COURSE ABBREVIATION       BIOL 1611L
COURSE HOURS               1 Semester Hour
COURSE TITLE               Human Anatomy and Physiology Lab I
CO-REQUISITE              BIOL 1611

COURSE DESCRIPTION
This is a laboratory covering microscopic survey of animal cells and tissues, integumentary, skeletal, muscular (animal dissection and muscle identification using human models), and nervous systems.

EXPECTED EDUCATIONAL RESULTS
As a consequence of completing this course, the student will be able to:

1. Identify and determine spatial relationships of anatomical structures being studied in BIOL 1611 through the use of practical examples provided by animal dissection, models and microscope slides, and explain the function of certain aspects of the muscular and nervous systems. Video, laser disks and computer demonstrations may be used to reinforce this.

2. Perform physiological experiments, gather and interpret data, and draw conclusions based on those data.

3. Write a coherent description of the methods, results, and conclusions of the experiment and their findings.

4. Demonstrate laboratory skills and techniques to include - reading and following directions, performing experiments and recording data.

GENERAL EDUCATIONAL OUTCOMES
I. OUTCOME: "The student should be able to communicate effectively through listening, reading, writing and speaking."

   Skill                      Method
   A. Listening:             instructions for lab work
   B. Reading:               following written direction in lab book
   C. Writing:               laboratory reports
II. OUTCOME: "The student should be able to recognize and apply scientific inquiry in a variety of settings."

Through laboratory experiments the student will demonstrate the ability to apply the scientific method. They will be able to form testable hypotheses, explain natural phenomena, interpret experiments, and make conclusions from data.

COURSE CONTENT
- Introduction - safety procedures and review of the metric system
- Language of anatomy
- Cell structures and mitosis
- Cellular transport mechanisms and cell permeability
- Classification of tissues
- Anatomy of the skeletal system, including classification of bones, individual bone components, and articulations
- Muscle cell physiology
- Anatomy and physiology of the muscular system
- Anatomy of brain and cranial nerves
- Anatomy of spinal cord, nerves and autonomic nervous system
- Anatomy of special sense organs
- Nervous system physiology

ASSESSMENT OF EXPECTED EDUCATIONAL RESULTS
A. COURSE GRADE
1. Each instructor, according to the guidelines presented in the instructor's course syllabus, will determine student's grades. There will be at least two practical exams, histology drawings of tissues (at least 10% of lab grade), and a lab report (at least 15% of the total lab grade) based on any of the physiological exercises performed in class. The lab report should emphasize the scientific method.

2. Each student, through a laboratory report, will be expected to demonstrate skills in writing, and knowledge and application of the scientific method.

B. DEPARTMENTAL ASSESSMENT
This course is part of the Nursing, Dental Hygiene, and Physical Education programs and will be addressed in their program assessments. Biol 1611 will be assessed by regular consultation between instructors and other members of the Anatomy and Physiology Committee and Nursing, Dental Hygiene, and Physical Education faculty.

C. USE OF THE ASSESSMENT FINDINGS
Instructors will consult the assessment results and each other to determine which educational approaches are working well, and which could be improved. They will continue what works and explore improved approaches to instruction where that is needed.

EFFECTIVE DATE: November 2000
REVIEW DATE: April 2004
APPROVED DATE: November 2000