**BIOLOGY MAJOR REQUIREMENTS**

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| **REQUIRED BIOLOGY COURSES (20 hrs)**  |
|   | BIOL 1440 | Principles of Biology I |
|   | BIOL 1441 | Principles of Biology II |
|   | BIOL 2490 | Genetics |
|   | BIOL 3402 | Cell Biology |
|   | BIOL 3403 | General Ecology |
|  |  |  |
| **REQUIRED CHEMISTRY (16 HRS)** |
|   | CHEM 1450 | College Chemistry I |
|   | CHEM 1451 | College Chemistry II |
|   | CHEM 2401 | Organic Chemistry I |
|   | CHEM 3411 | Organic Chemistry II |
|  |  |  |
| **REQUIRED PHYSICS (8 hrs)** |
|   | PHYS 1410 | College Physics I |
|   | PHYS 1420 | College Physics II |
|  |  |  |
| **REQUIRED MATHEMATICS (7 hrs)** |
|  | MATH 1491 | Calculus for Life Science OR |
|   | MATH 1496 | Calculus I |
|   | MATH 2311 |  Statistical Methods I (or PSYC 2330) |
|  |  |  |
| **BS Biology Graduation Requirements:** |
|  | Lower Level CORE |
|   | Upper Level CORE |
|   | Biology Major Requirements with a 2.00 or higher GPA |
|   | Minimum of 120 hours with a 2.00 or higher GPA |
|   | Minimum of 40 hours upper division courses |
|  |  |  |
| **STEM Teach:** | Ask your advisor about teaching options! |
| **NOTE: All biology courses have prerequisite** |
|  **requirements found in the undergraduate bulletin** |
|  |  |  |
| **Biology Electives:**  |
| **Major without a minor**: (28) hrs chosen from the following, |
| including a minimum of four (4) laboratory courses |
| **Major with a minor**: (20 hrs) chosen from the following, |
| including a minimum of four (4) laboratory courses |
|  |  |  |
| **Gulf Coast Research Laboratory/Courses:** Contact Dr. Noyes |
| at 450-5926 or refer to the Undergraduate Bulletin |
|  |  |  |
| Revised 2/20/14 |  |
| **Biology Electives:** |  |
|  | BIOL 3190 | Economic Botany Lab |
|   | BIOL 3310 | Neuroethology: The Neural Basis of Natural Behavior |
|   | BIOL 3390 | Economic Botany |
|   | BIOL 3410 | Vertebrate Zoology |
|   | BIOL 3420 | General Microbiology |
|   | BIOL 4250/5250 | Scanning Electron Microscopy & Microanalysis |
|  | BIOL 4311/5311 | Pathophysiology |
|   | BIOL 4320/5320 | Neurodevelopment & Pathology |
|   | BIOL 4330/5330 | Principles of the Cardiovascular System |
|   | BIOL 4340/5340 | Immunology |
|   | BIOL 4351/5351 | General Pharmacology |
|  | BIOL 4360/5360 | Endocrinology |
|   | BIOL 4400/5400 | Histology |
|   | BIOL 4401/5401 | Invertebrate Zoology |
|   | BIOL 4404/5404 | Plant Taxonomy |
|   | BIOL 4405/5405 | Developmental Biology |
|  | BIOL 4406/5406 | Mammalogy |
|   | BIOL 4407/5407 | Ornithology |
|   | BIOL 4412/5412 | Organisms in Extreme Environments |
|  | BIOL 4415/5415 | Evolution |
|   | BIOL 4418/5418 | Biology of the Reptilia (Ecology) |
|   | BIOL 4421 | Pathogenic Microbiology |
|   | BIOL 4425/5425 | Experimental Neurobiology |
|   | BIOL 4428/5428 | Animal Physiological Ecology |
|  | BIOL 4430/5430 | Comparative Vertebrate Anatomy |
|   | BIOL 4435/5435 | Animal Behavior |
|   | BIOL 4440/5440 | Entomology |
|   | BIOL 4442/5442 | Restoration Ecology: Principles & Application |
|  | BIOL 4445/5445 | Biometry |
|   | BIOL 4450/5450 | Plant Ecophysiology |
|   | BIOL 4455/5455 | Ichthyology - the Biology of Fishes |
|   | BIOL 4460/5460 | Animal Physiology |
|   | BIOL 4461/5461 | Parasitology |
|  | BIOL 4465/5465 | Environmental Toxicology |
|   | BIOL 4470/5470 | Biology of Seed Plants |
|   | BIOL 4475/5475 | Advanced Cell Biology |
|  | BIOL 4480/5480 | History of Life |
|   | BIOL 4530/5530 | Experimental Molecular Biology |
|   | CHEM 4320/4121 | Biochemistry I & Lab |
|   | ENVR 3410 | Environmental Theory and Application |
| **Up to 4 hrs of Independent Study, Internship and/or Research may** |
| **count as biology elective credit with department approval.** |