

# Major: Biochemistry & Molecular Biology/Biotechnology

June 2020

Name: \_\_\_\_\_ PID \_\_\_\_\_

Credits required for graduation: 120

<b>Integrative Studies and Writing- University Requirement: (20 credits)</b>			
WRA 101/195H-4 or LB 133-4	ISS 2XX ____ -4 ISS 3XX ____ -4 Note: ISS/IAH courses must be in at least 2 different Diversity Designations (N, I, D)	IAH 201-210 -4 IAH 211 or greater-4 _____	
<b>Biochemistry</b>	<b>Chemistry</b>	<b>Honors</b>	<b>Lyman Briggs</b>
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 <b>AND</b> BMB 495-2 ____ S seminar <b>OR</b> BMB 499 (2-8) ____ (Thesis) <b>OR</b> LB 492-4 ____ F S seminar (For Lyman Briggs Students Only)  <b>Electives (optional)</b> 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 or LB 171-4 ____ F S CEM 182H-4 ____ S or LB 172-3 ____ F S CEM 185H-2 ____ F or LB 171L-1 ____ F S CEM 185H-2 ____ F or LB 172L-1 ____ F S	LB 171-4 ____ F S LB 172-3 ____ F S LB 171L-1 ____ F S LB 172L-1 ____ F S
<b>Physics</b>			
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)			
<b>Non-Calc Physics**: Requires calculus bridge courses:</b> 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			
<b>Computer Science/Math</b>		<b>Lyman Briggs</b>	<b>Honors</b>
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			
<b>Biology</b>		<b>Lyman Briggs</b>	<b>Honors</b>
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	
<b>Premeds and all LB Students also need</b> BS 172-2 ____ F S US or LB 144-4 ____ F S or BS 192H-2 ____ F			
<b>General Genetics</b>		<b>Advanced Selectives (300-400 level) (9 credits) (see back page for approved course options)</b>	
IBIO/PLB 341-4 ____ F S US or CSS 350-3 ____		_____	
<b>**Molecular Biology Lab (3 credits)</b>		_____	
BMB 470 -3 ____ F or CSS 451-3 ____ S or MMG 408-3 ____ F		_____	
<b>Premeds and Lyman Briggs students may also need: (consult with Pre-professional advisor)</b>		<b>Premeds may also need: (consult with Pre-professional advisor)</b>	
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/>)