BIOLOGY (BIOL)

BIOL 6606 Current Topics in Biology
3 credit hours
A journal article-based examination of developments in biology that are relevant to all biology graduate students. NOTE: This course is compulsory for all graduate students in biology and is normally taken in the first year.

BIOL 6607 Advanced Molecular Biology
3 credit hours
The application of molecular techniques to broad biological problems is the focus of this course. It is suitable not only for students pursuing a degree in molecular biology but also to those who will use advanced techniques such as DNA sequencing, bioinformatics and genomics to approach larger aspects of biology, for example population genetics, taxonomic problems, paternity identification, etc.

BIOL 6608 Biostatistics for Graduate Students
3 credit hours
Analysis of biological data at the advanced level. The course will build on previous biostatistics experience and include multivariate analysis, nonparametric methods, and model selection as well as manipulation and analysis of large, complex databases.

BIOL 6609 Field Methods and Experimental Design
3 credit hours
Students will be exposed to standard methodologies for data collection under field conditions, including sampling protocols, technical devices available and types of numerical and descriptive data that are typically collected. Design of both experimental and ecological research projects will be discussed.

BIOL 6625 Theoretical Plant Ecology
3 credit hours
This course offers an advanced treatment of plant ecology, starting with theoretical principles but moving into empirical tests of theory. Topics covered include competition, facilitation, coexistence, ecosystem functioning, plant traits and modeling. Students will collaborate on a common experiment or field study during the course.

BIOL 6690 - 6699 Directed Study in Biology
3 credit hours
These courses are intended to supplement the course offerings in biology and allow students to delve deeper into a subject of particular interest to them. Students must show some initiative and be willing to work independently.

BIOL 6800 – 6825 Special Topics in Biology
6 credit hours
Course content varies from year to year.

BIOL 6826 – 6849 Special Topics in Biology
3 credit hours
Course content varies from year to year.