<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
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<tbody>
<tr>
<td>BI 1XX</td>
<td>Biology Elective</td>
<td>2-4 Credits</td>
<td>This course is designed for biology and other science majors or minors. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 111. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 100</td>
<td>Pre-Health Professions Orientation</td>
<td>1 Credit</td>
<td>This course is designed for biology and other science majors or minors. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 101 or BI 111. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 101</td>
<td>Introductory Biology</td>
<td>4 Credits</td>
<td>The basic physiological processes of animals. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 101. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 102</td>
<td>Introductory Biology</td>
<td>4 Credits</td>
<td>The basic physiological processes of animals. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 101. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 111</td>
<td>Principles of Biology</td>
<td>4 Credits</td>
<td>The basic physiological processes of animals. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 101. (Fall, Spring, Summer)</td>
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<td>BI 112</td>
<td>Principles of Biology</td>
<td>4 Credits</td>
<td>The basic physiological processes of animals. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 101. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 200W</td>
<td>Biological Literature</td>
<td>1 Credit</td>
<td>An introduction to the study of oceans, their physical and chemical parameters, the life within them, and their relationship to man.</td>
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<tr>
<td>BI 205</td>
<td>Marine Technical Methods</td>
<td>2 Credits</td>
<td>An introduction to the study of oceans, their physical and chemical parameters, the life within them, and their relationship to man.</td>
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<tr>
<td>BI 228</td>
<td>Ocean Science</td>
<td>4 Credits</td>
<td>An introduction to the study of oceans, their physical and chemical parameters, the life within them, and their relationship to man.</td>
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<tr>
<td>BI 241</td>
<td>Human Anatomy and Physiology I</td>
<td>4 Credits</td>
<td>A continuation of Biology 241, with emphasis on the digestive, circulatory, excretory, respiratory, and reproductive systems. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 241. (Fall, Spring, Summer)</td>
</tr>
<tr>
<td>BI 242</td>
<td>Human Anatomy and Physiology II</td>
<td>4 Credits</td>
<td>A continuation of Biology 241, with emphasis on the digestive, circulatory, excretory, respiratory, and reproductive systems. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 241. (Fall, Spring, Summer)</td>
</tr>
<tr>
<td>BI 299H</td>
<td>Honors Science Symposium</td>
<td>1 Credit</td>
<td>A continuation of Biology 241, with emphasis on the digestive, circulatory, excretory, respiratory, and reproductive systems. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 241. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 305</td>
<td>Cell Biology</td>
<td>4 Credits</td>
<td>The basic principles of heredity and their significance in the development and function of organisms. Three class periods; one 3-hour laboratory period per week, plus additional assignments. Prerequisites: BI 112; CH 111. (Fall, Spring, Summer, odd-numbered years)</td>
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<tr>
<td>BI 306</td>
<td>Genetics</td>
<td>4 Credits</td>
<td>The basic principles of heredity and their significance in the development and function of organisms. Three class periods; one 3-hour laboratory period per week, plus additional assignments. Prerequisites: BI 112; CH 111. (Fall, Spring, Summer, odd-numbered years)</td>
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<tr>
<td>BI 307</td>
<td>Microbiology</td>
<td>4 Credits</td>
<td>The basic principles of heredity and their significance in the development and function of organisms. Three class periods; one 3-hour laboratory period per week, plus additional assignments. Prerequisites: BI 112; CH 111. (Fall, Spring, Summer, odd-numbered years)</td>
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<tr>
<td>BI 308</td>
<td>Marine Biology</td>
<td>4 Credits</td>
<td>The basic principles of heredity and their significance in the development and function of organisms. Three class periods; one 3-hour laboratory period per week, plus additional assignments. Prerequisites: BI 112; CH 111. (Fall, Spring, Summer, odd-numbered years)</td>
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<tr>
<td>BI 310</td>
<td>Comparative Vertebrate Morphology</td>
<td>4 Credits</td>
<td>A continuation of Biology 241, with emphasis on the digestive, circulatory, excretory, respiratory, and reproductive systems. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 241. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 311</td>
<td>Animal Physiology</td>
<td>4 Credits</td>
<td>A continuation of Biology 241, with emphasis on the digestive, circulatory, excretory, respiratory, and reproductive systems. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 241. (Fall, Spring, Summer)</td>
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<tr>
<td>BI 312</td>
<td>Evolution</td>
<td>3 Credits</td>
<td>Principles of evolution, including natural selection, speciation, adaptation, and phylogeny. Three class periods per week. Prerequisite: BI 306. (Fall, Spring)</td>
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<tr>
<td>BI 340</td>
<td>Invertebrate Zoology</td>
<td>4 Credits</td>
<td>Principles of evolution, including natural selection, speciation, adaptation, and phylogeny. Three class periods per week. Prerequisite: BI 306. (Fall, Spring)</td>
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</table>
BI 341. Natural History of the Vertebrates. (4 Credits)
A survey of chordates, with emphasis on their phylogeny, classification, general characteristics, life histories, behavior, and distribution. Laboratory will include field work, collection, and identification of local vertebrates. Three class periods; one 3-hour laboratory period per week. Prerequisite: BI 112. (Spring)
Course Fees: $50

