



COLLEGE OF ARTS AND SCIENCES

BIOLOGY
PRE-PHYSICIAN ASSISTANT CONCENTRATION
1-800-334-4111 • WWW.CAMPBELL.EDU

THE CAMPBELL PROGRAM

The Pre-Physician Assistant program is a concentration within the Biology major. This program is designed to prepare undergraduate students for admission into professional degree programs. Students interested in this major may consider a Master of Physician Assistant Studies at Campbell University's College of Pharmacy and Health Sciences.

For more than 20 years, Campbell has been educating Pre-Physician Assistant students who have been well-prepared for graduate schools. With fewer medical students pursuing careers in internal medicine and a rapidly growing population, the American Academy of Family Physicians anticipates nearly all 50 states will have a shortage of primary care physicians by 2020. Physician Assistants are academically and clinically prepared to provide healthcare services with the direction and responsible supervision of a doctor of medicine or osteopathy.

Within the Biology Major, we present the biological sciences from the perspective of purpose and faith. Our program is substantial with approximately 150 biology majors pursuing a Pre-Professional track such as the Pre-Physician Assistant concentration.

THE CAMPBELL APPROACH

We strive to present a balance between the theoretical and the practical by spending equal amounts of time in lecture and lab. Labs typically range from 15-26 students. While pursuing the Pre-Physician Assistant track, you will also be encouraged to do independent research under faculty direction or a voluntary internship with a health-related organization.

We have extensive resources including modern laboratory equipment and instrumentation. You'll also find:

- Three analog video microscopes and three digital video microscopes
- Multimedia classrooms and laboratories
- 24 wireless laptop computer, printers, and course related software
- Eight mobile UV/VIS spectroscopy workstations
- Two mobile digital multimedia presentations stations
- LI-COR 4300 DNA Analysis System
- 12 canoes
- 17 ft. research boat with 90 HP outboard motor
- Five laminar flow hoods, two CO₂ incubators, three PCR thermocyclers and four inverted phase-contrast microscopes

For more information about the program contact:
1-800-334-4111, ext. 1730 • 910-893-1730
biology@campbell.edu

THE CAMPBELL FACULTY

Our faculty's strong academic credentials are complemented by vast teaching expertise in a wide variety of subjects. Their research interests are also diverse, encompassing cell-to-cell communications through signal transduction, molecular genetics, population dynamics and ecology, limnology horticulture, plant tissue culture and bioengineering, taxonomy, canine and ruminant digestive physiology, and immunity to infectious diseases.

As importantly, you will find faculty members are approachable, friendly and regularly available for "walk-in" discussions. If you're on the Pre-Physician Assistant track, you will have an adviser who is knowledgeable and experienced in that field. Students are also encouraged to get to know professors and fellow majors outside the classroom through the Walker Biology Club and Pre-Medical Allied Health Honor Society.

THE CAMPBELL STUDENT

The health sciences are an intensely competitive field. We are seeking serious, highly motivated students who want to be successful in attaining their goals and making a difference. Generally speaking, our students are well-grounded in trigonometry, biology, chemistry and physics before arriving at Campbell.

To be competitive in applying for health professional schools, you should expect to maintain an overall college GPA of 3.25 or better. Since graduate programs and Physician Assistant schools have varying requirements, make sure you research what is expected of you.

About 10% of our graduates immediately pursue post graduate studies. Acceptance rates among highly qualified students who apply to medical school is 80%. Ultimately, most of our students find excellent positions in industry or health service labs.



BIOLOGY, PRE-PHYSICIAN ASSISTANT: BACHELOR OF SCIENCE

Requirements for a Major in Biology with a Pre-Physician Assistant Concentration (CIP 26.0101)

In addition to the requirement for a Major in Biology, students must complete BIOL 221, 310, 320, 334, 430; CHEM 228. Individual PA programs vary in their requirements for work experience in the medical field.

