

**Genetics, Genomics, and Bioinformatics (GGB) Theme
2018-2019 Academic Requirements**

COURSES	PLANNED	COMPLETED
Lab Rotations		
GBS 795- Lab Rotation 1 (1 hour)	1 st Fall	
GBS 796- Lab Rotation 2 (1 hour)	1 st Fall	
GBS 797- Lab Rotation 3 (1 hour)	1 st Spring	
GBS 794- Lab Rotation 4 (1 hour), if needed	1 st Spring	
Core Courses		
GBS 707- Basic Biochemistry and Metabolism (2 hours)	1 st Fall	
GBS 708- Basic Genetics and Molecular Biology (2 hours)	1 st Fall	
GBS 709- Basic Biological Organization (2 hours)	1 st Fall	
Module Courses- recommended by theme		
GBS 724- Principles of Human Genetics (January, 2 hours)	1 st Spring	
GBS 720- Genomic Structure and Function (February, 2 hours)	1 st Spring	
GBS 722- Bioinformatics (March, 2 hours)	1 st Spring	
GBSC 718- Epigenetics (April, 2 hours)	1 st Spring	
Theme Required Courses		
GBS 717- Methods and Scientific Logic (2 hours)	1 st Summer	
GBS 723- Model Systems for Genetic Analysis (2 hours)	1 st Summer	
GBSC 742.VTD- GGB Student Theme Meeting (1 hour) - Attend in 1 st year, but do not register	Every fall & spring, 2 nd year to graduation	
GBS Required Courses		
GRD 717- Principles of Scientific Integrity (3 hours)	1 st Summer	
Grant-writing/Scientific-writing (2 hours) - Course selected: GBS 716, GBS 725, GBS 768, GBSC 726	2 nd year	
Biostatistics (3 hours) -Course selected: GBSC 731, BST 611, BST 612, BY 755, PY 716	2 nd year	
Journal Clubs (1 hour) -Chosen in consultation with mentor	Every fall & spring, 2 nd year to graduation	
Three Advanced Courses (3 hours each) -Chosen in consultation with mentor and thesis committee		
Research (Non-dissertation & Dissertation) - Student must complete 24 hours total of dissertation research	Every semester beyond lab rotations	

Notes:

- Seminars- Recommended to attend, but do not register
- Students must be registered for 9 hours each semester, for a total of 27 hours per year. Equity and Diversity Scholars must register for 32 hours total per year. Any hours over must be approved by the program.
- Students must be admitted to candidacy for a minimum of 1 year before the thesis defense

Additional Theme Requirements:

- Publications: At least two first authored papers
- Presentations: At least one presentation at a national or international scientific meeting