

# BIOPHYSICS (PH.D.)

**Offered by:** Graduate and Postdoctoral Studies

**Degree:** Doctor of Philosophy

## Program Description

The Ph.D. in Biophysics offers training in the understanding of the fundamental processes of biological systems through the application of biophysical techniques, coupled with molecular biology, biochemistry, bioengineering, immunology, cell biology, physiology, and pharmacology. This program is designed to provide comprehensive insight into the many disciplines that comprise biophysics research and fundamental biophysics. The program includes laboratory rotations and a Ph.D. thesis research project.

## Required Courses (9 credits)

Expand allContract all

Course	Title	Credits
BPHY 601D1	Fundamentals in Biophysics	3
BPHY 601D2	Fundamentals in Biophysics	3
BPHY 602D1	Current Topics in Biophysics	1
BPHY 602D2	Current Topics in Biophysics	1
BPHY 603	Effective Science Communication	1
BPHY 701	Ph.D. Comprehensive Examination	0

## Complementary Courses (3 credits)

3 credits from the following:

Expand allContract all

Course	Title	Credits
BIEN 530	Imaging and Bioanalytical Instrumentation.	3
BIEN 535	Electron Microscopy and 3D Imaging for Biological Materials.	3
BIEN 580	Synthetic Biology.	3
BIOC 604	Macromolecular Structure.	3
BIOC 605	Protein Biology and Proteomics.	3
BIOL 592	Integrated Bioinformatics.	3
BMDE 505	Cell and Tissue Engineering.	3
BMDE 507	Formulation and Delivery of Biotherapeutics.	3
BTEC 555	Structural Bioinformatics.	3
BTEC 650	Therapeutic Antibody Design.	3
CHEM 603	Principles and Applications of Materials Characterization.	3
PHYS 519	Advanced Biophysics.	3