

Major: Biochemistry & Molecular Biology/Biotechnology

*Feb 2025

Name: _____ PID _____

Credits required for graduation: 120

Integrative Studies and Writing- University Requirement: (20 credits)

WRA 101/195H-4 _____ ISS 2XX _____ -4 IAH 201-210 -4 _____
 or LB 133-4 _____ ISS 3XX _____ -4 IAH 211 or greater-4 _____
 Note: ISS/IAH courses must be in at least 2 different Diversity Designations (N, I, D)

Biochemistry

Chemistry

Honors

Lyman Briggs

BMB 101-1 ___ F lect. BMB 370-3 ___ F S lab BMB 461-3 ___ F S lect. 1 BMB 462-3 ___ F S lect. 2 BMB 470-4 ___ F lab (OR other Molecular Biology Lab - see below)* BMB 471-4 ___ S lab BMB 495-2 ___ S seminar OR BMB 499 (2-8) ___ (Thesis) OR LB 492-4 ___ F S seminar (Required for Lyman Briggs Students) Electives (optional) BMB 490 - ___ research BMB 491 - ___ research	CEM 151-4 ___ F inorg. 1 or CEM 141-4 ___ F S US or CEM 181H-4 ___ F or LB 171-4 ___ F S CEM 152-3 ___ S inorg. 2 or CEM 142-3 ___ F S US or CEM 182H-4 ___ S or LB 172-3 ___ F S CEM 161-1 ___ F S US lab 1 or CEM 185H-2 ___ F or LB 171L-1 ___ F S CEM 162-1 ___ F S US lab 2 or CEM 185H-2 ___ F or LB 172L-1 ___ F S CEM 351-3 ___ F organic 1 or CEM 251-3 ___ F S US organic 1 or LB 271-3 ___ F S organic 1 CEM 352-3 ___ S organic 2 or CEM 252-3 ___ F S US organic 2 CEM 355-2 ___ S US organic lab 1 CEM 356-2 ___ F organic lab 2 CEM 383-3 ___ F US phys. chem. 1 or CEM 484-3 ___ S molec. thermo. (MTH 235 is a prereq.)
---	--

Physics

Physics I: PHY 183-4 F S US or PHY 221-4 ___ F S or LB 273-4 ___ F (Lyman Briggs Only) or PHY 193H-4 ___ F (Honors)
 Physics II: PHY 184-4 F S US or PHY 222-4 ___ F S or LB 274-4 ___ S (Lyman Briggs Only) or PHY 294H-4 ___ S (Honors)

Non-Calc Physics: Requires calculus bridge courses:

Physics I: PHY 231-3 ___ F S US + PHY 233B-2 ___ F S US (bridge)
 Physics II: PHY 232-3 ___ F S US + PHY 234B-2 ___ F S US (bridge)

NOTE: Lyman Briggs students who are not taking LB 273/274, must complete PHY labs - see options below

Computer Science/Math

Lyman Briggs

Honors

CMSE 201-4 ___ F S
 MTH 132-3 ___ F S US (calc 1) or LB 118-4 ___ F S or MTH 152H-3 ___ F S
 MTH 133-4 ___ F S US (calc 2) or LB 119-4 ___ F S or MTH 153H-3 ___ S

Biology

Lyman Briggs

Honors

BS 162-3 ___ F S US or LB 144-4 ___ F S or BS 182H-3 ___ F
 BS 161-3 ___ F S US or *LB 145-5 ___ F S or BS 181H-3 ___ S
 BS 171-2 ___ F S US or *LB 145-5 (*LB 145 replaces BS 161&171) or BS 191H-2 ___ S lab

Premeds and all LB Students also need

BS 172-2 ___ F S US or LB 144-4 ___ F S or BS 192H-2 ___ F

General Genetics

Advanced Selectives (300-400 level) (9 credits)

(Visit: <https://bmb.natsci.msu.edu/undergraduate/academics/> for approved courses list)

IBIO/PLB 341-4 ___ F S US or CSS/CROP 350-3 ___ S

***Molecular Biology Lab (3-4 credits)**

BMB 470 -4 ___ F or CSS/CROP 451-3 ___ S or MMG/MGI 408-3 ___ F

Premeds and Lyman Briggs students may also need:

Premeds may also need:

(consult with pre-professional advisor)

(consult with pre-professional advisor)

PHY 251-1 ___ F S US lab 1 or PHY 191-1 ___ F lab 1
 PHY 252-1 ___ F S US lab 2 or PHY 192-1 ___ S lab 2

PSY ___ - ___ F S US
 SOC ___ - ___ F S US

(*Please visit our website for most current requirements checklists: <https://bmb.natsci.msu.edu/undergraduate/academics/>)