PROGRAM IN BIOMEDICAL SCIENCES (PIB)

PIB 700. Journal Club. 1 Credit Hour.
All PIBS students are required to attend one journal club or seminar each week.
Components: SEM.
Grading: SUS.
Typically Offered: Fall & Spring.

PIB 701. Introduction to Biomedical Sciences. 5 Credit Hours.
This course surveys fundamentals of molecular and cellular biology that underly all modern biomedical research. Lectures are organized into modules that cover Proteins and DNA, Gene Expression, Signaling and Membranes, Cells, and Development. A final module covers immunology, organ systems, and genetics. Experimental techniques are emphasized throughout, with the first week of the course devoted to a bootcamp on common biomedical methods.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

PIB 702. Scientific Reasoning. 3 Credit Hours.
This course teaches scientific reasoning by critical reading of primary research papers in a small-group setting. Multiple small groups are offered every week and students can choose from different topics related to lectures in the companion PIB 701 course. Research papers are discussed in two 1-hour sessions each week.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

PIB 731. Laboratory Research. 1-6 Credit Hours.
Laboratory rotations familiarize students with a variety of modern techniques in biomedicine and potential mentors for their dissertation projects. One credit is awarded per rotation.
Components: LAB.
Grading: GRD.
Typically Offered: Fall, Spring, & Summer.

PIB 780. Research Ethics. 1 Credit Hour.
The NIH Guide for Grants and Contracts stipulates that Institutions receiving support for National Research Service Award Training Grants are required to develop a program in the principles of scientific integrity. This program should be an integral part of the proposed training effort.
Components: LEC.
Grading: GRD.
Typically Offered: Fall.

PIB 782. Professional Development: Skills for Success I. 1 Credit Hour.
This workshop will teach students the basics on how to: manage your career, choose a rotation lab / mentor, read a scientific paper, write a lab report and present in the journal club and lab meetings.
Components: LEC.
Grading: SUS.
Typically Offered: Fall.

PIB 783. Professional Development: Skills for Success II. 1 Credit Hour.
This workshop will teach students the basics on how to: write a fellowship and scientific paper as well as the proper and ethical handling of research data.
Components: LEC.
Grading: SUS.
Typically Offered: Spring.

PIB 830. Doctoral Dissertation. 1-12 Credit Hours.
Required for all PhD candidates. First-year students generally take one credit of doctoral dissertation in their first summer semester then continue in program specific dissertation credit through graduation.
Components: THI.
Grading: SUS.
Typically Offered: Summer.