

Major: Biochemistry & Molecular Biology/Biotechnology

July 2020

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)

<u>Biochemistry</u>	<u>Chemistry</u>	<u>Honors</u>	<u>Lyman Briggs</u>
BMB 101-1 ___ F lect. BMB 461-3 ___ F S lect. 1 BMB 462-3 ___ F S lect. 2 BMB 470 (was 472)-3 ___ F lab (or other Molecular Biology Lab - see below)** BMB 471-3 ___ S lab AND BMB 495-2 ___ S seminar OR BMB 499 (2-8) ___ (Thesis) OR LB 492-4 ___ F S seminar (For Lyman Briggs Students Only) Electives (optional) BMB 490- ___ research	CEM 151-4 ___ F inorg. 1 or CEM 141-4 ___ F S US CEM 152-3 ___ S inorg. 2 or CEM 142-3 ___ F S US CEM 161-1 ___ F S US lab 1 CEM 162-1 ___ F S US lab 2 CEM 262-3 ___ F S US quantitative analysis CEM 351-3 ___ F organic 1 or CEM 251-3 ___ F S US 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.)	CEM 181H-4 ___ F CEM 182H-4 ___ S CEM 185H-2 ___ F CEM 185H-2 ___ F	or LB 171-4 ___ F S or LB 172-3 ___ F S or LB 171L-1 ___ F S or LB 172L-1 ___ F S

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 starting at MSU in Fall 2019 or after, who are not taking LB 273/274, must complete PHY labs - see options below

<u>Computer Science/Math</u>	<u>Lyman Briggs</u>	<u>Honors</u>
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		

<u>Biology</u>	<u>Lyman Briggs</u>	<u>Honors</u>
BS 162-3 ___ F S US or LB 144-4 ___ F S BS 161-3 ___ F S US or *LB 145-5 ___ F S BS 171-2 ___ F S US or *LB 145-5 (*LB 145 replaces BS 161&171)		or BS 182H-3 ___ F or BS 181H-3 ___ S 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

<u>General Genetics</u>	<u>Advanced Selectives (300-400 level) (9 credits) (see back page for approved course options)</u>
IBIO/PLB 341-4 ___ F S US or CSS 350-3 ___	
**Molecular Biology Lab (3 credits)	
BMB 470 -3 ___ F or CSS 451-3 ___ S or MMG 408-3 ___ F	
Premeds and Lyman Briggs students may also need: (consult with Pre-professional advisor)	Premeds 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	PSY ___ - ___ F S US SOC ___ - ___ F S US

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