BI 345. Dolphins and Whales. (2 Credits)
Lectures, audiovisual presentations, and practical exercises to guide students to further study of the classification, anatomy, and ecology of the cetaceans. Prerequisite: BI 310 or 408.

BI 362. Non-Vascular Plants. (4 Credits)
A survey of algae, fungi, and bryophytes, with emphasis on reproduction, morphology, taxonomy, and evolution. Three class periods; one 3-hour laboratory period per week. Prerequisite: BI 112. (Spring)
Course Fees: $50

BI 363. Vascular Plants. (4 Credits)
A survey of ferns, fern allies, gymnosperms, and flowering plants, with emphasis on reproduction, morphology, taxonomy, and evolution. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 112. (Fall)
Course Fees: $50

BI 403. Marine Invertebrate Zoology. (4 Credits)
A study of the natural history, systematics and morphology of marine invertebrates from a variety of habitats in the Gulf of Mexico, oriented toward a field and laboratory approach. Prerequisite: BI 112.

BI 407. Applied Bacteriology. (4 Credits)
Principles and procedures used in the study of the microbiology of diseases, water, foods, air, soil, sewage, and industrial processes. The bacteria will be emphasized. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 307. (Spring, odd-numbered years)
Course Fees: $50

BI 408. Marine Vertebrate Zoology. (4 Credits)
Biological study of marine vertebrates emphasizing systematics, behavior, physiology, and ecology of local forms. Prerequisite: BI 112.

BI 409. Immunology. (3 Credits)
The immune response, including the chemical nature of antigens and antibodies, the humoral and cellular response to antigens, and the cells of the immune system and their relationship to each other. Two class periods; one 2-hour laboratory period per week. Prerequisite: BI 307; CH 311/311L is recommended. (Spring)
Course Fees: $50

BI 410. Marine Invertebrate Zoology. (4 Credits)
A general survey of marine algae (microscopic and macroscopic), as well as salt marsh vegetation mangroves, seagrasses and maritime forest communities. Prerequisite: BI 112.

BI 411. Coastal Wetlands Ecology. (4 Credits)
A study of the floral and faunal elements of various marsh communities.

BI 412. Marine Ecology. (4 Credits)
A general survey of the floral and faunal elements of various marsh communities. Prerequisite: BI 112.

BI 413. Marine Behavioral Ecology. (4 Credits)
Principles of animal behavior as applied to marine organisms. Prerequisite: BI 112; MA 345 recommended.

BI 415. Molecular Biology. (4 Credits)
The molecular basis for gene structure, function and regulation of gene expression. Emphasis on understanding current molecular biology methods, performing laboratory techniques, and data interpretations. Two class periods; two 2-hour laboratory periods per week. Prerequisites: BI 305, BI 306, BI 307. (Fall)
Course Fees: $50

BI 421. Ecology. (4 Credits)
Relationships between organisms and their environment, including the structure and function of populations, communities, and ecosystems. Three class periods; one 3-hour laboratory period per week. Extended laboratory periods, overnight, or weekend field trips may be required. Prerequisite: BI 112, BI 200W and Junior or Senior standing. (Fall, Spring)
Course Fees: $50

BI 423. Aquatic Ecology. (4 Credits)
Freshwater habitats and their biotas. Qualitative and quantitative techniques for studying lakes, streams, and wetlands will be included. Three class periods; one 3-hour laboratory period per week. Extended laboratory periods, overnight, or weekend field trips may be required. Prerequisites: BI 112; CH 112, and junior or senior standing. (Fall)
Course Fees: $50

BI 425. Introduction to Oceanography. (4 Credits)
A general introduction to the physics, chemistry, geology and biology of the ocean. Prerequisite: general biology, marine biology, or graduate standing.

BI 429. Marine Botany. (4 Credits)
A general survey of marine algae (microscopic and macroscopic), as well as salt marsh vegetation mangroves, seagrasses and maritime forest communities. Prerequisite: BI 112.

