



**EFFECTIVE: SEPTEMBER, 2008**  
**CURRICULUM GUIDELINES**

A. Division: **Education** Effective date: **September 2008**

B. Department / Program Area: **Science and Technology** Revision  **New Course**

**Biology**

**D: Human Anatomy and Physiology I** **E:**

<p><b>Enrolment is usually limited to students in specific Health Science programs</b></p>	
<p><b>G:</b> Allocation of Contact Hours to Type of Instruction / Learning Settings</p> <p>Primary Methods of Instructional Delivery and/or Learning Settings:</p> <p><b>Lecture / Tutorial / Laboratory.</b></p> <p>Number of Contact Hours: (per week / semester for eac</p>	<p><b>H:</b> Course Prerequisites:</p> <p style="text-align: center;"><b>None</b></p> <hr/> <p><b>I:</b> Course Corequisites:</p> <p style="text-align: center;"><b>None</b></p> <hr/> <p><b>J:</b> Course for which this Course is a Prerequisite</p> <p style="text-align: center;"><b>Biology 1203</b></p>

**M:** Course Objectives / Learning Outcomes

Upon completion of Biology 1103, the student will be able to:

1. Use a compound microscope, and describe and identify cell and tissue types in the body.
2. Describe the basic components of an atom and describe the properties of ionic and covalent bonds.
3. Describe the chemistry and properties of water, and the structure and biological significance of carbohydrates, lipids, proteins and nucleic acids.
4. Describe the basic principles of homeostasis and negative feedback systems, and provide at least one example of a homeostatic mechanism.
5. Describe anatomical structures using appropriate terminology, and specify the locations of various organs and systems.
6. Describe the components and functions of the integumentary system.
7. Identify the components of the human skeleton, and describe the structure and growth of long bones.
8. Describe the types and range of movements of skeletal articulations.
9. Describe the basic principles of biomechanics.
10. Describe the location, structure, and functions of the major muscles of the body.
11. Describe the gross anatomy of muscles and the microanatomy of muscle tissue.
12. Describe the physiology of muscle contraction.
13. Describe the structure and functions of the cardiovascular and lymphatic systems.
14. Describe the origin, composition, and functions of blood.
- 15.

5. The integumentary system:
  - The identification and description of the components of the epidermis and the dermis.
  - Specialized cells, structures, and glands.
  
6. The skeletal system:
  - The basic structure, histology, and components of the human skeleton.
  - The structure, physiology, and function of bone.
  - The changes in skeletal structure during growth and development (ossification).
  - Articulations (joints) with respect to their

**Q: Means of Assessment**

<b>TYPE OF EVALUATION</b>	<b>POINTS</b>
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	25 – 35 %
- final	25 – 35 %
<b>TOTAL</b>	<b>100</b>

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**Notes:**1. **Laboratory Experiments and Activities:**

Laboratory work will be assigned each week. The laboratory work must be completed in the week it is assigned. If more than one lab assignment is not completed, two percentage points will be deducted for each lab assignment (in excess of the one permitted without penalty). **Laboratory experiments and assignments are a compulsory component of this course. A minimum of 50% of the laboratory experiments and assignments must be completed to receive a P or better grade in the course.**

2. **Examinations:**