

Natural Sciences	61-65 hours
Biology	
Introductory Biology	
Biology 105, 115, 106.....	8
Organismal (Plant): one course from	
Biology 206, 207, 208, 313.....	4
Organismal (Animal): one course from	
Biology 201, 202, 204, 209, 312, 315	4
Ecology: one course from	
Biology 308, 314, 317, 318, 402, 408, or 411.....	4
Cell Biology: one course from	
Biology 301, 302, 407.....	4
Genetics: Biology 401 or 409	4
Senior Seminar: Biology 499.....	1
One course from Biology 210, Biology 214	3-4
Biology Elective: one course from	
Biology 201, 202, 204, 206, 207, 208, 209, 308, 312,	
313, 314, 315, 402, 408, 411	4
Chemistry	
Chemistry 101, 102, and 201.....	12
Physics	
Physics 215, 216 (or 200, 201, 202)	8-12
Total Hours Required for Graduation	120

Recommended minor: Chemistry. Consider one additional course from Chemistry 202, 203, 313 to complete the minor in chemistry.

Other suggested courses: Chemistry 203, 313, Economics 340, English 318, Geography 105, 215, Math 312, Psychology 302, Sociology 331.

MEDICAL TECHNOLOGY OPTION

Coordinators: Dr. Gregory S. Pryor
and Dr. Lorianne S. Turner

Medical technologists usually serve as technical assistants to pathologists, performing clinical laboratory procedures helpful to physicians in the determination of the nature, course and treatment of disease. A Bachelor of Science degree in Biology with emphasis in medical technology at FMU is awarded after successful completion of 120 hours (See pages 88 and 191). A cooperative program with McLeod Regional Medical Center allows students to become medical technologists in four years. Students will complete their clinical studies during the senior year (3+1 program). Applicants to this program must be at least in their junior year. Acceptance is on a competitive basis.

Students may also elect to obtain a Bachelor of Science in biology, with the appropriate prerequisites, and then apply to a medical technology program for their clinical year of study (4+1 program).

BIOLOGY COURSES (BIOL)

103 Environmental Biology (4:3-3) (Does not count toward biology major) F. A study of the needs of human beings for food, energy, and other natural resources and the effects of their actions on the air, water, soil, plants, and other animals. The diversity of life, plant anatomy and physiology, ecology and evolution will be included. Throughout the course the process of doing science is emphasized.

104 Human Biology (4:3-3) (Does not count toward biology major.) S. Basic biology of humans and how to interpret emerging technologies such as DNA fingerprinting and genetic engineering. The process of doing science is emphasized.

105 Biological Sciences I (3) F, S, SU. The content of this course covers broad concepts of the scientific method, biological chemistry, and the molecular and cellular basis of life. Includes the topics of cell structure, energetics and metabolism, molecular genetics, Mendelian inheritance, and cell reproduction, with selected applications at the tissue and organ levels of organization. Required for majors, minors, and collaterals in

biology, health physics majors, and pre-nursing majors. Recommended for other science majors and middle level education majors who have an emphasis in science.

106 Biological Sciences II (4:3-3) (Prerequisite: 103 and 104, or 105 and 115, or permission of the department) F, S, SU. A survey of the domains of life in an evolutionary framework. Includes biological evolution and the mechanisms of evolutionary change, a survey of biological diversity with examples of plant and animal structure and physiology, and general ecological principles. Includes laboratory and field experiences.

115 Laboratory for Biological Sciences I (1:3) (Prerequisite/Corequisite 105) F, S, SU. This course is a practical examination of life science topics through experimental procedures with instruction on laboratory equipment and techniques. Required for majors, minors, and collaterals in biology and health physics majors. Recommended for other science majors and middle level education majors who have an emphasis in science.

120 Natural History of South Carolina (4:3-3) (Prerequisite: 103 or 106 or permission of department) AS. Topics may cover a variety of plants and/or animals. Identification, taxonomy, evolution, ecology, and conservation of these groups will be covered. Laboratories will include outdoor field trips.

201 Invertebrate Zoology (4:3-3) (Prerequisite: 106 or 103 and 104 with permission of the department) AF. Structure, physiology, ecology, life histories, and evolutionary trends of invertebrate animals.

202 Vertebrate Zoology (4:3-3) (Prerequisite: 106 or 103 and 104 with permission of the department) S. Classification, ecology, life histories, and evolutionary trends of vertebrate animals.

204 Introductory Marine Biology (4:3-3) (Prerequisite: 106 or permission of the department) Scope and application of marine biology, with emphasis on coastal Carolina animals and their ecology. Credit cannot be given for both Biology 204 and Biology 317.

205 Human Anatomy (4:3-3) (Prerequisite: 105 or 106 and sophomore status or higher in pre-nursing major or permission of the department) F, S, SU. Designed as anatomic studies for students in medical technology, nursing, and related allied health programs. Fundamental tissues, organs, and systems; anatomic terminology; early development; connective tissue, skeletal, muscular, nervous, circulatory, respiratory, digestive, genitourinary, endocrine, and integumentary systems.

206 Fall Flora (4:2-4) (Prerequisite: 106 or 103 and 104 with permission of department) F. Collection, preservation, identification, and classification of 250 native and naturalized plants in the Pee Dee region during fall season. Most of the laboratory time is spent in the field studying the taxonomical, morphological, and ecological aspects of plants. Taxonomic keys used extensively. Students may select only two courses from the Biology 206, 207, 208 series.

207 Spring Flora (4:2-4) (Prerequisite: 106 or 103 and 104 with permission of department) S. Collection, preservation, identification, and classification of 250 native and naturalized plants in the Pee Dee region during spring season. Most of the laboratory time is spent in the field studying the taxonomical, morphological, and ecological aspects of plants. Taxonomic keys used extensively. Students may select only two courses from the Biology 206, 207, 208 series.

208 Summer Flora (4:2-4) (Prerequisite: 106 or 103 and 104 with permission of department) SU. Collection, preservation, identification, and classification of 250 native and naturalized plants in the Pee Dee region during the summer season. Most of the laboratory time is spent in the field studying the taxonomical, morphological, and ecological aspects of plants. Taxonomic keys used extensively. Students may select only two courses from the Biology 206, 207, 208 series.