

**Bachelor of Arts in Business Administration**  
**Area of Specialization: Pre-Health (med)**

**Description**

Students intending to go to medical, dental, veterinary, optometry, podiatry or chiropractic school may choose almost any major. The BABA with a Pre-Health area of specialization allows pre-health students to get a strong foundation in business while completing the prerequisites for entry into a professional school in the health field (medical, veterinary, optometry, dental, podiatry, pharmacy, and chiropractic schools).

All students considering a pre-health track should review the [pre-health advising](#) website for additional information on admission requirements specific to each program.

For career information view: [www.crc.ufl.edu/](http://www.crc.ufl.edu/)

**Requirements**

Students are required to complete each of the course segments below with a minimum 2.0 Area of Specialization GPA. Be sure to check course prerequisite requirements. Pre-Health students should also complete MAC 2311 (Calculus I **instead of** MAC 2233 (Survey of Calculus) in the business Universal Tracking requirements.

\*Note: The courses required for this area of specialization have substantial prerequisites. Please see the Undergraduate Catalog or an academic advisor for prerequisite requirements.

- 1. Biochemistry – (4 credits) EITHER**
  - a. BCH 4024 Intro to Biochemistry and Molecular Biology OR
  - b. CHM 3218 Organic Biochemistry 2
- 2. Cellular Biology – (3 - 4credits) EITHER**
  - a. PCB 3134 – Eukaryotic Cell Structure OR
  - b. MCB 3020 **AND** MCB 3020 Lab – Microbiology **AND** Microbiology Lab
- 3. Genetics – (3 - 4 credits) EITHER**
  - a. PCB 3063 – Genetics OR
  - b. PCB 4522 – Molecular Genetics OR
  - c. AGR 3303- Genetics
- 4. Choose ONE course from the list of Approved Electives beginning on page two of this document.**

**Contact Information**

You are always welcome to meet with an Advisor in the School of Business, however, advising specifically related to Pre-Health requirements is also available through the College of Liberal Arts and Sciences advising office.

Pre-Health Advising Team  
[prehealth@advising.ufl.edu](mailto:prehealth@advising.ufl.edu)  
352-273-4083  
204 Farrior Hall

**ANS 3319C Reproductive Physiology and Endocrinology in Domestic Animals.** Credits: 4; Prereq: ANS 3006C, BSC 2010 and BSC 2010L, or equivalent. Principles of reproduction in avian and mammalian farm animals including factors related to the estrous cycle, pregnancy, lactation, semen-production, artificial insemination, pregnancy diagnosis and environmental factors affecting reproduction

**ANS 3440 Principles of Animal Nutrition** Credits: 4; Prereq: CHM 2045 and CHM 2045L. The nutrients required by animals, their functions interrelationships, and processes of utilization; feedstuff composition and their use in diet and ration formulation.

**ANT 4531 Molecular Genetics of Disease.** Credits: 3.; Prereq: AGR 3303. Examines molecular genetics of human disease. Discusses a range of diseases from single-gene recessive defects to complex diseases.

**BSC 3402 Theory and Practice in the Biological Sciences.** Credits: 2. Presents the scientific method, in its many formulations, from historical, philosophical and sociological perspectives. Explores generation and presentation of data, formulation of hypotheses and theories, and dissemination of results. Also examines the ethical implication of biological research.

**ENY 4660/4660L Medical and Veterinary Entomology.** Credits: 2+1; Prereq: ENY 3005 and ENY 3005L. Lec: Presents the major insect, mite and tick vectors of disease to man and animals. Learn about arthropod-transmitted diseases, the interaction between pathogens and the arthropod vector, and the mechanical damage that a parasite inflicts on its host. Lab: Learn to identify mosquitoes, ticks, lice, fleas, and other disease vectors. Collection required. (B)

**HUN 4221 Nutrition and Metabolism.** Credits: 3; Prereq: BCH 3025 or BCH 4024; PCB 4723C or APK 2105C; HUN 3403; and HUN 4445. Metabolic relationships of nutrients with emphasis upon their functions in biochemical and physiological processes as well as variations in requirements in response to stress.

**ISC3523 Integrative Biomedical Sciences. Credits: 3;** Prereq: BSC 2011, and CHM 2211 or CHM 2213 or CHM 3217, and PHY 2048 or PHY 2053 or PHY 2060, and MAC 2311 or STA 2023, and PSY 2012 or SYG 2000. Introduces biomedical science as the application of the natural sciences to medicine. Focuses on integration of biological and biochemical sciences, chemical and physical sciences, and social and behavioral sciences in the context of health. Activities promote skills in problem-solving, critical analysis, and quantitative reasoning.

