

**Cell, Molecular, & Developmental Biology (CMDDB) Theme- MSTP/ARISE  
2019-2020 Academic Requirements**

COURSES	PLANNED	COMPLETED
<b>Module Courses- Recommended by theme</b>		
GBS 710- Cell Signaling (January, 2 hours)	MS2 Spring	
GBS 712- Cellular & Molecular Aspects of Dev Bio (February, 2 hours)	MS2 Spring	
GBS 723- Model Systems (March, 2 hours)	MS2 Spring	
GBS 784- Stem Cell Biology (April, 2 hours)	MS2 Spring	
<b>Theme Required Courses</b>		
GBS 717- Methods and Scientific Logic (2 hours)	GS1 Summer	
GBS 792- CMDDB Seminar (1 hour)	Fall & Spring	
<b>GBS Required Courses</b>		
GRD 717- Principles of Scientific Integrity (3 hours)	GS1 Fall	
Grant-writing/Scientific-writing (2 hours) - Course selected: GBS 716, GBS 725, GBS 768, GBSC 726, GRD 709		
Biostatistics (3 hours) -Course selected: GRD 770, BST 611, BST 612, BY 755, PY 716	GS1 Fall	
Journal Clubs (1 hour) -Chosen in consultation with mentor	Fall & Spring	
Three Advanced Courses (3 hours each) -Chosen in consultation with mentor and thesis committee		
<b>MSTP/ARISE Required Courses</b>		
MSTP 794- Translational Research Seminar (1 hour) -MSTP Requirement	Every semester	
MSTP 795- Continuing Clinical Education (1 hour) -MSTP Requirement	Fall & Summer	
Research -MSTP- MSTP 798: Non-dissertation & MSTP 799: Dissertation -ARISE- PSDO 798: Non-dissertation & PSDO 799: Dissertation -Student must complete 24 hours total of dissertation research	Every semester	

**Notes:**

- Students must be registered for 9 hours each semester. Any hours over must be approved by the MSTP/ARISE Director.
- Must obtain permission of Thesis Mentor, Theme Director, and MSTP/ARISE Director to register for Career Development courses (e.g., GRD and CIRTLL)
- Students must be admitted to candidacy for a minimum of 1 year before the thesis defense

**Additional MSTP/ARISE Requirements:**

- Submission of F30/F31 **on or before** April of GS2 Year (MSTP Requirement)
- Committee Meetings held every 6 months

**Additional Theme Requirements:**

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