

Major: Biochemistry & Molecular Biology/Biotechnology

*May 2024

Name: _____ PID _____

Credits required for graduation: 120

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

WRA 101/195H-4 _____
or LB 133-4 _____

ISS 2XX _____ -4
ISS 3XX _____ -4

IAH 201-210 -4 _____
IAH 211 or greater-4 _____

Note: ISS/IAH courses must be in at least 2 different Diversity Designations (N, I, D)

Biochemistry

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

Chemistry

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 orgo 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.)**

Honors

Lyman Briggs

Physics

Physics I: PHY 241-4 ___ F **or** 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 242-4 ___ S **or** 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

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

*Molecular Biology Lab (3-4 credits)

BMB 470 -4 ___ F **or** CSS 451-3 ___ S **or** MMG 408-3 ___ F

Premeds and Lyman Briggs students may also need: (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

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

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

Premeds may also need: (consult with pre-professional advisor)

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

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