

## **Health Science 20 (Grade 11)**

Designed to help students achieve the Saskatchewan curricular outcomes for Health Science 20 in an individualized learning system, this course includes eight workbook units with corresponding score keys, tests, and test keys. Students will need to use the text, *Biology, 4<sup>th</sup> Edition* by Brad R. Batdorf and Elizabeth A. Lacy, published by Bob Jones University Press, in conjunction with the workbook units in order to complete them successfully.

Health Science 20 will challenge students to look at the health science field from holistic and analytical perspectives to create a basis for making wise and educated personal health choices. Students will examine a range of philosophies that guide health care and consider ethical decisions within those contexts. They will learn the basic anatomy and physiology of the human body to provide a context for studying normal and abnormal functions, will examine the use of diagnostic tools and procedures for determining treatment, and finally, will investigate the range of health science careers and post-secondary programs available in Saskatchewan.

### **The content of this course includes:**

#### **Unit 1: Health Care Philosophies and Ethics**

- ❖ A History of Health Care
- ❖ Cultural Differences in Perceptions of Health and Illness
- ❖ Alternative Medicine
- ❖ Laws, Ethics, and Morals in Health Care
- ❖ Controversial Medical Issues

#### **Unit 2A: The Human Body**

- ❖ Human Tissues, Organs, and Systems
- ❖ The Integumentary System
- ❖ The Skeletal System
- ❖ The Muscular System
- ❖ The Respiratory System
- ❖ The Digestive System

#### **Unit 2B: The Human Body II**

- ❖ The Circulatory System
- ❖ The Lymphatic System/Immune System
- ❖ The Excretory System

#### **Unit 2C: The Human Body III**

- ❖ The Nervous System
- ❖ The Endocrine System
- ❖ The Reproductive System

#### **Unit 3A: Nutrition**

- ❖ Personal Energy Requirements
- ❖ Designing a Healthful Diet
- ❖ Food Labels and Food Guides
- ❖ Dietary Supplements, Food Additives, and Genetically Modified Foods
- ❖ Disordered Eating
- ❖ Eating Patterns and Trends

#### **Unit 2A, 2B, and 2C**

Saskatchewan provincial curricular outcomes for this course require understanding of **at least FIVE** body systems.

Unit 2A does include the minimum number required. It is recommended that students choose one other of 2B or 2C to complete, and whether or not in its entirety would be according to the student's desire or the

### **Unit 3B: Micro and Macromolecules**

- ❖ The Structure and Role of Carbohydrates, Lipids, and Proteins
- ❖ The Role of Enzymes
- ❖ The Relationships between Dehydration, Synthesis, and Decomposition Reactions
- ❖ Identification of Macromolecules in Food Groups and Good Nutrition
- ❖ The Role of Micronutrients and Good Nutrition

### **Unit 4: Diagnosis Activity**

### **Unit 5: Career Exploration**

- ❖ Research and Presentation of a Career Option in the Field of Health

### **Unit 6: Student-Directed Study**

- ❖ Development and Presentation of a Health Care Topic of Choice