NEVADA STATE UNIVERSITY SCHOOL OF LIBERAL ARTS, SCIENCES, & BUSINESS **BIOLOGY. B.S.**

COLLEGE CORE CURRICULUM (19-44 CREDITS)

Unless otherwise noted, please refer to the Nevada State catalog for full list of Core requirements. Classes in the major requirements may be used to satisfy the Core requirements; consult an Academic Advisor for details. Note: A single course cannot fulfill more than one core requirement.

3-8 CREDITS

Nevada State students can be placed into English courses by submitting ACT or SAT scores or by completing the Directed Self Placement survey to better guide their placement. Students who complete Composition II will satisfy the Core Curriculum Composition requirement. Typically, students take Composition I during their first semester at the college and Composition II during the second semester.

English Composition I (ENG 100, 101, or 116)	3-5
English Composition II	3

□ STUDY AND TECHNOLOGY SKILLS 0-3 CREDITS

Transfer students with 30 or more transferrable college credits or Nevada State students who complete the Nepantla Summer Bridge Program with an average GPA of 3.0 or greater will be able to waive the Study and Technology Skills Core Requirement.

□ College Success (CEP 123 or ALS 101N) 2-3

□ MATHEMATICS

3-5 CREDITS

7-8 CREDITS

Nevada State students can be placed into Math courses by submitting ACT or SAT scores or by completing the Math Directed Self-Placement survey to better guide their placement. Classes in the major may satisfy this requirement. Please see your degree outline and/or consult an Academic Advisor.

□ NATURAL SCIENCES

Students are required to take two science courses, at least one of which must include an associated laboratory component. Classes in the major may satisfy this requirement. Please see your degree outline and/or consult an Academic Advisor.

Natural Science Core	3-4
Natural Science Core with Lab	4

	SOCIAL SCIENCES	3 CREDITS
	FINE ARTS	3 CREDITS
	HUMANITIES	6 CREDITS
	Humanities CoreHumanities Core	3 3
	CONSTITUTION	3-6 CREDITS
Completion of US and NV Constitutions required. Complete either one		

Completion of US and NV Constitutions required. Complete either one US Constitution course and one NV Constitution course or complete one course that fulfills both US and NV Constitutions (CH 203 or PSC 101).

Nevada Constitution	0-3
United States Constitution	0-3

CULTURAL DIVERSITY 3 CREDITS

For a full breakdown of requirements for the Biology major, please refer to accompanying "Major Degree Checklist"

MAJOR REQUIREMENTS (71 CREDITS)

ADDITIONAL GENERAL ELECTIVES (9-30 CREDITS)

TOTAL CREDITS FOR DEGREE (120 CREDITS)

Check box when requirement is satisfied

**Indicates a prerequisite and/or corequisite is required. Please refer to the catalog or speak to an advisor about these requirements.

+ Indicates a lab is required.

This sample degree checklist is a planning tool intended for the current academic year. Each student's situation is unique and your degree may differ from the sample presented here. It is recommended that current NS students review the Academic Requirements report in their Student Center to monitor progress toward their degree and graduation requirements. It is also strongly recommended that you meet regularly with your Academic Advisor to verify degree progression.

2023-2024 CATALOG COLLEGE CORE CURRICULUM CHECKLIST

2023-2024 CATALOG MAJOR DEGREE CHECKLIST (PAGE 2)

NEVADA STATE UNIVERSITY SCHOOL OF LIBERAL ARTS, SCIENCES, & BUSINESS BIOLOGY (Cell and Molecular Concentration), B.S.

All courses used to fulfill major requirements must be completed with a minimum C-. Grades below a C- carry no credit towards major requirements.

