FORM AA

Course Program for a Ph.D. in GGB

Student's Name:_____

Course Program for a Ph.D. in GGB

(An additional copy of form AA-GB is located in Section X.)

Use the following outline as a check list to be sure that **ALL** coursework requirements have been met. The form version of this list (Form AA) will be submitted to the Graduate Advisor along with a Course Plan (Form BB), additional relevant courses taken (Form CC) and a letter from the Chair of the Guidance Committee explaining any unusual features of the file.

Entry Requirements for students with background in genetics and molecular biology:

			Equivalent class/Year/Institution Grade
___	BCH 100	Elementary Biochemistry	_____
___	BCH 102	Introductory Biochemistry Lab	_____
___	BIOL 5A-B-C	General Biology	_____
___	BIOL 102	Introductory Genetics	_____
___	BIOL 107A or BCH 110C	Molecular Biology	_____
___	CHEM 1A-B-C	General Chemistry	_____
___	CHEM 112A-B	Organic Chemistry	_____
___	MATH 9A-B	Calculus	_____
___	STAT 100A	Introduction to Statistics	_____

Entry Requirements for students with background in bioinformatics:

			Equivalent class/Year/Institution Grade
___	BCH 100	Elementary Biochemistry	_____
___	BIOL 5A-B-C	General Biology	_____
___	BIOL 102	Introductory Genetics	_____
___	CHEM 1A-B-C	General Chemistry	_____
___	CS 014	Data Structures and Algorithms	_____
___	MATH 9A-B-C	Calculus	_____
___	STAT 100A	Introduction to Statistics	_____

Core Classes (breadth requirements)

Students will take one course from each of the following three areas (A-C).

(A) Molecular Genetics

___ GEN 203 - Advanced Genetic Analysis of Model Organisms

Students focusing on specific organism groups can substitute GEN 203 with other courses such as:

___ MCBL 221 - Microbial Genetics

___ CMDB 201 - Molecular Biology
___ BPSC/BCH 231 - Plant Genome

Other alternatives can be chosen after approval by their guidance committee and graduate advisor.

(B) Genomics

___ GEN 241 (former GEN 240A) - Advances in Genomics

(C) Bioinformatics

___ GEN 242 (former GEN 240B) - Data Analysis in Genome Biology

Elective Classes (areas of specialization)

Students must take one or more classes from the following areas. Students can also choose elective courses other than the ones listed below after approval by their guidance committee and graduate advisor.

Genetics

___ CMDB 201 - Molecular Biology
___ GEN 206 - Gene Silencing
___ BPSC/BIOL 148 - Quantitative Genetics
___ BPSC/BCH 231 - Plant Genome
___ BIOL/MCBL 221 - Microbial Genetics
___ EEOB 214 - Evolutionary Genetics
___ ENTX 204 - Genome Maintenance and Stability
___ EEOB 216 - Theory of Evolution

Computational Biology and Statistics

___ BPSC 234 – Statistical Genomics
___ CS 141 - Intermediate Data Structures and Algorithms
___ CS100: Software Construction
___ CS234: Computational Methods for Biomolecular Data
___ CS238: Algorithmic Techniques in Computational Biology
___ GEN 220 - Computational Analysis of High Throughput Biological Data
___ STAT 110 - Biostatistical Methods in Life Sciences
___ STAT 155 – Probability and Statistics for Science and Engineering
___ STAT201A/B/C Theory of Probability and Statistics (replaces 160A/B)
___ STAT201A/B/C-- Elements of Probability and Statistical Theory
___ STAT 160B - Elements of Probability and Statistical Theory
___ STAT 161 - Introduction to Probability Models