

## Biology Core and Major Requirements (Bachelor of Arts) – Catalog Year 2009

Hrs	Course Requirements	Hrs	Course Requirements	Hrs	Course Requirements
6	Freshmen Composition: <input type="checkbox"/> ENGL 1013 and <input type="checkbox"/> ENGL 1023	3	Philosophy: <input type="checkbox"/> PHIL 2003 or <input type="checkbox"/> PHIL 2103	6	Western or World Civilization: <input type="checkbox"/> HIST 1003 or 1113 & <input type="checkbox"/> HIST 1013 or 1123
0-3	Advanced Composition: <input type="checkbox"/> ENGL 2003 or <input type="checkbox"/> ENGL 2013 <i>Exemption may be granted by:</i> 1) grade of at least "B" in ENGL 1013 and "A" in ENGL 1023 taken at the U of A, or 2) passing exemption exam	3-4	Mathematics: <input type="checkbox"/> MATH 2043 ( <i>Math 1203 or equiv.</i> ) or <input type="checkbox"/> MATH 2053 ( <i>Math 1203 or equiv.</i> ) or** <input type="checkbox"/> MATH 2193 ( <i>Math 1203 or equiv.</i> ) or** <input type="checkbox"/> MATH 2554 ( <i>Math 1203 &amp; 1213 or Math 1285 or equivalent</i> )	12	Natural Sciences:  At least 4 hours must be chosen from biological and 4 hours from physical.  <u>Biological Sciences</u> <input type="checkbox"/> ANTH 1013/1011L <input type="checkbox"/> BIOL 1613/1611L# <input type="checkbox"/> BIOL 1543/1541 L <input type="checkbox"/> BIOL 2013/2011L# <input type="checkbox"/> BIOL 1603/1601L#  <u>Physical Sciences</u> <input type="checkbox"/> ASTR 2003/2001L <input type="checkbox"/> PHYS 1023/1021L <input type="checkbox"/> CHEM 1053/1051L <input type="checkbox"/> PHYS 2013/2011L# <input type="checkbox"/> CHEM 1103/1101L# <input type="checkbox"/> PHYS 2033/2031L# <input type="checkbox"/> CHEM 1123/1121L# <input type="checkbox"/> PHYS 2054/2050# <input type="checkbox"/> GEOL 1113/1111L <input type="checkbox"/> PHYS 2074/2070# <input type="checkbox"/> GEOL 1133/1131L
6	Fine Arts: <input type="checkbox"/> ARCH 1003 or LARC 1003 <input type="checkbox"/> DRAM 1003 <input type="checkbox"/> ARHS 1003 or ARTS 1003 <input type="checkbox"/> HUMN 1003 <input type="checkbox"/> COMM 1003 <input type="checkbox"/> MLIT 1003 <input type="checkbox"/> DANC 1003	6	Social Science (from two areas): <input type="checkbox"/> ANTH 1023 <input type="checkbox"/> PLSC 2013 <input type="checkbox"/> SOCI 2013 or SOCI 2033 <input type="checkbox"/> PSYC 2003 <input type="checkbox"/> GEOG 2003 <input type="checkbox"/> ECON 2013 ( <i>Math 1203</i> ) or ECON 2143		
3	Communication: <input type="checkbox"/> COMM 1313	3	U.S. History/American Government: <input type="checkbox"/> HIST 2003 or <input type="checkbox"/> HIST 2013 or <input type="checkbox"/> PLSC 2003		
6	World Literature: <input type="checkbox"/> WLIT 1113 and <input type="checkbox"/> WLIT 1123 ( <i>WLIT 1113</i> ), a foreign language lit course, any WLIT course, CLST 1003, or CLST 1013	0-12	Foreign Language <sup>1</sup> : <i>See advisor for placement</i> <input type="checkbox"/> Completion of the Intermediate II level (2013) in a single language.		

\*\*Does not meet the requirements for BIOL # see advisor or Catalog of Studies for pre-requisites

### Major Requirements for Biology:

- ❖ Requirements in cognate sciences and mathematics include the following:
  - CHEM 1103/1101L University Chemistry I/ Univ. Chem. I Lab (*MATH 1203*) and  CHEM 1123/1121L University Chemistry II/ Univ. Chem. II Lab (*CHEM 1103*) and either
    - CHEM 2613/2611L/2610D Organic Physiological Chemistry/ Lab/ Drill (*CHEM 1123/1121L or CHEM 1074/1071L*) OR
    - CHEM 3603/3601L Organic Chemistry I/ Lab (*CHEM 1123/1121L*) and  CHEM 3613/3611L Organic Chemistry III/ Lab (*CHEM 1123/1121L & CHEM 3603/3601L*)
  - PHYS 2013/2011L College Physics I/ Lab (*MATH 1203 & 1213 or equivalent*) and  PHYS 2033/2031L College Physics III/ Lab (*PHYS 2013/2011L*)
  - MATH 2043 Survey of Calculus (*MATH 1203*) OR  MATH 2554 Calculus I (*MATH 1203 & 1213 or 1285*)
- ❖  BIOL 1543/1541L Principles of Biology/Principles of Biology Lab {Majors may take an additional 1000-level BIOL course BIOL1603/1601L (Principles of Zoology) OR BIOL 1613/1611L (Plant Biology). Majors may apply a maximum of eight 1000-level credits toward the major.}
- ❖ An additional 24 hours of biological sciences including the following:
  - BIOL 2001 Bibliographic Practicum: ***Bibliographic Practicum is required of all majors.***

