

**PONCE SCHOOL OF MEDICINE
GRADUATE PROGRAM IN BIOMEDICAL SCIENCES
CURRICULUM**

The goal of the Biomedical Sciences Doctoral Program is to foster a broad-based training in the biomedical sciences while concentrating the research experience and additional courses in a specific area. The Program is intended to develop extensive interdepartmental research interactions including seminars, discussion groups and journal clubs. Students may elect to do research in a particular research laboratory within the areas of Anatomy, Biochemistry, Microbiology, Pharmacology, and Physiology.

FIRST YEAR					
I SEMESTER			II SEMESTER		
COURSE	TITLE	CREDITIS	COURSE	TITLE	CREDITIS
BCH 611	Biochemistry †	Extended	BCH 611	Biochemistry †	6
PHY 701	Physiology †	Extended	PHY 701	Physiology †	6
ANA 605	Histology †	Extended	ANA 605	Histology †	4
BSG 775	Seminar	1	BSG 775	Seminar	1
(DEPT) 671-672-673	Rotation*	2	MIC 601	Microbiology I †	6
			(DEPT) 671-672-673	Rotation*	2
SUMMER					
BSG 641	Computers	2	BSG 645	Biostatistics	3
SECOND YEAR					
PHA 781	Pharmacology †	Extended	PHA 781	Pharmacology †	8
BSG 775	Seminar	0	BSG 775	Seminar	0
	Advanced Topics	1-3		Advanced Topics	1-3
BSG 675	Ethics	2		Electives	1-3
THIRD YEAR					
(DEPT) 798	Thesis Research	Extended	(DEPT) 798	Thesis Research	0
	Special Topics	1-3		Special Topics	1-3
FOURTH YEAR					
(DEPT) 799	Thesis	Extended	(DEPT) 799	Thesis	12
TOTAL CREDITS			70		

* Subject to student's needs

† Same courses as those taken by medical students in their first two years of basic sciences.

RESEARCH APPRENTICESHIP ROTATIONS

The student will carry out a minimum of two laboratory rotations during the 2nd year (two credits each). Students spend eight weeks (6 hrs/week) with a minimum of 48 hrs. in the research laboratory of a specific faculty member taking part in all laboratory activities.

TEACHING PRACTICUM

Consists of 30 hours of teaching under faculty supervision (two credits). Teaching experience at any other institution of higher education will be convalidated as long as evidence is provided.

QUALIFYING EXAMINATION

Administered upon completion of all core courses. Should be taken within the first three years of full time studies as soon as the student completes the basic course requirements. Students who pass the exam will be granted admission to candidacy of the Ph.D. degree and will be allowed to continue in the Program.

RESEARCH

By the end of the second year, students should have chosen a research mentor and a Graduate Committee. This Committee will consist of the student's dissertation advisor, three faculty members whose interests are related to the student's research, and a member from another institution with experience in the field. Upon consultation with the research mentor, the student will present a research proposal using NIH format. The proposal will be defended orally before the student's Graduate Committee who will give the final approval.

DISSERTATION

Upon completion of an original and independent research project, the student will prepare a dissertation according to the established guidelines. The student will give an oral presentation, followed by a closed-session defense of the dissertation before the student's Graduate Committee who will approve the thesis and recommend to the Dean grating of the Ph.D. degree.