College of Science, Technology, Engineering, and Mathematics (STEM) - YSU Major: Bachelor of Science (BS) Degree in Biological Sciences

Department of Biological Sciences Dr. Gary Walker, Chair Ward Beecher Science Hall, Room 4037 (330) 941-3601 (330) 941-1483 fax web.ysu.edu/stem/biology

Requirements for Graduation:

GER model complete
 Minimum 37 sh in major (**see back)
Minimum 18 sh in minor (**see back)
Support courses complete
48 sh of upper division (3700+)
Minimum of 120 total sh (see back)
Residency requirement (transfer students only)
Min. of a 2.00 overall GPA
After 80-85 sh are complete, request a "graduation evaluation" from the Advising Center in Moser Hall, Room 2325.
Meet with your departmental chair after your graduation evaluation is complete.

Advisement for the Biology major:

Students will meet with a Biology faculty member for advisement. Please come to the Biology Department, Ward Beecher Science Hall, Room 4037, to consult the listing of faculty interest areas and office hours.

It is recommended that all students meet with their advisor at least one time an academic year. The following current students are required to meet w/an advisor before registration: freshman, athletes, and students on warning or probation.

2012 GER Model

	Genera	al Education Requirements (GEF	R)	
Dept	Catalog	Course Description	s.h	Grade
Engl	1550	Writing I (Prereq. = CRPT or Engl	3	
		1539/1540)		
Engl	1551	Writing II (Prereq. = Engl 1550)	3	
Cmst	1545	Communication Foundations	3	
		(Prereq. = eligibility to take Engl 1550)		
Math	1570	Applied Calculus (Prereq. = Math	4	
		1513 or Level 5 on MPT)		
	or 1571	or		
	1571	Calculus 1 (Prereq. = Math 1513 or Level		
		7 on MPT) (Recommended)		
		Foreign Language		<u> </u>
Not requ	uired for a	BS Biological Sciences major if th	e ma	jor was
entered	after Fall,	2012.		
		ences (NS): 2 courses + 1 GER e		
(This re	equirement	is satisfied by completion of the B	IOL	major.)
Biol	2601/	General Biology 1 & Lab	4/	
	2601L	(Prereq. = Chem 1515/1515L)	0	
Biol	2602/	General Biology 2 & Lab	4/	
	2602L	(Prereq. = Biol 2601)	0	
Chem	1515/	General Chemistry 1 & Lab	4/	
	1515L	(Prereq. = Math 1513)	0	
	Arts &	Humanities (AH): 2 courses (6 sl	h)	
			3	
			3	
	Soci	al Science (SS): 2 courses (6 sh)		
		, , , , ,	3	
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Soc	ial and Pa	rsonal Awareness (SPA): 2 cours	es (6	sh)
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	1		3	
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		CED Floatives 1 co (2 ch)		
Th:		GER Elective: 1 course (3 sh)	10-	. ma o :
i nis rec	uirement i	s satisfied by completion of the Bio	nogy	major.

Consult the GER website or your advisor for the list of courses

meeting GER requirements: web.ysu.edu/ger/

- Engl. 1550 & 1551 must be completed by 62 SH.
- Placement exam in English and Math required before registration of classes. (Foreign Language placement test is optional.)
- MATH 1500, 1501, 1502, 1503, 1504, 1507, ENGL 1509, 1512, 1539, 1540, RSS 1510A, B & C and will not count toward graduation total hours.
- A grade of "C" or better is required in the Major and Minor and support courses. Credit/NC Option not permitted in Major/Minor
- Upper division courses have a catalog number of 3700 and above.
- Classes taken and/ or repeated out of sequence will **not** count toward graduation. **Check prerequisites.**
- Residency rule states that the last 30 SH must be completed at YSU; 16 SH in major and 21 SH in Upper Division at YSU.
- Request for graduation evaluation form must be filed by 85 SH.

	Reau	ired Biology courses (37 sh)		
Biol	2601/2601L	General Biology 1: Molecules &	4+0	
		Cells & Lab		
Biol	2602/260L	General Biology 2: Organisms &	4+0	
		Ecology & Lab (Biol 2601)		
Biol	3721	Genetics (Biol 2601)	3	
Biol	4861	Senior Biology Capstone	2	
		Experience (Senior Status; completion of at least one 3700 and one 4800 level lab course)		
		Core Courses:		
		aken from two of the following groups	(7-9 sh	1).
GROU				
Biol	3711	Cell Biology: Fine Structure (Biol 2601)	3	
Biol	3702/3702L	Microbiology & Lab (Biol 2601)	4+0	
GROU	PB:			
Biol	3730/3730L	Human Physiology & Lab (Biol 2602)	4+1	
Biol	3725	Mammalogy (Biol 2601/2602)	3	
GROU		D	4.0	
Biol	3740/3740L	Plant Diversity & Lab (Biol 2602)	4+0	
Biol	3759	Evolution (Biol 2602)	4+0	
		Electives in Biology		
	at <u>www.ysu.ed</u>	courses may be found in the Undergraue lu/ebulletin/		
	D.	animal Summant Courses		
(Si		equired Support Courses minor in Chemistry under required minor co	urses)	
		e of the following courses (4 sh):	ruises.j	
Math	1570	Applied Calculus 1 (Math 1513 or level 5 on MPT)	4	
Math	1571	Calculus 1 (Math 1513 or Level 7 on MPT)	4	
Statisti	cs (one of the fo	ollowing 3-4 sh):		
BIOL	5853	Biometry (20 sh of Biological Sciences)	3	
Stat	3717	Statistical Methods (Math 1549 or 1570 or	4	
Physics	l s - take one of ti	he following sequences (9-10 sh):	<u> </u>	
Phys	1501/1501L	Fundamentals of Physics 1 & Lab	4+1	
		(Math 1504 or Level 4 on MPT) Fundamentals of Physics 2 & Lab	3+1	
Phys	1502/1502L	(Phys 1501)		
Phys	2610/2610L	General Physics 1 (HS Physics or Phys 1501; Math 1571 (prereq. or concurrent)	4+1	
Phys	2611/2611L	General Physics 2 (Phys 2610; (perereq. or concurrent: Math 1572)	4+1	
Chemi	stry (16 sh):			
Chem	1515/1515L	General Chemistry 1 & Lab (Chem 1501 or one unit HS Chem.; Math 1513 or three units of HS algebra & geometry)	4+0	
Chem	1516/1516L	General Chemistry 2 & Lab (Chem	4+0	
Chem	3719/3719L	Organic Chemistry 1 & Lab (Chem	4+0	
	l	1516)		

Chem	3720/3720L	Organic Chemistry 2 & Lab (Chem 3719)	4+0		
Enrollment in the recitation sections are recommended for Phys 1501 & the above Chemistry courses. Recitation Chemistry courses may not count toward the Chemistry minor.					

Biology (BS) – 37 sh

Notes:

wrb 4-30-14

Required Minor Courses **

Minors are listed in the Undergraduate Bulletin and all must be a minimum of **18 sh**, with at least 6 sh at the 3000-level or higher.

It is **strongly recommended** that students complete a **minor in Chemistry**. A chemistry minor can be met by completion of the required 16 sh of chemistry required for the BS Biology degree plus one additional course from the following: Chem 2604, 3729, 3739, 3764, 3785 or 4850/4850L. Chem 3785 Biochemistry 1 (3 sh) is recommended.

Electives (needed to meet the minimum of 124 sh total, not to include remedial coursework)						
Dept	Cat. #	Course Description	sh	gı		
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