**MCB 4203 Bacterial and Viral Pathogens.** Credits: 3; Prereq: MCB 3020, with a C or better. Host-parasite relationships in the diseases of man and animals. The characteristics of bacterial and viral pathogens. Basic techniques of isolation and identification.

**MCB 4304 Genetics of Microorganisms.** Credits: 3; Prereq: MCB 3020, MCB 3020L with C or better; BCH 4024 or CHM 4207 should be taken before MCB 4304. Molecular biology of bacterial gene expression, DNA replication, mutation, genetic mapping using plasmids and phages, recombinant DNA mechanisms.

**MCB 4320C Bacterial Genome Sequencing and Analysis.** Credits: 3; Prereq: MCB 3020 or MCB 3023. Course to learn about genomics, research and scientific communication while sequencing a whole bacterial genome as a class project.

**MCB 4403 Prokaryotic Cell Structure and Function.** Credits: 3; Prereq: CHM 2211; MCB 3020, MCB 3020L with C or better. BCH 4024 or CHM 4207 should be taken before MCB 4403. An analysis of the cell structure and physiology of bacterial cells. Extensive discussion of cell division and cell growth is provided, along with descriptions of important bacterial cell structures (e.g. cell walls, membranes, flagella, etc.).

**MCB 4503 General Virology.** Credits: 3; Prereq: MCB 3020 and MCB 3020L and MCB 4203 with C or better. Nature of viruses and mechanisms of infection and replication. Includes bacterial, animal and plant viruses.

**PCB 3023 Essential Cell Biology.** Credits: 3. Prereq: BSC 2011 and 2011L with a grade of at least C. Introduction to the basic concepts of molecular cell biology in prokaryotic and eukaryotic systems including experimental strategies and methodology.

**PCB 4043C General Ecology.** Credits: 4; Prereq: BSC 2011 and 2011L with grades of at least C. Ecological processes and organization in terrestrial and aquatic habitats. Laboratory and field exercises emphasize techniques of ecological analysis.

**PCB 4233 Immunology.** Credits: 3; Prereq: MCB 3023, MCB 3020 or equivalent. This course focuses on basic immunological concepts: including specific components, development, and function.

**PCB 4674 Evolution.** Credits: 4; Prereq: BSC 2011 and 2011L with grades of at least C; Coreq: one semester of calculus. PCB 3063 recommended. Processes and mechanisms of evolution, including population genetics, speciation, patterns of evolution and molecular evolution.

**PSB 3002 Physiological Psychology.** Credits: 3; Prereq: PSY 2012. Survey of the biological basis of behavior with special relevance to psychology. Students may not take both PSB 3002 and PSB 3340. (B)

**PSB 3340 Behavioral Neuroscience.** Credits: 3; Prereq: BSC 2010. Neuroanatomical, chemical, and electrophysiological studies in the biological basis of behavior. Students may not take both PSB 3002 and PSB 3340. PSB 3340 is recommended for IDS majors in Neurobiological Sciences. (B)

**ZOO 3513C Animal Behavior.** Credits: 4; Prereq: BSC 2011 and 2011L with grades of at least C and PCB 4674. The causes, origins and evolution of animal behavior emphasizing field observations and experiments on the behavior of a variety of animal groups.

**ZOO 3603C Evolutionary Developmental Biology.** Credits: 4; Prereq: BSC 2011 and 2011L with grades of at least C. Analysis of embryonic development, underlying genetic mechanisms and how these processes have driven the evolutionary diversification of animal body plans.

**ZOO 3713C Functional Vertebrate Anatomy.** Credits: 4; Prereq: BSC 2011 and 2011L with grades of at least C. The form and function of chordates accompanied by laboratory work dealing with a selected series of chordates.

**ZOO 4232 Human Parasitology (Coll of Agric.).** Credits: 3; Prereq: BSC 2010 and BSC 2010L; BSC 2011, BSC 2011L or AGR 3303 with C or better grade. Host-parasite relationships of helminth and protozoan diseases important in health sciences and veterinary medicine.

**ZOO 4403C Marine Biology.** Credits: 4 to 6; Prereq: BSC 2011 and 2011L with grades of at least C. Survey of major marine taxa, systematics of local marine fauna and flora, with familiarization of the marine environment. Laboratory emphasizes field work and independent projects.

**ZOO 4472C Avian Biology.** Credits: 4; BSC 2011 and 2011L with grades of at least C, and PCB 4674 (recommended). The basic biological characteristics of birds, which, as exceptionally unique flying vertebrates, are confronted with a spectrum of problems in terms of anatomy, physiology, behavior, migration and population ecology.