



**M: Course Objectives / Learning Outcomes:**

Upon completion of Biology 1203, the student will be able to:

1. Describe the basic requirements of human nutrition and describe the roles of various nutrients in the body.
2. Describe the absorption, transport, storage and metabolic importance of carbohydrates, lipids and proteins.
3. Describe the gross anatomy of the digestive system and describe the digestion of carbohydrates, lipids, and proteins.
4. Describe energy metabolism, including the processes of glycolysis, Krebs Cycle and the electron transport chain.
5. Describe the importance of oxygen in respiration and compare aerobic and anaerobic respiration.
6. Describe the fluid and electrolyte composition of the body and explain how fluid and electrolyte balance is maintained.
7. Describe the components of the urinary system.

**P: Textbooks and Materials to be Purchased by Students:**

Tortora, G.J. and Derrickson, B. *Principles of Anatomy and Physiology* (Current Edition). New York: John Wiley and Sons, Inc.

Douglas College produced manual: **Biology 1203/1209: Human Anatomy and Physiology II.**

**Q: Means of Assessment:****TYPE OF EVALUATION****POINTS**

Class Tests and Assignments	20 30 %
Laboratory Experiments and Activities (see Note 1 below)	(up to 20 %)
Laboratory Examination - final	10 15 %
Comprehensive Examinations - midterm	