

BACHELOR OF SCIENCE DEGREE BIOLOGY

FOR ADDITIONAL INFORMATION, PLEASE CONTACT THE LYMAN BRIGGS COLLEGE ADVISING OFFICE

(1) UNIVERSITY REQUIREMENTS

Writing Requirement

Tier I: LB 133 4
Tier II: Satisfied by completing the Lyman Briggs College History, Philosophy and Sociology of Science and Senior requirements listed below.

Integrative Studies in Arts & Humanities (IAH)

IAH 201-210* 4
IAH 211-241*†# 4

Integrative Studies in Social, Behavioral & Economic Sciences (ISS)

ISS 200-level course* 4
ISS 300-level course*‡@ 4

*National, International, & Multicultural Diversity
Students must include at least one "N" course and one "I" course in their Integrative Studies programs. A "D" course may meet either an "N" or an "I" requirement, but not both.

†Summer 2013 to Summer 2017: LB 331, 333, and 336 will fulfill the IAH "B" university requirement (IAH 211 or higher). Please consult your LBC Academic Advisor for specific details for your program.

‡Summer 2013 to Summer 2017; LB 332, 334, and 335 will fulfill the ISS 300-level university requirement. Please consult your LBC Academic Advisor for specific details for your program.

Beginning Fall 2017; LB 321a, 322a, 323a, 324a, 325a, 326a and 327a will fulfill the IAH university requirement (IAH 211 or higher).

@ Beginning Fall 2017; LB 321b, 322b, 323b, 324b, 325b, 326b and 327b will fulfill the ISS 300-level university requirement.

Please contact your LBC Academic Advisor for specific details for your program. If you fulfilled the LB 331, 332, 333, 334, 335 or 336 requirement you do not need the new Fall 2017 courses.

Mathematics, Biological and Physical Sciences

Satisfied by the Lyman Briggs College requirements in Mathematics, Biological and Physical Sciences (see next section).

(2) LYMAN BRIGGS COLLEGE REQUIREMENTS

Biological Sciences (9 cr.)

Complete ONE of the following groups of courses
(1) LB 144 & 145 9
(2) BS 161, 162, 171, & 172 10

Chemistry (8-9 cr.)

Complete ONE of the following groups of courses
(1) LB 171, 171L, 172, & 172L 9
(2) CEM 141, 142, & 161 8
(3) CEM 151, 152, & 161 8

Physics (8 cr.)

Complete ONE of the following groups of courses
(1) LB 273, 274 8
(2) PHY 183, 184 8
(3) PHY 231, 232, 251, & 252 10

Mathematics (7-8 cr.)

Complete ONE of the following groups of courses
(1) LB 118 & 119 8
(2) MTH 132 & 133 7
(3) LB 118 & STT 231 7
(4) MTH 132 & STT 231 7

History, Philosophy & Sociology of Science (11-12 cr.)

LB 133 4
LB 321-327, 330-336, 355, 490E; ENG 473A; HST 425; SOC 368 7-8

Senior Seminar (4 cr.)

LB 492 4

Minimum number of credits required: 120

Minimum cumulative and major grade point average: 2.0

(3) MAJOR REQUIREMENTS

Complete a minimum of 41 credits from the courses listed below

		Organic Chemistry (6 credits)	
CEM	251	Organic Chemistry I	3
CEM	252	Organic Chemistry II	3
		Biochemistry (4 to 6 credits)	
BMB	401	Comprehensive Biochemistry or	4
BMB	461	Advanced Biochemistry I	3
BMB	462	Advanced Biochemistry II	3
		Advanced Experiential Biology (6 credits)	
LB	348	Advanced Directed Study – Biology	3
		and at least 3 credits from the following:	
LB	490B	Advanced Directed Study – Biology	1-4
LB	493	Field Experience	1-4
LB	494	Undergraduate Research	1-4
		Other courses as approved by Academic Advisor	
		Integrative Biology (16 credits)	
IBIO	341	Fundamental Genetics	4
IBIO	355	Ecology	3
IBIO	445	Evolution (W)	3
MMG	301	Microbiology	3
MMG	409	Eukaryotic Cell Biology	3
		Organismal Diversity (3 to 4 credits)	
ENT	404	Fundamentals of Entomology	3
ENT	422	Aquatic Entomology	3
ENT	470	General Nematology	3
FW	471	Ichthyology	4
IBIO	306	Invertebrate Biology	4
IBIO	328	Comparative Anatomy and Biology of Vertebrates (W)	4
IBIO	360	Biology of Birds	4
IBIO	365	Biology of Mammals	4
IBIO	384	Biology of Amphibians and Reptiles (W)	4
PLB	402	Biology of Fungi	3
PLB	418	Plant Systematics	4
PLB	424	Algal Biology	4
		Other courses as approved by Academic Advisor	
		Ecology, Evolution, and Behavioral Biology (3 to 4 credits)	
CSS	442	Agricultural Ecology	3
FW	417	Wetland Ecology and Management	3
FW	420	Stream Ecology	3
FW	431	Ecophysiology and Toxicology of Fishes	3
FW	439	Conservation Ethics	3
FW	444	Conservation Biology	3
FW	463	Wildlife Disease Ecology	3
FW	472	Limnology	3
GLG	434	Evolutionary Paleobiology	4
IBIO	303	Oceanography	4
IBIO	313	Animal Behavior	3
IBIO	415	Ecological Aspects of Animal Behavior (W)	3
IBIO	440	Field Ecology and Evolution	4
MMG	425	Microbial Ecology	3
PLB	441	Plant Ecology	3
PLB	443	Restoration Ecology	3

Cellular and Molecular Biology**(3 to 4 credits)**

FSC	440	Food Microbiology	3
IBIO	320	Developmental Biology	4
IBIO	408	Histology	4
IBIO	425	Cells and Development (W)	4
MMG	404	Human Genetics	3
MMG	413	Virology	3
MMG	421	Prokaryotic Cell Physiology	3
MMG	425	Microbial Ecology	3
MMG	431	Microbial Genetics	3
MMG	433	Microbial Genomics	3
MMG	445	Microbial Biotechnology (W)	3
MMG	451	Immunology	3
MMG	461	Molecular Pathogenesis	3
MMG	463	Medical Microbiology	3
PSL	310	Physiology for Pre-Health Professionals	4
PSL	431	Human Physiology I	4

Other courses as approved by Academic Advisor

IMPORTANT: This advising guide is presented for planning purposes only. It is the student's responsibility for knowing and following University, college and departmental requirements as stated in the [Academic Programs Catalog](#).

The Academic Advisors will provide information and suggest others based on expressed interests. It is the student's responsibility for enrolling in classes and selecting the number of credits per semester for success. Appointments are made using the [Student Success Dashboard](#).