

B.S. Biochemistry and Molecular Biology (SMBB) Degree

This is not an official list of degree requirements. Adjustments may be required due to curriculum changes.

First Year

Fall

Course	Prerequisite	Credit
UN 1015 Composition		3
MA 1160 or 1161 Calculus I	Yes	4/5
BL 1100 Gen Bio I		3
BL 1110 Gen Bio I Lab		1
Essential Education: Michigan Tech Seminar BL 1580		1
CH 1150 University Chemistry I	Yes	3
CH 1151 University Chemistry I Lab	Yes	1
Total		16/17

Spring

Course	Prerequisite	Credit
Essential Education: Foundations of the Human World		3
Essential Education: Activities for Well-being and Success		1
BL 1200 Gen Bio II		3
BL 1210 Gen Bio II Lab		1
CH 1160 University Chemistry II	Yes	3
CH 1161 University Chemistry II Lab	Yes	1
MA 2160 Calculus II	Yes	4
Total		16

Second Year

Fall

Course	Prerequisite	Credit
Essential Education: Arts & Culture		3
BL 2700 Principles of Computation Bio	Yes	3
CH 2430 Mechanistic Organic Chem	Yes	3
CH 2411 Organic Chemistry I Lab	Yes	1
PH 2100 University Physics I	Yes	3
PH 1100 University Physics by Inquiry	Yes	1
Total		14

Spring

Course	Prerequisite	Credit
Essential Education: Communication Intensive		3
BL 2200 Genetics	Yes	3
BL 2210 Genetics Lab	Yes	1
CH 2440 Synthetic Organic Chemistry	Yes	3
CH2421 Organic Chem II Lab	Yes	2
PH 2200 University Physics II	Yes	3
PH 1200 Physics by Inquiry	Yes	1
Total		16

Third Year

Fall

Course	Prerequisite	Credit
Essential Education: Intercultural Competency		3
Essential Education: Activities for Well-being and Success		1
BL 3300 Genomics	Yes	3
BL 3210 or BL 3310* Microbiology/Environmental Microbio	Yes	4
BL 3020 Biochemistry	Yes	3
Total		14

BL 3310 is only offered in Spring

Spring

Course	Prerequisite	Credit
Essential Education: Experience		3
BL 3782 Writing Practicum	Yes	2
BL 3012 Essential Cell Bio	Yes	3
BL 4020 Biochemistry II	Yes	3
BL 3820 Biochemistry Techniques	Yes	2
MA 3715 Biostatistics	Yes	3
Total		16

Fourth Year

Fall

Course	Prerequisite	Credit
Essential Education: Activities for Well-being and Success		1
BL 4030 Molecular Biology	Yes	3
BL 4840 Molecular Biology Techniques	Yes	3
CH 3540 Biophysical Chemistry	Yes	3
Free Elective	Yes	3
Total		13

Spring

Course	Prerequisite	Credit
Essential Education: Shape		3
BL 4600 Prof Dev Capstone	Yes	1
Experiential Learning Exp Capstone		5
CH 3510 Physical Chemistry	Yes	3
Free Elective		3
Total		15

Grand Total = 120 Credits