One course from four of the following six areas of specialization (I-VI) in addition to fulfilling requirement VII. Students must also select at least one course from each of the three general areas of biology: **Group 1: Botany**, **Group 2: Microbiology**, **Group 3: Zoology** (see advisor or Catalog of Studies for [specific courses](#)).

#### I. Microorganism Biology:

- BIOL 2533/2531L Cell Biology/ Lab\* (*\*lab optional*) (Pre: BIOL 1543/1541L; Pre or Co: CHEM 1123/1121L or CHEM 1223/1221L)
- BIOL 2013/2011L General Microbiology/ Lab (*BIOL 1543/1541L and 1 semester of Gen. Chemistry*)
- BIOL 3123 Prokaryote Biology

#### II. Genetics:

- BIOL 2323/2321L General Genetics/ Lab (*BIOL 1543/1541L & CHEM 1123/1121L & MATH 1203 or STAT 2023*)
- BIOL 4233 Genomics and Bioinformatics (*BIOL 4313*)

#### III. Morphology:

- BIOL 4104 Taxonomy of Flowering Plants (*BIOL 1613/1611L & BIOL 2323 & BIOL 3023*)
- BIOL 4424 Mycology (*BIOL 2323 & BIOL 2533*)       BIOL 4404 Comparative Botany (*BIOL 2323 & BIOL 2533*)
- BIOL 2404 Comparative Vertebrate Morphology (*BIOL 1543/1541L or equiv*)

#### IV. Physiology:

- BIOL 4234 Comparative Physiology (*BIOL 2533 & CHEM 3613/3611L*)  BIOL 4263 Cell Physiology (*BIOL 2533 & 2323 & CHEM 3813 & PHYS 2033*)
- BIOL 4304 Plant Physiology (*BIOL 1613/1611L & 1543/1541L & CHEM 1103 or equiv*)
- BIOL 4313 Molecular Cell Biology (*BIOL 2533 & BIOL 2323 & CHEM 3603 and CHEM 3601L and CHEM 3613 and CHEM 3611L*)
- BIOL 2213/2211L Human Physiology/ Lab (*CHEM 1023/1021L or CHEM 1074/1071L or CHEM 1103/1101L or CHEM 1123/1121L or equivalent & MATH 1203*)

#### V. Evolution:

- BIOL 3023 Evolutionary Biology (*BIOL 1543/1541L and Pre- or Co-requisite BIOL 2323*)

#### VI. Ecology:

- BIOL 3863/3861L General Ecology/General Ecology Lab (*7 Hours of Biological Sciences*)

#### VII. Remaining 8-10 credit hours from biology electives of advanced level BIOL classes (3000 level or greater). See Catalog of Studies or advisor for [additional courses](#).

- BIOL \_\_\_\_\_     BIOL \_\_\_\_\_     BIOL \_\_\_\_\_     BIOL \_\_\_\_\_

- ❖  Senior Writing Requirement (discuss this requirement with your Biology advisor)

Electives		

Progress Check (Graduation Credit Hours Only) <sup>†</sup>										
Sem	Hrs	Sem	Hrs	Rule	Cum Hrs	Cum Hrs	Cum Hrs	Cum Hrs	Cum Hrs	Cum Hrs
Sem 1		Sem 9		8 hr						
Sem 2		Sem 10		24 hr						
Sem 3		Sem 11		(24 cont)						
Sem 4		Sem 12		40 hr						
Sem 5		Sem 13		(40 cont)						
Sem 6		Sem 14		(40 cont)						
Sem 7		Sem 15		68 hr						
Sem 8		Sem 16		124 minimum hrs required for graduation						

For more information on Biology, contact the Department of Biological Sciences: SCEN 601 (479)-575-3251 <http://biology.uark.edu>  
 ++This form is NOT a substitute for the Catalog of Studies. Students should verify this information with their advisor, their degree audit, and the Catalog of Studies++  
<sup>†</sup>See Graduation Checklist at <http://cac.uark.edu/degreeplanning/checksheets.php> for more information on degree requirements.