

GEORGIA PERIMETER COLLEGE
DIVISION OF SCIENCE
COMMON COURSE OUTLINE
Revision Date: October 2000

COURSE ABBREVIATION	BIOL 1405L
COURSE HOURS	1 semester hour
COURSE TITLE	Human Biology and Disease Laboratory.
PREREQUISITES	Exit or exemption from Learning Support English, reading and ESL requirements.
COREQUISITE	BIOL 1405

CATALOG DESCRIPTION

This is an investigative laboratory to support BIOL 1405

EXPECTED EDUCATIONAL RESULTS

Upon completion of the course, the student will be able to:

1. identify and determine the spatial relationships of anatomical structures being studied through the use of concrete, practical examples provided by dissection, models, and microscopic slides in the laboratory;
2. demonstrate laboratory skills and techniques, to read and follow directions, and to perform experiments that require the use of the scientific method to analyze, interpret data, and to write a coherent discussion of the results; and,
3. show group learning skills through successful participation in team-based active learning experiments and guided discovery exercises.

GENERAL EDUCATION OUTCOMES

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

Skill:	Method:
Listening:	note-taking in laboratory preparation and experiments.
Reading:	textbook assignments, instructions for tasks.
Writing:	participation in the "writing across the curriculum" program; writing assignments in lab, and the use of discussion test questions.
Speaking:	oral questioning.

II. OUTCOME: The student should be able to demonstrate effective problem-solving and critical thinking skills. See description for Outcome #3.

III. OUTCOME: "The student should be able to recognize and apply scientific inquiry in a variety of settings." Through laboratory experiences including writing assignments and experiments, the student will be able to recognize and apply the scientific method, making observations, forming tentative, testable hypotheses to explain natural phenomena, interpreting controlled experiments, and making conclusions from data. The student should also be able to distinguish between well-supported scientific conclusions and poorly supported assumptions and beliefs.

IV. OUTCOME: "The student should be able to identify and apply the basic concepts of wellness." Together with courses in Health and Physical Education, Human Biology will train students to interpret the significance of the scientific method and the facts discovered to understand the homeostasis, aging, and common disease processes of each of the organ systems.

COURSE CONTENT

1. The Scientific Method and Microscopy of Cells
2. Tissue Structure and Function
3. Osmosis, Edema and Blood Pressure
4. Tissues, Integument, and Skin Physiology
5. Bone and Skeletal Anatomy
6. Muscle Anatomy and Exercise Physiology
7. Enzymes and Digestion
8. Analysis of Caloric Intake and Nutrition
9. Heart and Circulation Anatomy, Computerized Monitoring of Cardiovascular Physiology
10. Respiration and Urinary Anatomy and Physiology
11. Nervous System and Sensory Anatomy and Physiology
12. Reproductive Anatomy
13. Microbial Culture, Antisepsis, Antibiosis, and Microscopic Pathology of Selected Microbial Diseases of Humans in the Organ Systems listed above.
14. Common Protozoan, Helminth, and Arthropod Parasites of Humans

ASSESSMENT OF EXPECTED EDUCATIONAL RESULTS

A. TESTS AND ASSIGNMENTS

1. There will be at least two practical exams given..
2. There will be a lab report(s) based on any of the physiological exercises performed in class. The report(s) should emphasize the scientific method and should count at least 15% of the total lab grade.

B. COURSE GRADE

Each instructor according to the guidelines presented in the instructor's course syllabus will determine student's grades. Methods will include quizzes, tests, projects, library assignments or homework as developed by each instructor. Each student will be expected to demonstrate knowledge and application of the scientific method. Evaluation will require the student to demonstrate skills in writing. The final practical exam will be comprehensive and will include questions from all the sections of the course covered. It is recommended that short answer/critical thinking questions are included in the exams to promote critical thinking and writing across the curriculum.

C. DEPARTMENTAL ASSESSMENT

Biol 1405L will be assessed by regular consultation between instructors and other members of the Transfer Biology Committee.

An assessment test will be administered to all students enrolled in Biol 1405L every five years. Portfolio assessment of students' writing on final exams or lab papers may be included in the assessment process.

USE OF 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: October 2000

APPROVED DATE: October 2000

REVIEW DATE: April 2005