

***Application for a Designated Emphasis in  
 Mechanisms of Gene Expression and Regulation Studies (GERS)***

*None of these units may be used to fulfill the requirements in another masters or PhD program. Students must be in a PhD program to participate and complete the DE during their 2nd or 3rd year in the PhD program, but no later than one calendar year from the advancement to candidacy date. A 3.00 overall GPA in all courses taken must be earned. 100-level courses must be accompanied by an appropriate 292 course, which requires additional readings and research. Any substitutions must be justified by the DE Director in writing prior to enrollment in the course.*

Student Name: \_\_\_\_\_ SID: \_\_\_\_\_

Graduate Program: \_\_\_\_\_

Date Advanced to Candidacy for PhD: \_\_\_\_\_

**Coursework Requirements**

- I. Three courses (12 units) with a focus in basic principles of genetics gene regulation (epigenetics, non coding RNA) and bioinformatics will be selected from: MCBL 221, CMDB 201, CMDB/GEN 203, GEN 241, GEN 242, GEN 206, GEN 220, BPSC/BIOL 148, EEOB 214, EEOB 216, ENTX 204, STAT 100A, BPSC 234, STAT 110, CS 234, CS 238.
  - a. Courses must be selected in consultation with the DE Advisory Committee which includes three participating faculty including the student’s major professor.
  - b. Courses must be selected from two different departments.
  
- II. All students will take BMSC 222 (2 units): Special Topics in Biomedical Sciences with emphasis in gene expression and regulation. The course is graded S/NC.

Course	Grade	Quarter	Units
BMSC 222			

- III. Research Project – students will write a review article on a selected genetics/bioinformatics regulation of gene expression topic. The article will be evaluated by the DE Advisory Committee with the expectation that the student will submit the article for journal publication.

Research Project Title: \_\_\_\_\_

Date research project approved: \_\_\_\_\_

\_\_\_\_\_  
 DE Director Signature

\_\_\_\_\_  
 Date