BI 430. Research on Special Topics. (1-3 Credits)

BI 433. Embryology. (4 Credits)
Principles of the development of animals including the molecular and cellular basis for differentiation, with selected vertebrates used to illustrate the development of tissues, organs, organ systems, and body form. Two class periods; two 2-hour laboratory periods per week. Prerequisite: BI 112, and junior or senior standing. (Offered on sufficient demand)
Course Fees: $50

BI 440. Special Topics in Marine Science. (1-4 Credits)

BI 441. Biochemistry. (3 Credits)
Chemical interpretations of biological phenomena; compounds of biological significance as related to metabolism; carbohydrates, lipids, proteins, nucleic acids, and enzymes. Also listed as CH 441 but creditable only in field for which registered. Prerequisites: CH 312, 312L. (Fall)

BI 451. Ornithology. (3 Credits)
Biological study of birds with emphasis on field identification of local species. Two class periods; one 3-hour laboratory period per week. Prerequisite: BI 112. (Summer, even-numbered years)
Course Fees: $50

BI 452. Entomology. (3 Credits)
Morphology, physiology, and taxonomy of insects, including collection, preservation, and identification of those occurring in the local area. Two class periods; one 3-hour laboratory period per week. Prerequisite: BI 112. (Summer, odd-numbered years)
Course Fees: $50
BI 455W. Paleobiology. (4 Credits)
Fundamental biological problems, including speciation, systematics, evolution, extinction, functional morphology, paleoecology, and biogeography will be addressed from the perspective of the fossil record. Three class periods; one 2-hour laboratory per week. Field trips and/or term projects may be required. Prerequisite: ES 132 or departmental approval. Also listed as ES 455W, but creditable only in the field for which registered. (Fall, even-numbered years)
Course Fees: $50

BI 460. Plant Physiology. (3 Credits)
Physiological processes in plants and their relationship to structure and environment with emphasis on vascular plants. Two class periods; one 2-hour laboratory period per week. Prerequisite: BI 112. (Spring, even-numbered years)
Course Fees: $50

BI 463. Plant Taxonomy. (3 Credits)
Plant morphology and taxonomic methods for the identification, classification, nomenclature, and phylogeny of higher vascular plants and their distribution and ecology, utilizing all elements of local flora. Two class periods; one 3-hour laboratory period per week. Prerequisite: BI 112. (Spring)
Course Fees: $50

BI 471. Parasitology. (4 Credits)
Morphology, taxonomy, life history, and ecology of parasites of humans and other animals. Three class periods; one 2-hour laboratory period per week. Prerequisite: BI 112, and junior or senior standing recommended. (Spring, odd-numbered years).
Course Fees: $50

BI 472. Histology. (4 Credits)
Animal tissues and a survey of the microscopic structure of the various organs of higher vertebrates. Two class periods; two 2-hour laboratory periods per week. Prerequisite: BI 305. (Fall, even-numbered years)
Course Fees: $50

BI 480. Pre-Health Professions Internship. (1 Credit)
Designed to provide pre-health professions (pre-medicine, pre-dentistry, pre-optometry, pre-pharmacy, pre-physical therapy, pre-occupational, pre-podiatry, and pre-veterinary) students direct contact with the health professions and the variety of aspects of health care delivery through supervised observation and instruction at an approved area hospital and/or private practice. Open to junior and senior pre-health professions students with a GPA not less than 3.0 and with approval of the pre-health professions advisor. Not applicable for credit toward a major or minor in biology; may be used as a general elective. Also listed as CH 480 but creditable only in field for which registered. (Fall, Spring)

BI 495. Research/Internship. (1-4 Credits)
Independent research or internship on individual projects under faculty supervision for selected biology majors. Scheduled work and conferences require a minimum average of four hours per week per credit hour. Research or internship may be off campus at a preapproved site with credit depending on scope of project. May be repeated for a maximum of four credit hours. Prerequisite: departmental approval. (Fall, Spring, Summer)
Course Fees: $50

BI 498. Senior Assessment Seminar. (1 Credit)
Review of the major subject areas of biology, preparation of a professional portfolio, participation in departmental assessment, and completion of a comprehensive examination for the major. Prerequisites: Prerequisites: biology major and senior standing. (Fall, Spring)

BI 499. Special Topics in Biology. (1-4 Credits)
A detailed study of a particular topic of special interest. Topics will vary but will be listed in the schedule of classes when offered, and on the students' transcripts. Prerequisite: departmental approval. (Offered on sufficient demand)
Course Fees: $50