

2018-19 BA Biological Sciences

120 Credit minimum – Grade of C- or higher for all classes

GENERAL REQUIREMENTS

COMMUNICATIONS (9)

WRTG 111X Intro to Academic Writing (3) _____
WRTG 211X or 212X or 213X or 214X.(3) _____
COJO 121X or 131X or 141X (3) _____

GER Arts, Humanities, Social Sciences, & Ethics:

All GER in this category require WRTG 111 placement; 200 level courses-sophomore standing or higher; 300 level - junior standing or higher

1 course from Art category

1 course from Humanities category

2 courses from Social Science category (must be two different disciplines)

1 additional course from any above Arts/Humanities/Social Science category

See attached for category lists of courses.

1 GER Ethics: BA 323; COJO 300; JUST 300; NRM 303; PHIL 322; or PS 300

SOCIAL SCIENCE/HUMANITIES (18)

Each area must include at least 6 credits. Twelve credits of a non-English language taken at the university level may fulfill the humanities requirement. May use courses in minor but only those beyond 15 credits (ie 18 credit minor means you can double count 3 credits). May not double count from GER Arts, Humanities, Social Sciences & Ethics above. *As part of this requirement, take at least 9 credits of upper division.*

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_____ () _____ ()
_____ () _____ ()

MINOR: _____ (min. 15 credits)

As part of this requirement, take at least 3 credits of upper division if applicable.

_____ () _____ () _____ ()
_____ () _____ () _____ ()

MATHEMATICS & STATISTICS (6-7)

Requires recent Math Placement and/or prereqs

STAT 200X Elementary Probability & Statistics (3) _____

MATH 151X or 152X or 156 or 230 or 251 (3-4) _____

NATURAL SCIENCE (8)

CHEM 105X General Chemistry I (4) _____

CHEM 106X General Chemistry II (4) _____

NOTE: CHEM 105X is a prereq (C- or higher)/co-req for BIOL 115X—both require MATH 151X & WRTG 111X or higher placement. For concurrent enrollment, if you drop CHEM 105X during the semester, you may be dropped from BIOL 115X as well.

LIBRARY & INFO SKILLS (0-1)

LS competency test _____ OR LS 101X (1) _____

UPPER DIVISION CREDITS (300 & 400-level) (39)

Transfer Credits: _____; minimum of 24 UAF Credits _____

MAJOR REQUIREMENTS

All Biology courses higher than BIOL 116X listed below have BIOL 115X/116X as well as at least MATH 151X/WRTG 111X placement prereqs (except BIOL 111X & 112X) (prereqs in parenthesis)

1. Complete the following (20):

BIOL 115X Fundamentals of Biology I - (CHEM 105X or concurrent, MATH 151X & WRTG 111X placement) (4) _____

BIOL 116 Fundamentals of Biology II - (BIOL 115X) (4) _____

BIOL 260 Principles of Genetics – (CHEM 105X, MATH 151X, LS 101) (4) _____

BIOL 481 Principles of Evolution – (BIOL 260; STAT 200 or concurrent enrollment in STAT 200, junior or higher) (4) _____

CHEM 321 Organic Chem I - fall (CHEM 106X) (4) _____

One of the following (3-4):

A. PHYS 103 College Physics I – fall/summer (DEVM 105 & WRTG 111X placement) (4) _____

B. CS 103 Introduction of Computer Programming – (math placement at 100 level) (3) _____

C. CS 201 Computer Science I – (math placement at 200 level; high school programming or CS 103) (3) _____

2. Complete 2 of the listed 3 biology breadth requirements (7-12):

Breadth courses serve as prereqs for many upper division biology electives, therefore select according to anticipated biology electives

A. BIOL 360 Cell & Molecular Biology –spring (BIOL 260, CHEM 105X & 106X) (3) _____

B. BIOL 371 Principles of Ecology – fall (4) _____

C. Physiology—**complete one of the following:**

BIOL 310 Animal Physiology – spring (CHEM 105X/106X) (4) _____

OR BIOL 434 Structure and Function in Vascular Plants, - odd spring (MATH 151, WRTG 111X & 211X/etc) (4) _____

OR BIOL 342 Microbiology - spring (CHEM 105X) (4) _____

OR BIOL 111X Human Anatomy & Physiology I – fall/summer (Placement in DEVM 105 and WRTG 111X or higher) (4) _____

AND BIOL 112X Human Anatomy & Physiology II – spring/summer (BIOL 111X) (4) _____

3. Complete three (3) elective courses from biology course lists A, B, C, D or E (see attached) (9-12). Independent study (BIOL 397 or BIOL 497) or a research experience course (URSA 388, URSA 488 or BIOL 490) may be substituted by petition for a maximum of two required elective courses in biology (3-4 credits per substituted course).

4. BIOL 400 (0)_____ Complete a biology capstone project. Can be met through petition following the completion of a mentored research project with a faculty member (e.g., by taking BIOL 497 or BIOL 490 or without course credits) or automatically by completing at least **ONE** of the following courses. The below classes can also be utilized to meet one of the specific Biology list electives above to which it's assigned.

BIOL 434 Structure and Function in Vascular Plants- odd spring (MATH 151, WRTG 111X & 211X/etc) (3) _____

BIOL 441 Animal Behavior - fall (BIOL 371, BIOL 310, COJO 131X/141X, WRTG 111X & 211X/etc, coreq BIOL 481) (3) _____

BIOL 466 Advanced Cell & Molecular Laboratory –spring (BIOL 360)(3)_____

BIOL 472 Community Ecology – even fall (BIOL 371, WRTG 111X & 211X/etc) (3) _____

BIOL 473 Limnology – odd fall (BIOL 371, CHEM 105X & 106X, WRTG 111X & 211X/etc) (3) _____

BIOL 491 The Human Microbiome – fall (BIOL 260 or Stat 200)(4)_____

BIOL 394 MORE Behavioral Neurobiology – spring (3) _____

ELECTIVES (for a program total of 120 credits):

_____ () _____ ()
_____ () _____ ()

^ or permission of instructor