**College of Science, Technology, Engineering, and Mathematics (STEM) - YSU**

 **Major: Bachelor of Arts (BA) Degree in Biological Sciences**

 **2012 GER Model**

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| **General Education Requirements (GER)** |
| Dept. | Cat. # | Course Description | sh | Grade |
| Engl | 1550 | Writing I (Prereq. = CRPT or Engl 1539/1540)  | 3 |  |
| Engl | 1551 | Writing II (Prereq. =Engl 1550) | 3 |  |
|  |  |  |  |  |
| CMST | 1545 | Communication Foundation (Prereq. = eligibility to take Engl 1550) | 3 |  |
|  |  |  |  |  |
| Math | 1570 or 1571 | Applied Calculus (Prereq. = Math 1513 or Level 5 on MPT)or Calculus 1 (Prereq. = Math 1513 or Level 7 on MPT) (Recomended) | 4 |  |
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|  |  | **Foreign Language (8 sh)** |  |  |
| Fnlg | 1550 | Elementary | 4 |  |
| Fnlg | 2600 | Intermediate | 4 |  |
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| **Natural Sciences (NS): 2-plus 1 GER Elective course**(This requirement is satisfied by completion of the BIOL major.) |
| Biol | 2601/2601L | General Biology 1(Prereq. = Chem 1515/L) | 4/0 |  |
| Biol | 2602/2602L | General Biology 2(Prereq. = Biol 2601) | 4/0 |  |
| Chem | 1515/1515L | General Chemistry 1(Prereq. = Math 1513) | 4/0 |  |
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| **Arts & Humanities (AH): 2 courses (6 sh)** |
|  |  |  | 3 |  |
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| **Social Sciences (SS): 2 courses (6 sh)** |
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| **Social and Personal Awareness (SPA): 2 courses (6 sh)** |
|  |  |  | 3 |  |
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| **GER Elective: 1 course (3 sh)** |
| This requirement is satisfied by completion of the Biology major. |
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**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 32 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)

\_\_\_\_ Minimum of a 2.00 overall GPA

\_\_\_\_ After 80-85 sh are completed, request a

 “graduation evaluation” from the Advising Center

 in Moser Hall, Room 2325

\_\_\_\_ Meet w/ your departmental chair after 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 w/ 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.

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

 meeting GER requirements**:** [**web.ysu.edu/ger/**](http://www.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.
* FNLG through level 2600 required unless satisfied through placement exam.
* 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.***

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| **Required Biology courses (minimum of 32 sh)** |
| Biol | 2601/2601L | General Biology 1: Molecules & Cells & Lab | 4+0 |  |
| Biol | 2602/2602L | General Biology 2: Organisms & Ecology & Lab | 4+0 |  |
| Biol | 4861 | Senior Biology Capstone Experience (Senior Status; completion of at least one 3700 and one 4800 level lab course) | 2 |  |
| **Core Courses:****One** course must be taken from **two** of the following **groups (7-9 sh)** |
| **GROUP A:** |
| Biol | 3711 | Cell Biology: Fine Structure (Biol 2601)  | 3 |  |
| Biol | 3702 | Microbiology/ Lab (Biol 2601) | 3 |  |
| **GROUP B:** |
| Biol | 3730/3730L | Human Physiology & Lab (Biol 2602) | 4+1 |  |
| Biol | 3725 | Mammalogy |  |  |
| **GROUP C:** |
| Biol | 3740/3740L | Plant Diversity & Lab (Biol 2602) | 4+0 |  |
| Biol | 3741/3741L | Animal Diversity & Lab (Biol 2602) | 4+0 |  |
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| **Electives in Biology****13-15** sh of BIOL courses at the 3000-5000 level. At least **two** of these courses **must have a laboratory component.** BIOL courses may be found in the Undergraduate Bulletin at [**www.ysu.edu/ebulletin/**](http://www.ysu.edu/ebulletin/) |
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| **Required Support Course** |
| Chem | 1515/1515L | General Chemistry 1 & Lab (Chem 1501 or one unit HS Chem.; Math 1513 or three units of HS algebra & geometry required) | 4+0 |  |
| Chem | 1516/1516L | General Chemistry 2 & Lab (Chem 1515) | 4+0 |  |
| Fnlg | 1550 | Elementary | 4 |  |
| Fnlg | 2600 | Intermediate | 4 |  |
| **Recommended Support Courses**(see note regarding Minor in Chemistry) |
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| MathorMath | 1570or1571 | Applied Calculus 1 (Math 1513 or Level 5 on MPT)Calculus 1 (Math 1513 or Level 7 on MPT) (Recommended) | 44 |  |
| Stat | 3717 | Statistical Methods (Math 1549 or Math 1570 or 1571 or Math 1585H)  | 4 |  |
| Chem | 3719/3719L | Organic Chemistry 1 & Lab (Chem 1516) | 4+0 |  |
| Chem | 3720/3720L | Organic Chemistry 2 & Lab (Chem 3719) | 4+0 |  |
| Phys | 1501/1501Lor 2610/2610L | Fundamentals of Physics 1 & Lab (Math 1504 or Level 4 on MPT) General Physics 1(Math 1504 or Level 4 on MPT) | 4+14+1 |  |
| Phys | 1502/1502Lor26112611/L | Fundamentals of Physics 2 / & Lab (Physics 1501) General Physics 2 (Phys 2610; prereq. or concurrent: Math 1572) | 3/14/1 |  |

 **Biology (BA) – 32 sh**

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| **Required Minor Courses \*\***  |
| Minors are listed in the Undergraduate Bulletin and all must be a minimum of **18 sh,** with 6 sh being at the 3000-level or higher.  |
| ALL STUDENTS MUST HAVE A MINOR |
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| **Electives (needed to meet the minimum of 120 sh total, not to include remedial coursework)** |
| Dept | Cat. # | Course Description | sh | gr |
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wrb 4-30-14