ANATOMY AND PHYSIOLOGY CONCENTRATION

BIO 452   Cell Biology   4
CHEM 371   Biochemical Principles   5
or CHEM 313   Survey of Biochemistry and Biotechnology

Biodiversity Courses
Select from the following:

AEPS/BOT 323   Plant Pathology
BIO 321   Mammalogy
BIO 322   Ichthyology
BIO 323   Ornithology
BIO 324   Herpetology
BIO 329   Vertebrate Field Zoology
BIO 335   General Entomology
BIO 336   Invertebrate Zoology
BIO 415   Biogeography
BOT 313   Taxonomy of Vascular Plants
MCRO 224   General Microbiology I
MSCI 324   Marine Mammals, Birds and Reptiles
MSCI 437   Marine Botany

Core Anatomy and Physiology Courses
Select from the following:

BIO 406   Advanced Anatomy and Physiology: Neuroscience
BIO 407   Advanced Anatomy and Physiology: Endocrinology
or ASCI 405   Domestic Livestock Endocrinology
BIO 408   Advanced Anatomy and Physiology: Cardiorespiratory and Renal
BIO 409   Advanced Anatomy and Physiology: Muscle and Locomotion
BIO 410   Functional Histology
BIO 426   Immunology

Electives
Select additional Anatomy and Physiology Courses (above) or select from the list below. At least three units must come from BIO or MCRO courses other than BIO 400, BIO 461, BIO 462 or BIO 463.

ANT 401   Culture and Health
ASCI 351   Reproductive Physiology
ASCI 406   Applied Animal Embryology and Assisted Reproduction
ASCI 438   Systemic Animal Physiology
BIO 400   Special Problems for Advanced Undergraduates
BIO 405   Developmental Biology
BIO 428   Hematology
BIO 429   Parasitology
BIO 434   Environmental Physiology
BIO 435   Plant Physiology

Total units: 43

1 Excess units will be applied to Electives in the Anatomy and Physiology concentration.
2 Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.
3 Recommended for students interested in health sciences careers.
4 If BIO 461 or BIO 462 is used to meet the Senior Project Requirement, it cannot also be counted as an Approved Elective.
5 Maximum of 6 units may be applied toward Approved Electives from "by arrangement" courses: BIO 400, BIO 461, BIO 462, BIO 463, ENGR 322/SCM 302.

BIO 461   Senior Project - Research Proposal
BIO 462   Senior Project - Research
BIO 463   Honors Research
BIO/CHEM 475   Molecular Biology Laboratory
CHEM 217   Organic Chemistry II
& CHEM 220   and Organic Chemistry Laboratory For Life Sciences II
CHEM 218   Organic Chemistry III
& CHEM 223   and Organic Chemistry Laboratory for Life Sciences III
CHEM 372   Metabolism
COMS 418   Health Communication
ENGR 322/SCM 302   The Learn By Doing Lab Teaching Practicum
FSN 310   Maternal and Child Nutrition
FSN 429   Clinical Nutrition I
KINE 406   Neuroanatomy
KINE 445   Electrocardiography
KINE 446   Echocardiography
MCRO 225   General Microbiology II
MCRO 320   Emerging Infectious Diseases
MCRO 342   Public Health Microbiology
MCRO 402   General Virology
MCRO 423   Medical Microbiology
MCRO 424   Microbial Physiology
PHIL 339   Biomedical Ethics
or PHIL 341   Professional Ethics
or SCM 451   Ethics in the Sciences
PSY 320   Health Psychology
PSY 340   Biopsychology
WGS/ES 350   Gender, Race, Culture, Science and Technology