

Bachelor of Science/Master of Science in Biology
3+2 MS in Biology Major Advising Worksheets^{\$}

General Studies:

Composition & Oral Communication Outcome (6-10 credit hours)

2-3 courses, grade of C or better required

ENG 101 and ENG 102	_/_	COM 101	_
OR		(required for all students)	
ENG 103	_		

Analysis Outcome (3 credit hours; 7-11 credit hours of MATH and BIO/CHEM/PHYS satisfied within major requirements)

Students must take one course:

COM 203 (Arg/Debate) _	LING 150 (Intro Ling) _
ECON 103 (Microecon) _	PHIL 210 (Logic) _
FIN 131 (Financial Lit) _	PSYC 101 (Intro to Psych) _

Cultural Literacy Outcome (18 credit hours)

Students must take courses from each literacy block as directed:

<u>History (1 Course)</u>	<u>Literature (1 Course)</u>
HIST 103, 104, 210, 211 _	ENG 202, 204, 205, 214, 215 _

Arts & Humanities (2 Courses)

1 courses from each group

GROUP I:

ART 140, 341, 343,
MUS 130, 132, 133, 134
THE 100, 300

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GROUP II:

PHIL 201, 205
REL 250, 335
Any FREN or SPAN
SPA 252

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Social Sciences (2 Courses)

2 courses from different groups

GROUP I:

GEO 205, 206

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GROUP II:

POLS 101, 201, 202

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GROUP III:

SOC 150, SWK 201

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General Biology Major:

Core Courses:

BIO 124/125 [†] (Prin Bio/lab)	_/_(4h)	BIO 221 (Biostats)	_(3h)
BIO 200 (Botany & lab)	_(4h)	CHEM 110/111 [†] (Chem I)	_/_(4h)
BIO 202/203 (Zoology/lab)	_/_(4h)	CHEM 112/113 (Chem II)	_/_(4h)
BIO 207 Funds of Eco/Biodiv	_(3h)	PHYS 101/110 (Phys I)	_/_(4h)
OR		PHYS 102/111 (Phys II)	_/_(4h)
BIO 208 Found Mol/Cell Bio	_(3h)	MATH 145 [†] (Precal)	_(4h)

[†]Courses fulfill General Studies Analysis Outcome for Quantitative and Scientific blocks.

Major Specific Courses:

BIO 302/303* (Anat I/lab) __(4h)	BIO 404/405 (Ecology/lab) __(4h)
OR	OR
BIO 426* (Comp An. Phys/lab) __(4h)	BIO 472* (Cell Bio) __(3h)
BIO 325/326 (Micro & lab) __(4h)	BIO 460/461* (Mol Bio/lab) __(4h)
BIO 401* (Genetics/lab) __(4h)	BIO 480 (Capstone) __(2h)

Additional Undergraduate Requirements:

CHEM 340/341 (Org I) __/__(4h)	CHEM 342/343 (Org II) __/__(4h)
CHEM 480 (Biochem I; S) __(3h)	
OR	
BIO 470 (Biol. Chem; F) __(3h)	

Graduate Requirements:

BIO 510 Grad Research Skills __(3h, graded)
BIO 525 Grad Seminar __/__/__(3h total; P/F)
BIO 5XX Electives __/__/__(7-8h total, graded)
BIO 580 Indep. Study __(4h max to hours for graduation; P/F)
BIO 598 Thesis + Defense __(9h; P/F)

A **minimum of 4 credit hours of upper level biology courses** in the undergraduate curriculum must be **designated for graduate credit** to complete the curriculum in 5 years; courses for which the graduate option is available are denoted with an asterisk (*). Dual-counted courses must be designated before the beginning of the semester in which they are taken.

Students **must take additional 300-400 level General Electives** (8-18h dependent on course choices) to complete the curriculum (136 credit hours with a minimum of 30 graduate credit hours as designated).

- 136 credit hours are required to graduate from West Liberty with the 3+2 BS/MS Biology.
- 30 credit hours, minimum, are biology graduate coursework; a maximum of 9 credit hours may be earned for thesis toward the 30 required graduate credit hours.
- In semester 7, students will register for BIO 510 Graduate Research Skills (3 credit hours) and BIO 525 Graduate Seminar (1 credit hour). BIO 525 Graduate Seminar will be required semesters 7-9 (3 credit hours total) of graduate work except thesis semester.
- Students must complete 14 credit hrs in graded graduate biology courses including BIO 510.
- Students may take up to 9 credit hrs of BIO 580 Independent Study per semester, beginning no earlier than semester 7. Only 4 credit hrs of BIO 580 may be used toward the 30 graduate credits; these credits do NOT count as graded biology grad course credits.
- The 3+2 BS/MS in Biology major requires a cumulative 3.0 gpa with at least a "C" in each course within the program; no more than 6 credit hours of "C" grades may be applied to the total hours for graduation.
- All MS candidates must pass an oral thesis defense upon completion of course requirements and thesis; the MS in Biology will only be awarded to those students who successfully complete all requirements including the oral thesis defense.
- ***These worksheets are a guide.** Each student is responsible for their curriculum and meeting the requirements for graduation as stipulated in the college catalog.

- Courses may not be offered every semester and/or year; please consult with Biology advisor for sequencing.