Douglas College

EFFECTIVE: SEPTEMBER 2003
CURRICULUM GUIDELINES

A. Division: **Science and Technology**

B. Department / Program Area **Biology**

Date: **May 2002**

New Course [ ] Revision [X]

If Revision, Section(s) Revised **A, B, G, J, K, L, M, N, O, P, Q, and**

M: Course Objectives / Learning Outcomes

Upon completion of this course, the student should be able to:

1. Describe the structure and functions of the digestive system.
2. Describe the structures and functions of carbohydrates, lipids, proteins, vitamins, and minerals.
3. Describe the relationship between nutrition and health.
4. Explain cellular respiration processes and describe the relationship between metabolism and body composition.

4. CIRCULATORY SYSTEM
-organization – circulatory routes
-blood – structure and function
-heart – structure and function
-electrocardiogram
-cardiac cycle
-cardiac output
-blood vessels – structure and function
-circulation physiology – blood flow and blood pressure
-hemostasis
-immunity and the lymphatic system
-disorders

5. RESPIRATORY SYSTEM
-structure and function of the nose, pharynx, larynx, trachea, bronchi, and lungs.
-pulmonary ventilation
-air volumes and capacities
-respiratory exchange
-transport of gases
-control and regulation of respiration
-disorders

6. EXCRETORY SYSTEM
-structure and function of the kidney, nephron, ureters, bladder, and urethra.
-physiology of urine formation
-homeostasis
-disorders

P: P: