SBI3C – Grade 11 College Biology

Unit One - Internal Systems

**Big Idea**

Organ systems of the human body have specific structures and functions that work together to maintain homeostasis and prevent disease.

**Learning Targets #1**: **Organization and Homeostasis**

1. Describe the organization and general systems of the body
2. Define homeostasis and give examples of systems achieving homeostasis through negative feedback loops.
3. Defend how body systems interact to support homeostasis and prevent disease of the body as a whole.

**Learning Target #2: The Digestive System**

1. Describe the specific structures and functions of key organs to support the overall function of the digestive system
2. Describe the role and importance of peristalsis and sphincters throughout the system
3. Describe specific enzymes and explain their role in digestion
4. Defend how various illnesses/disorders that disrupt the homeostasis of the digestive system can be prevented.

**Learning Target #3: Respiratory System**

1. Describe the specific structures and functions of key organs to support the overall function of the respiratory system.
2. Describe and illustrate the specific mechanics of breathing as it relates to volume and pressure changes (normal v. extreme environments)
3. Defend how various illnesses/disorders of the respiratory system affect homeostasis of the body and can be prevented.

**Learning Target #4: Circulatory System**

1. Describe the specific structures and functions of key organs to support the overall function of the circulatory system.
2. Describe and illustrate both the systemic and pulmonary circulation pathways
3. Compare diastolic and systolic blood pressures and the risks associated with values outside of normal
4. Defend how various illnesses/disorders impact all systems and can be prevented

