

# CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY PH.D.

BIOM 540	Microbial Pathogenesis	
BIOM 596	Independent Study	
<b>Total Hours</b>		<b>60</b>

## DOCTOR OF PHILOSOPHY - CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY

Degree Specific Credits: 60

Required Cumulative GPA: 3.0

- 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
<b>Electives, Research, and Dissertation</b>		
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 581	Physical Biochemistry	
BCH 582	Proteins and Enzymes	
BCH 584	Nucleic Acids	
BCH 595	Special Topics	
or BIOM 595	Special Topics	
BCH 597	Research	
or BIOM 597	Research	
BCH 600	Cell Organization & Mechanisms	
BCH 699	Dissertation	
or BIOM 699	Dissertation	
BIOB 567	Molecular Analysis of Development	
BIOM 502	Advanced Immunology	
BIOM 535	Advanced Virology	