CURRICULUM OUTLINE

Biology, Pre-Physician Assistant Concentration

FRESHMAN YEAR

SEMESTER 1		HRS	SEMESTER 2		HRS
ENGLISH FUNDAMENTALS	ENGL 100	3	ENGL COMP I	ENGL 101	3
FOREIGN LANG	102	3	FOREIGN LANG	201	3
GEN CHEMISTRY I	CHEM 111	4	GEN CHEMISTRY II	CHEM 113	4
BASIC BIOLOGY	BIOL 111	4	STATISTICS	MATH 160	3
TRIGONOMETRY	MATH 112	3	BOTANY	BIOL 202	4
CU WORSHIP	CUW 100	0.5	CU WORSHIP	CUW 100	0.5

SOPHOMORE YEAR

SEMESTER 3		HRS	SEMESTER 4		HRS
ZOOLOGY	BIOL 203	4	CELL & MOL BIOL	BIOL 201	4
ORGANIC CHEMISTRY I	CHEM 227	4	ORGANIC CHEMISTRY II	CHEM 228	4
INTRO TO CHRISTIANITY	RELG 125	3	HUMAN ANAT & PHYS	BIOL 221	4
ENGLISH COMP II	ENGL 102	3	ENGLISH LITERATURE	ENGL LIT	3
WESTERN CIV I	HIST 111	3	WESTERN CIV II	HIST 112	3
CU WORSHIP	CUW 200	0.5	CU WORSHIP	CUW 200	0.5

JUNIOR YEAR

SEMESTER 5		HRS	SEMESTER 6		HRS
ADV HUMAN PHYS	BIOL 310	3	ENGLISH LITERATURE	ENGL LIT	3
INTRO TO BIO RESEARCH	BIOL 205	3	GENETICS	BIOL 342	4
MICROBIOLOGY	BIOL 334	4	RELIGION ELECTIVE	RELG	3
PHYSICS I	PHYS 221	4	PHYSICS II	PHYS 222	4
GENERAL PSYCHOLOGY	PSYC 222	3	PE ACTIVITY	PE 111	1

SENIOR YEAR

SEMESTER 7		HRS	SEMESTER 8		HRS
DEVELOPMENTAL ANATOMY	BIOL 320	3	ECOLOGY	BIOL 327	4
SENIOR SEMINAR	BIOL 451	1	SOCIAL SCIENCE ELECTIVE		3
BIOCHEMISTRY	BIOL 430	4	SCIENCE ELECTIVE		4
SOCIAL SCIENCE ELECTIVE		3	ART/MUSIC/THEATRE	131	3
LIFETIME WELLNESS	PE 185	2			

TOTAL HOURS 128

English – Students with an SAT verbal score below 450 will be enrolled in ENGL 100; 450-699 students will be enrolled in ENGL 101; 700 and above with at least a “B” average in high school students will be enrolled in ENGL 102.

English Literature – The ENGL LIT requirement may be satisfied by completing any two of the following literature courses: ENGL 201, 202, 203, 204 or 205, or with a 300-level Foreign LANG LIT.

Foreign Language – Students are required to pass a 201-level Foreign LANG.

Social Science – Courses may be selected from CRIM, ECON, GEO, POLS, HIST, PHIL, PSYC and SOCI.

Electives – Any course may be used for an elective; however, carefully chosen electives will allow for a minor.

*Most applicants range from 2-5 years of experience, including volunteer work, nursing experience, laboratory work and military experience.

BIOLOGY ELECTIVES

BIOL 215 Plants for Pleasure & Profit; BIOL 221 Human Anatomy & Physiology; BIOL 224 Vertebrate Natural History; BIOL 226 Ornithology; BIOL 241 Field Botany; BIOL 250 Histology; BIOL 310 Advanced Human Physiology; BIOL 315 Bioinformatics; BIOL 319 Biomedical Ethics; BIOL 320 Developmental Anatomy; BIOL 321 Environmental Toxicology; BIOL 322 Aquatic Ecology; BIOL 333 General Parasitology; BIOL 334 Microbiology; BIOL 335 Immunology; BIOL 336 Medical Microbiology; BIOL 350 Advanced Cell & Molecular Biochemistry; BIOL 351 Creation, Evolution, or Both?; BIOL 441 Biology Research; BIOL 465 Biology Internship; BIOL 508 Molecular Techniques

The Campbell Advantage

Our program provides an exceptionally solid foundation for future success, whether you choose to work toward a professional degree or immediately enter the work force. Today's PA needs capabilities extending beyond the lab and classroom. They must be well-grounded in ethics, research, writing and technology. We are convinced Campbell is uniquely qualified to give you the foundation on which to build your specialization because...

- We combine a core curriculum with a vast array of biology-related courses and resources.
- We have a faculty committed to outstanding teaching and to helping you achieve your goals.
- We are a university dedicated to quality liberal arts education, free enterprise and our Christian Mission.

The major requirements outlined within this brochure are intended as a guideline, and the curriculum outlines are only a sample. The most recent copy of the University's Undergraduate Studies Bulletin is the official source related to curriculum guidelines. It is the student's responsibility to consult with his/her academic adviser.