MAJOR REQUIREMENTS (71 CREDITS)

BIOLOGY CORE COURSES 21 CREDITS □ **BIOL 190**** + | Intro to Cell and Molecular Biology 4 | Intro to Organismal Biology □ **BIOL 191** + 4 □ BIOL 209** | Cell Processes 3 | Intro to Ecological Principles 3 BIOL 220** ENV 220** | Intro to Ecological Principles 3 □ **BIOL 300**** + | Principles of Genetics 4 □ BIOL 415** | Evolution 3 **34 CREDITS RELATED MATH/SCIENCE REQUIREMENTS** □ CHEM 121** † | General Chemistry | 4 □ CHEM 122** † | General Chemistry II 4 □ CHEM 241** + | Organic Chemistry | 4 □ CHEM 242** + | Organic Chemistry II 4 □ CHEM 474** | Biochemistry | 3 □ MATH 181** | Calculus I 4 □ PHYS 151** + | General Physics | 4 D PHYS 152** + | General Physics || 4 □ **STAT 391**** | Applied Statistics for Biological Sciences 3

Concentrations are optional for the biology major. If students complete one of the three biology concentrations options (physiology, cellular & molecular biology, evolution & ecology), the courses will count towards the 16 upper division biology electives credits required for the degree.

At least one elective must be a 4-credit course that has a lab/field experience component.

CONCENTRATION IN CELL AND MOLECULAR BIOLOGY 16 CREDITS				
□ BIOL 405**	Molecular Biology	3		
□ BIOL 453**	Immunology	3		
Please complete 10 add	litional credits of the following:			
□ BIOL 306/CHEM	1306 ** Intro to Scientific Ethics	1		
□ BIOL 330** †	Plant Biology	4		
□ BIOL 351** †	Microbiology	4		
□ BIOL 405L**	Molecular and Cell Biology Techniques	1		
□ BIOL 409**	Virology	3		
□ BIOL 414**	Endocrinology	3		
□ BIOL 416**	Bioinformatics	3		
□ BIOL 437**	Entomology	4		
□ BIOL 440** †	Mammalian Physiology	3		
□ BIOL 448**	Mammalian Physiology - Laboratory	1		
□ BIOL 457** †	Molecular and Cellular Immunology	4		
□ BIOL 460**	Microbial Physiology	3		
□ BIOL 470**	Topics in Applied Microbiology	3		
□ BIOL 473**	Advanced Topics in Cell and Molecular			
	Biology	3		
□ BIOL 475**	Neurobiology	3		
□ BIOL 493**	Undergraduate Seminar	1		
BIOL 494/ENV 4	194 ** Biology Colloquium	1		
□ BIOL 497**	Senior Thesis	3		
□ CHEM 380**	Medicinal Chemistry	3		
□ CHEM 456**	Medical Biochemistry	3		
□ CHEM 472**	Biochemistry Laboratory	2		
□ CHEM 475**	Biochemistry II	3		

TOTAL CREDITS FOR DEGREE (120 CREDITS)

Check box when requirement is satisfied

**Indicates a prerequisite and/or corequisite is required. Please refer to the catalog or speak to an advisor about these requirements.

+ Indicates a lab is required.

This sample degree checklist is a planning tool intended for the current academic year. Each student's situation is unique and your degree may differ from the sample presented here. It is recommended that current NS students review the Academic Requirements report in their Student Center to monitor progress toward their degree and graduation requirements. It is also strongly recommended that you meet regularly with your Academic Advisor to verify degree progression.

2023-2024 CATALOG DEGREE OVERVIEW & NOTES PAGE

NEVADA STATE UNIVERSITY SCHOOL OF LIBERAL ARTS, SCIENCES, & BUSINESS **BIOLOGY, B.S.**

CREDIT REQUIREMENTS

Summary of	credit requirements	for the Bachelor of	Science in Biology
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College Core Curriculum	19-54
Major Requirements	71
General elective credit	9-30

UPPER DIVISION ELECTIVE REQUIREMENTS UPPER DIVISION CREDITS Must be 300-400 level	9	CREDITS COMPLETED	CREDITS REMAINING
ADDITIONAL GRADUATION REQUIREMENTS 120 CREDITS College credits earned (minimum; must be 100 level or above) RESIDENCY RULE Upper division credits from Nevada State (minimum)	120 30	CREDITS COMPLETED	CREDITS REMAINING

ADVISOR NOTES

STUDENT NOTES