BIOLOGY (BIO)

BIO 502 Microbiology (0-3 credits)

Introduction to the classification and life cycles of micro-organisms. Special emphasis on application to the prevention and treatment of disease. Includes immunological principles and basic concepts of body defenses in health and disease. **Course Rotation:** TBA.

BIO 503 Anatomy and Physiology (0-4 credits)

Integrated approach to human anatomy and physiology as these sciences relate to patient care. Emphasis is on functional anatomy and physiology. **Course Rotation:** TBA.

BIO 605 Pathophysiology (3 credits)

An introductory course emphasizing the physiologic changes and/or pathophysiologic adaptational consequences of normal body functioning to stressors.

Course Rotation: TBA.

BIO 611 Molecular Biology and Manipulation of the Gene (3 credits)

The structure and function of the prokayote and eukaryote genome. Techniques of genetic manipulation and their actual and potential applications will be considered.

Course Rotation: TBA.

BIO 620 Biological Man and His Environment (3 credits) **Course Rotation:** TBA.

BIO 630 Advanced Pharmacology (3 credits) Discussion of state-of-the-art pharmacological interventions in selected health-illness cases as they relate to clinical practice. **Course Rotation:** TBA.

BIO 640 Pharmacological Intervention in Human Biology (3 credits)

This course provides advanced study of biological subsystems of man as related to health and illness. Pharmacology is considered with respect to affecting the biological subsystems of man. Biochemical interactions are considered as they apply to man's adaptation to health and illness. **Course Rotation:** TBA.

BIO 642 Sexual Rehabilitation (3 credits)

Disability and sexual functioning are examined relative to the lify cycle, aging, and illness. Capabilities are then explored as a means toward rehabilitation within the context of the life of the individual - and, when existant, the couple. **Course Rotation:** TBA.

BIO 650 Topics in Biology (3 credits)

Various topics in the Biological Sciences will be offered from semester to semester. Students should check with the Department of Biological Sciences each semester for details. May be taken for credit more than once. **Course Rotation:** TBA.

Prerequisites: One year of General Biology and/or permission of the department Chairperson.

BIO 650A Topic: Ecology (0-4 credits) Course Rotation: TBA.

BIO 650B Topic: Plant Physiology (3 credits) Course Rotation: TBA.

BIO 650C Topic: General Physiology (4 credits) Course Rotation: TBA.

BIO 650D Topic: Developmental Biology (4 credits) Course Rotation: TBA.

BIO 650E Topic: Molecular and Cell Biology (0-4 credits) **Course Rotation:** TBA.

BIO 650F Topic: Animal Behavior (4 credits) Course Rotation: TBA. BIO 650G Topic: Bacteriology (4 credits) **Course Rotation:** TBA.

BIO 650H Topic: Recombinant DNA Technology (4 credits) **Course Rotation:** TBA.

BIO 650J Topic: Introduction to Toxicology (3 credits) **Course Rotation:** TBA.

BIO 650L Topic: Biodiversity (0-2 credits) Course Rotation: TBA.

BIO 650M Topics in Biology: Virology (3 credits) Course Rotation: TBA.

BIO 650N Topic: Animal Nutrition (3 credits) Course Rotation: TBA.

BIO 650P Topic: Endocrinology (3 credits) **Course Rotation:** TBA.

BIO 650R Topic: Immunology (0-4 credits) **Course Rotation:** TBA.

BIO 650S Topic: Comparative Anatomy (4 credits) Course Rotation: TBA.

Prerequisites: This course is for Graduate Education majors only. Permission of the department Chairperson is required.

BIO 650T Topic: Histology (0-4 credits) Course Rotation: TBA.

BIO 699 Independent Research in Biology (1-6 credits) Enrollment by faculty invitation or student approach to faculty sponsor. Under faculty supervision, the student selects a topic for guided research. A research paper or project must be submitted. Copies to be submitted to chairperson for department files. **Course Rotation:** TBA.

Prerequisites: Registration for this course requires permission of the department Chairperson based upon the approval of the submitted proposal.

BIO 699A Independent Research in Biology: Carnivore Ecology (1 credits) Refinement of research statement/proposal: How to use non-invasive techniques to study wildlife in Westchester County, New York **Course Rotation:** TBA.

BIO 699B Independent Research in Biology: Carnivore Field Methods (3 credits) Collection of Wildlife field data in Westchester County, New York. Analysis of field data. Preparation of publication of research performed. **Course Rotation:** TBA.