

THIS WEEK IN BI 103

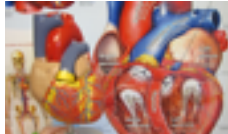
EXAM #1 IS MONDAY APR. 20, 7:00 - 7:50 P.M.

TUESDAY LECTURE



Respiratory System
A relatively simple organ system, susceptible to infection.

THURSDAY LECTURE



Cardiovascular System
Basic structures and functions, more on disorders next week.

RECITATION



Respiration
Lung anatomy and human behaviors tied to a variety of disorders.

LABORATORY



Heart and Vessels
Follow the path blood takes as it travels through the body.

TEXTBOOK READINGS



196-205; 378-391; 170-185; 346-361
First two sets of readings are the respiratory system.



Work Ahead for the Respiratory System

Read 196-205 & 378-391 in *Human Body* and answer the following questions.

Where are **alveoli** located? _____
 Why is surfactant important in the alveoli? (p. 198-200)

Where are the vocal cords located, and how do they generate sounds? (p. 204)

What anatomically happens when you cough? (p. 205)

Compare and contrast bronchitis with pneumonia (p. 381-382)



Work Ahead for the Cardiovascular System

Read 170-185 & 346-361 in *Human Body* and answer the following questions.

How does the nervous system impact the heart? (p. 177)

Describe what happens within the heart during diastole, atrial systole, and ventricular systole (p. 179).

Thought Question:
How do the respiratory and cardiovascular systems connect together? (p. 180)

What causes **angina** (p. 347)?

What causes a **heart murmur** (p. 351)?

Work Ahead for Recitation

In the **activity manual**, read over *Respiration* to answer these questions.

Using the **Human Body** book (p. 198), try labeling the lung photo in question #2, p. 66

What is **vital capacity**? _____
 To calculate an individual’s vital capacity, what three measures do you need to include (p. 67-68).



Respiration:
 In which lung structure is air exchanged with the blood in capillaries?
Human Body, p. 200

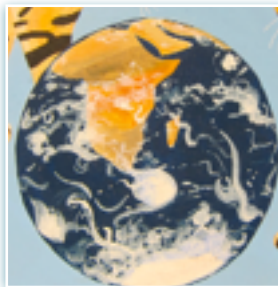
Work Ahead for Laboratory

In the **activity manual**, read over *Heart and Vessels* to answer these questions.

Using the **Human Body** book (p. 198), try labeling the heart photos in question #1, p. 74.

The heart pumps blood to two locations, the right side of the heart pumps low-oxygen blood to the _____, where carbon dioxide is dropped off and oxygen is picked up. The left side of the heart pumps blood to the rest of the body.

What role do the **valves** play in the heart (question #6, p. 75).



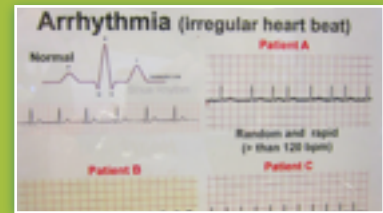
Happy Earth Day
 Wed. April 22

Where is the **sinoatrial node** (our natural pacemaker) located in the heart? (question #1, p. 76). _____

If atherosclerosis (see panel to the right) leads to blockage of an artery in the brain, which disease results? (question #7, p. 79). _____

If your exam #1 results are not as high as you would like... First do the “Exam Results Analysis” portfolio assignment (activity manual, p. 71). Next, seek assistance from the Teaching Team ([office hours](#) are posted at the course website).

Cardiovascular Diseases



Arrhythmia: Irregular heart rate; erratic, too fast, or too slow (**Human Body**, p. 349).



Myocardial Infarction: Death of part of the heart muscle, also called a heart attack (p. 348).



Atherosclerosis: Arteries become narrowed due to a buildup of fatty deposits (p. 346).



Hypertension: Abnormally elevated blood pressure (p. 361).