# CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY PH.D. - MICROBIAL EVOLUTION AND ECOLOGY

## DOCTOR OF PHILOSOPHY - CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY; MICROBIAL EVOLUTION AND ECOLOGY

**Degree Specific Credits:** 60

#### Required Cumulative GPA: 3.0

CONCENTRATION

- All CMMB PhD students have a common set of requirements: students must take a total of 60 semester credits, including 20 semester credits of courses (includes any course other than Dissertation and Research).
- At least three 3-credit (or more) graduate courses at the 500 or 600 level.
- In addition to coursework, all PhD students must teach at least one semester (typically as a Graduate Teaching Assistant) and must rotate in at least two research laboratories.
- · The following credit limitations apply:
  - A maximum of 6 credits of Special Topics (BCH 595, BIOB 595 and BIOM 595).
  - A maximum of 6 credits of Independent Study (BIOB 596, and BIOM 596).
  - A maximum of 20 credits of dissertation (BCH 699 and BIOM 699).

### **Required Courses**

Code	Title	Hours
<b>Core Courses</b>		
Complete all of the following courses:		
BCH 570	Intro to Research	2
or BIOM 570	Intro to Research	
BIOB 547	Experimental Molecular, Cellular, and Chemical Biology	4
BIOM 594	Molecular and Biomedical Sciences Seminar	4
Electives, Research, and Dissertation		
Complete 50 credits of elective courses.		50
Elective courses can include any graduate-level course in General Biology (BIOB), Microbiology (BIOM), and Biochemistry (BCH). Suggested courses include:		
BCH 582	Proteins and Enzymes	
BCH 584	Nucleic Acids	
BCH 597	Research	
or BIOM 597 Research		
BCH 699	Dissertation	

#### or BIOM 699 Dissertation

Total Hours 60