

# MICROBIOLOGY, PH.D.

## Degree Requirements

A minimum of 6 credit hours of 7000 level course work is required beyond the M.Sc. degree, and must include one of MBIO 7010, MBIO 7020 or MBIO 7030 (Seminars in Microbiology I, II or III).

A minimum of 12 credit hours of 7000 level course work is required beyond the Honours Bachelor's degree when the M.Sc. degree is not required and 9 of these 12 credit hours should normally be from Microbiology courses (include one of MBIO 7010, MBIO 7020 or MBIO 7030). These are minimal requirements; students may be directed to take additional courses by their advisor or advisory committee.

Students in the Ph.D. program are required to present one 50-minute seminar on their own research as part of the regular Department Seminar program.

**Expected Time to Graduate:** 4 - 6 years

## Progression Chart

Course	Title	Hours
<b>Year 1</b>		
MBIO 7010	Graduate Seminar in Microbiology 1 <sup>1</sup>	3
MBIO 7040	Graduate Microbiology <sup>1</sup>	3
GRAD 7300	Research Integrity Tutorial	0
GRAD 7500	Academic Integrity Tutorial	0
<b>Hours</b>		<b>6</b>
<b>Year 2</b>		
MBIO 7020	Graduate Seminar in Microbiology 2 <sup>1</sup>	3
Select one of the following:		3
MBIO 7060	Microbial Interactions	
MBIO 7070	Bioprocessing	
MBIO 7100	Advanced Concepts in Molecular Biology	
MBIO 7160	Special Problems in Microbiology	
MBIO 7200	Macromolecular Structure Analysis	
Or other approved by advisory committee		
<b>Hours</b>		<b>6</b>
<b>Years 3-5</b>		
GRAD 8020	Doctoral Re-registration	0
GRAD 8000	Doctoral Thesis (register if defending that term)	0
<b>Hours</b>		<b>0</b>
<b>Total Hours</b>		<b>12</b>

<sup>1</sup> Students who have transferred from the M.Sc. program and have successfully completed MBIO 7010 and MBIO 7040 may wish to take MBIO 7020 and/or the additional graduate course in Year 1.