

Anatomy & Physiology

Unit 1: The Organization of the Body

5 days

3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
3.6.1	The student understands animals have behavioral responses to internal changes and to external stimuli.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.

Unit 2: The Chemical Basis of Life

2-3 days

3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
3.6.1	The student understands animals have behavioral responses to internal changes and to external stimuli.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.1	The student understands some chemical and physical hazards and accidents can be avoided through safety education.

Unit 3: Anatomy of Cells

5 days

3.1.1	The student understands cells are composed of a variety of specialized structures that carry out specific functions.
3.1.5	The student understands cells can differentiate, thereby enabling complex multicellular organisms to form.
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 4: Physiology of Cells

5 days

3.1.1	The student understands cells are composed of a variety of specialized structures that carry out specific functions.
3.1.2	The student understands cell functions involve specific chemical reactions.
3.1.3	The student understands cells function and replicate as a result of information stored in deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) molecules.
3.1.5	The student understands cells can differentiate, thereby enabling complex multicellular organisms to form.
3.5.3	The student understands food molecules contain biochemical energy, which is then available for cellular respiration.
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 5: Tissues

7 – 10 days

3.1.1	The student understands cells are composed of a variety of specialized structures that carry out specific functions.
3.1.5	The student understands cells can differentiate, thereby enabling complex multicellular organisms to form.
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 6: Skin & Its' Appendages

7 - 10 days

3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 7: Skeletal Tissues

10 - 15 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 8: Skeletal System

10 – 15 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 9: Articulations

7 - 10 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 10: Anatomy of Muscular System

10 - 15 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 11: Physiology of the Muscular System

5 – 7 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 12: Nervous System Cells

7 - 10 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 13: Central Nervous System

7 - 10 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 14: Peripheral Nervous System

4 – 5 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 15: Sense Organs

5 – 7 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 16: Endocrine System**5 – 7 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 17: Blood**3 - 5 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 18: Anatomy of the Cardiovascular System**7 - 10 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 19: Physiology of the Cardiovascular System**3 - 4 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 23: Anatomy of the Respiratory System

4 – 6 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 24: Physiology of the Respiratory System

4 – 6 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

UNIT 25: Anatomy of the Digestive System

4 – 6 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 26: Physiology of the Digestive System

4 – 6 days

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 27: Nutrition & Metabolism**4 – 6 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 28: Urinary System**4 – 6 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.

Unit 31-32: Male & Female Reproductive System**6 – 7 days**

3.7.1	The student understands differences in structure and function among organisms and can identify the characteristics of relevant life forms
3.7.5	The student understands that in complex organisms there is a division of labor into specific body systems i.e., respiration, digestion, nervous, endocrine, excretion, circulatory, reproductive, immune, skeletal and muscle.
6.1	The student will develop an understanding of the overall functioning of human systems and their interaction with the environment in order to understand specific mechanisms and processes related to health issues.
6.1.2	The student understands the severity of disease symptoms is dependent on many factors.
6.2.2	The student understands a variety of factors influence birth rates and fertility rates.