. True or False: There are no single causes of chronic disease.

Slide 30: Chronic degenerative diseases differ from infectious diseases in several important ways. Therefore, we must combat them in different ways. Let's check out a comparison of the differences: Infectious diseases are caused by pathogens; with chronic diseases we don't have definitive causes only risk factors. Most infectious diseases are contagious, chronic diseases are not. Infectious diseases are usually curable or eventually just run their course. While chronic diseases are often treatable, they are rarely if ever curable. Infectious diseases usually have a short onset, meaning the time from exposure to the time of illness is usually pretty quick. Chronic disease often have a long onset. Think of heart disease, you are probably developing the early signs of heart disease by your late teens but more than likely will not display any symptoms for 20, 30 or 40 years. Finally, infectious diseases usually have a short duration...they don't last too long whereas you can have a chronic disease for many years.

Slide 31: While it may be that heart disease, cancer and stroke actually kill us, certain behaviors put us at significant risks for contracting these and other causes. For example over 400,000 deaths per year can be attributed to cigarette smoking.

Slide 32: An important question for us this semester is how many of these risky behaviors are we involved in? If we want to practice "Wellness", we must pay attention to our behaviors and how they affect our health.

Slide 33: So, what is WELLNESS, anyway? Wellness involves making informed and responsible decisions about behaviors that can either enhance or damage our health. It is optimal health and vitality. Take a look at these wellness behaviors. How many do you practice on a regular basis?
Slide 34: If antibiotics and vaccines against infectious diseases were the magic bullet cures of the first half of the 20th century; then HEALTHY LIFESTYLE CHOICES are the closest thing we have to a magic bullet today. Unfortunately, protecting yourself from today’s chronic disease killers is much more difficult and complicated than a shot of penicillin.

Slide 35: Time for another question. The average life expectancy in the U.S. is 76.9. On average for how many of those years is the typical American impaired by poor mental or physical health?

Slide 36: Keep in mind that we don't just want to live LONGER, we want to live HEALTHIER longer. While the life expectancy of Americans has increased significantly in the past century, on average poor health restricts the last 17% of our lives. Buy making better lifestyle choices while you are young, you can increase the quality and years of healthy life.

Slide 37: Unless we're living perfect lives, improving our health will probably involve changing one or more of our behaviors. It may seem very difficult to change certain health behaviors, like smoking, alcohol use or poor eating habits. And you're probably right. Change, and especially big changes are hardly ever easy. However, health experts contend that even small changes can have a significant impact on your health. You've got to start somewhere, right?

Slide 38: If you already know that you do need to make some lifestyle changes, don't feel like you're alone. Probably most of us could make improvements in the choices we make. Want to know what your Health 1000 instructors are working on in their lives?

Slide 39: Check out this list of small changes. See any you could try...just for today? We'll attempt some bigger changes as the semester progresses.

Slide 40: Changing certain health behaviors can be extremely challenging. It rarely happens just because you want it to. To start and maintain a behavior change program you're going to need commitment, a well-developed plan, social support and a system of rewards.

Slide 41: So welcome to Health 1000! Think of this course as a personal journey to self-discovery. We hope the online lessons, self-assessment assignments, in-class lectures and activities, and interaction with your fellow students will enable you to learn a great deal about who you are and how the choices you are making affect your own health and well-being. Our hope is that you may even be motivated to make some positive changes in your life. We're honored to be your guide on this journey. Thanks for taking us along.

Slide 42: ECU faculty who teach HLTH 1000 find it very rewarding! To close this presentation, we thought you'd like to know why we love it so much.