

# CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY PH.D. - MICROBIOLOGY AND IMMUNOLOGY

BIOM 502	Advanced Immunology
BIOM 540	Microbial Pathogenesis
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<b>Total Hours</b>	<b>60</b>

## DOCTOR OF PHILOSOPHY - CELLULAR, MOLECULAR, AND MICROBIAL BIOLOGY; MICROBIOLOGY AND IMMUNOLOGY CONCENTRATION

**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).

### Course Requirements

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 582	Proteins and Enzymes	
BCH 584	Nucleic Acids	
BCH 597	Research	
or BIOM 597	Research	
BCH 600	Cell Organization & Mechanisms	
BCH 699	Dissertation	
or BIOM 699	Dissertation	