Fundamentals of Genomics

CREDITS: 3
FORMAT: Lecture/Seminar
SCHEDULE: Meets twice weekly, 80 minutes
Tuesday and Thursday, 5th period
LOCATION: Rm 124 Foran Hall, Cook Campus

ORGANIZER/LEAD INSTRUCTOR: CO-INSTRUCTOR
Debashish Bhattacharya Dana C. Price
Biochemistry and Microbiology Plant Biology

OUTCOMES:
Students will leave the course with knowledge of the foundations of modern genomics, including experimental design, data acquisition, analysis, and interpretation.

PRE-REQUISITES:
General Biochemistry 403 or Introduction to Molecular Biology and Biochemistry Research 315 or Genetics 380 (one of the three) OR Fundamentals of Evolution 251 or Principles of Evolution 486 (one of the two)

SYNOPSIS:
This course will provide an introduction to genome science to undergraduate and graduate students with a variety of backgrounds such as microbiology, biochemistry, animal and plant science, and ecology/evolution who are confronted with the growing influence of this field in their work but may not be knowledgeable in its uses and limitations. The lectures will provide an overview of genomics technology and provide real-life examples in the life sciences with a particular focus on microbial biology and evolution.