

BACHELOR OF SCIENCE IN MICROBIOLOGY

(as approved 4/20/04)
Lyman Briggs College

University (Integrative Studies & Tier I Writing Courses) (20 cr)

Tier 1 Writing (LB 133 or WRA 1XX)	4 credits
Social Behavioral and Economic Sciences (ISS 2XX & 3XX)	8 credits
Arts and Humanities (IAH ≤210 & ≥211)	8 credits

Lyman Briggs College (46 - 47 credits)

Mathematics - LB 118 & 119	9 credits
<u>or</u> LB 118 & STT 231	8 credits
Physics - LB 271, LB 271L, LB 272, LB 272L	8 credits
Chemistry - LB 171, LB 171L, LB 172, LB 172L	9 credits
Biological Science - LB 144, 145	9 credits
History, Philosophy & Sociology of Science	
Two of LB 330 - 336, 355, 425, 483	7 or 8 credits
Senior Seminar - LB 492	4 credits

Departmental Requirements (42 - 43 credits)

Organic Chemistry (CEM) 251, 252, 255 <u>or</u> 351, 352, 355	8 credits
Biochemistry (BMB) - 461, 462	6 credits
Microbiology (MMG)	
a. Core Courses	
Introductory Microbiology	301 3 credits
Introductory Microbiology Lab	302 1 credit
*Advanced Microbiology Laboratory	408 3 credits
Eukaryotic Cell Biology	409 3 credits
Prokaryotic Cell Physiology	421 3 credits
Microbial Genetics	431 3 credits
b. Capstone Experience	
⌘ Undergraduate Research Seminar	492 1 credit
<u>and</u> Undergraduate Research	499** or 499H* 2 credits
<u>or</u>	
Current Topics in Microbiology	491 3 credits
c. Complete an option	9-10 credits

*Fulfills Tier II Writing requirement

**Variable credit course (1-3 credits per semester; 6 credit maximum)

⌘Recommended experience

Requirements for Options

Cell and Molecular Biology

MMG 413	Virology	3
MMG 451	Immunology	3

One of the following courses (3-4 credits):

MMG 433	Microbial Genomics	3
MMG 445	Basic Biotechnology	3
ZOL 341	Fundamental Genetics	4
MMG 833**	Microbial Genetics	3
MMG 835**	Eukaryotic Cell Genetics	3

Medical Microbiology and Immunology

MMG 413	Virology	3
MMG 451	Immunology	3

One of the following courses (3-4 credits):

EPI 390	Disease in Society	4
FSC 440*	Food Microbiology	3
MMG 461	Molecular Pathogenesis	3
MMG 463*	Medical Microbiology	3
MMG 861**	Molecular Pathogenesis	3

Microbe Biology

MMG 425	Microbial Ecology	3
MMG 433	Microbial Genomics	3

One of the following courses (3 credits):

MMG 413	Virology	3
MMG 426***	Biogeochemistry	3
MMG 445	Basic Biotechnology	3
MMG 463*	Medical Microbiology	3

Microbial Biotechnology

MMG 433	Microbial Genomics	3
MMG 445	Basic Biotechnology	3

One of the following courses (3 credits):

FSC 440*	Food Microbiology	3
MMG 425	Microbial Ecology	3
MMG 451	Immunology	3
MMG 801**	Integrative Microbial Biology	4

*Laboratory courses exist (FSC 441, MMG 464)

**Permission of instructor required

***Offered at Kellogg Biological Station (Hickory
Corners, MI)