**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.** | | | | | |