

COMMITTEE ON GENETICS, GENOMICS & SYSTEMS BIOLOGY: SUGGESTED STUDENT TRACKS

	AUTUMN QUARTER		WINTER QUARTER		SPRING QUARTER	
		Course #		Course #		Course #
MODEL SYSTEMS	Genetic Analysis of Model Organisms Molecular Evolution Cell Biology I Advanced Developmental Biology Human Genetics I Nucleic Acid Structure Introduction to Probability and Statistics for Geneticists	MGCB 31400 ECEV 44000 MGCB 31600 DVBI 35400 HGEN 4700 BCMB 30600 HGEN 47400	Fundamentals of Molecular Biology OR Molecular Biology I Genetic Mechanisms Cell Biology II Dev. Gene of Non-Vertebrate Model Systems	MCGB 31000 OR 31200 MGCB 31500 MGCB 31700 DVBI 35500	Genomics and Systems Biology Human Variation and Disease Vertebrate Developmental Genetics Molecular Biology II	HGEN 47300 HGEN 46900 DVBI 35600 MGCB 31300
POPULATION GENETICS	Genetic Analysis of Model Organisms Fundamentals of Molecular Evolution Cell Biology I Statistical Methods & Their Applications Statistical Theory & Methods I Introduction to Probability and Statistics for Geneticists	MGCB 31400 ECEV 44000 MGCB 31600 STAT 22000 STAT 24400 HGEN 47400	Fundamentals of Molecular Biology OR Molecular Biology I Genetic Mechanisms Principles of Population Genetics I Statistical Methods & Applications Statistical Theory & Methods II	MGCB 31000 OR 31200 MGCB 31500 ECEV 35600 STAT 22000 STAT 24500	Genomics and Systems Biology Human Variation & Disease Evolutionary Genomics Speciation Sexual Selection	HGEN 47300 HGEN 46900 ECEV 35901 ECEV 36300 ECEV 37500
HUMAN GENETICS	Genetic Analysis of Model Organisms Fundamentals of Molecular Evolution Human Genetics Statistical Methods & Their Applications Statistical Theory & Methods I Introduction to Probability and Statistics for Geneticists	MGCB 31400 ECEV 44000 HGEN 47000 STAT 22000 STAT 24400 HGEN 47400	Fundamentals of Molecular Biology OR Molecular Biology I Genetic Mechanisms Principles of Population Genetics I Introductory Statistical Genetics Statistical Methods & Applications Statistical Theory & Methods II	MGCB 31000 OR 31200 MGCB 31500 ECEV 35600 HGEN 47100 STAT 22000 STAT 24500	Genomics and Systems Biology Human Variation & Disease Molecular Biology II Statistical Genetics	HGEN 47300 HGEN 36900 MGCB 31300 STAT 35500
DEVELOPMENTAL GENETICS	Genetic Analysis of Model Organisms Fundamentals of Molecular Evolution Advanced Developmental Biology Cell Biology I Introduction to Probability and Statistics for Geneticists	MGCB 31400 ECEV 44000 DVBI 35400 MGCB 31600 HGEN 47400	Fundamentals of Molecular Biology OR Molecular Biology I Genetic Mechanisms Dev. Gene of Non-Vertebrate Model Systems	MGCB 31000 OR 31200 MGCB 31500 DVBI 35500	Genomics and Systems Biology Human Variation & Disease Molecular Biology II Vertebrate Developmental Genetics Evolutionary Aspects of Gene Regulation	HGEN 47300 HGEN 46900 MGCB 31300 DVBI 35600 EVOL 32600
GENOMICS & SYSTEMS BIOLOGY	Genetic Analysis of Model Organisms Fundamentals of Molecular Evolution Topics in Bioinformatics Computational Systems Biology Introduction to Probability and Statistics for Geneticists	MGCB 31400 ECEV 44000 CMSC 37701A CMSC 37720 HGEN 47400	Fundamentals of Molecular Biology OR Molecular Biology I Genetic Mechanisms Principles of Population Genetics I Topics in Bioinformatics	MCGB 31000 OR 31200 MGCB 31500 ECEV 35600 CMSC 37701B	Genomics and Systems Biology Human Variation & Disease Evolutionary Genomics Systems Biology II Systems Biology, Self-Assembly & Complexity	HGEN 47300 HGEN 46900 ECEV 35901 BIOS 28401 CPHY 35000

THE ABOVE COURSE TRACK IS SUGGESTED. THE COMMITTEE ON GENETICS ENCOURAGES ALL STUDENTS TO EXPLORE OTHER AREAS OF INTEREST AS WELL.

TO SATISFY THE COURSE REQUIREMENTS FOR THE COMMITTEE ON GENETICS, STUDENTS ARE TO TAKE:
5 REQUIRED COURSES, 3 ELECTIVES, AND 2 GRADED LAB ROTATIONS FOR ½ CREDIT EACH, TOTALING 9 GRADED COURSES.

REQUIRED RED BOLDED COURSES FOR THE DEGREE ARE AS FOLLOWS:

Genetic Analysis of Model Organisms	MGCB 31400
Genomics and Systems Biology	HGEN 47300
Genetic Mechanisms	MGCB 31500
Fundamentals of Molecular Biology	MGCB 3100
OR Molecular Biology I	OR MGCB 31200

SUGGESTED ELECTIVES FROM WHICH TO CHOOSE THREE

CHOOSE 1 OF THE FOLLOWING BULE ITALICIZED COURSES TO SATISFY THE FINAL COURSE REQUIREMENT FOR THE DEGREE:

<i>Fundamentals of Molecular Evolution</i>	<i>ECEV 44000</i>
<i>Principles of Population Genetics I</i>	<i>ECEV 35600</i>
<i>Human Variation & Disease</i>	<i>HGEN 46900</i>
<i>Evolutionary Genomics</i>	<i>ECEV 35901</i>