Catalog of Postgraduate Programs and Curricula

Curriculum for PhD(BICH)
(For students admitted in 2010-11)

Program Requirements for Doctor of Philosophy (PhD) Program in Biochemistry

Credits

1. Students admitted to the PhD program with only a **bachelor's degree** in biological science or related fields are required to take **12 credits** of coursework from the following course list, of which no more than 3 credits can be taken from 300-level UG courses.

2. Students entering the program with a **master's degree** are required to take **9 credits** of coursework from the following course list, of which no more than 3 credits can be taken from 300-level UG courses.

BISC	319	*Advanced Cell Biology*
BISC	338	*Pharmacology and Toxicology*
BISC	354	*Structure and Function of Proteins*
BISC	358	*Bioinformatics*
BISC	362	*Advanced Biological Chemistry*
BISC	363	*Advanced Topics in Biotechnology*
BISC	376	*Biochemistry of Diseases*
BISC	395	*Neurochemistry*
BISC	507	*Workshops in Bioscience*
BISC	512	*Advanced Topics in Biophysical Chemistry*
BISC	524	*Molecular and Development Neurobiology*
BISC	526	*Biochemical and Molecular Basis of Diseases*
BISC	538	*Cell Cycle Control*
BISC	571	*Cellular Regulation*
BISC	613	*Scientific Writing in Biology*
BISC	617	*Special Topics in Molecular Biology*
BISC	627	*Advanced Topics in Biochemistry*
BISC	666	*Molecular Medicine*

3. Students with a first degree in an area not directly related to biological science may be required to take additional courses.

Postgraduate Seminar

To attend seminars organized in each semester and present seminars as required:

BICH	601	*Biochemistry Seminar I*; and
BICH	602	*Biochemistry Seminar II*

Qualifying Examination

To pass a qualifying examination.

Research and PhD Thesis Examination

1. To conduct research and enroll in BICH 799 *Doctoral Thesis Research*; and

2. To defend the PhD thesis successfully.

Concentration

1. In addition to the existing program requirements, students who opt for the Molecular Medicine concentration are required to take the following **2 required courses (6 credits)**:

BISC 526	*Biochemical and Molecular Basis of Diseases*; and
BISC 666	*Molecular Medicine*

2. Students admitted to the PhD program with only a **bachelor's degree** in biological science or related fields are required to take **another 6 credits** of coursework from the following course list, of which no more than 3 credits can be taken from 300-level UG courses.

3. Students entering the program with a **master's degree** are required to take **another 3 credits** of coursework from the following course list.

BISC	319	*Advanced Cell Biology*
BISC	338	*Pharmacology and Toxicology*
BISC	354	*Structure and Function of Proteins*
BISC	358	*Bioinformatics*
BISC	362	*Advanced Biological Chemistry*
BISC	363	*Advanced Topics in Biotechnology*
BISC	376	*Biochemistry of Diseases*
BISC	395	*Neurochemistry*
BISC	512	*Advanced Topics in Biophysical Chemistry*
BISC	524	*Molecular and Developmental Neurobiology*
BISC	571	*Cellular Regulation*
BISC	627	*Advanced Topics in Biochemistry*

4. To conduct research in the area of molecular medicine.