TAYLOR UNIVERSITY

BA or BS in Biology Investigations and Applications – 2024-2025

Student Name: _____
Student ID: _____

Foundational Requirements

_____	BIO 201	4	Biology I: Foundations of Cell Biology and Genetics
_____	BIO 202	4	Biology II: Organisms and Diversity
_____	BIO 203	4	Principles of Genetics
_____	BIO 493	4	Biology Senior Capstone
_____	ENS 204	4	Principles of Ecology

Major Requirements

_____	BIO 185	1	Biology Major Orientation
_____	BIO 285	1	Biology Colloquium I
_____	BIO 381	3	Research Methods
_____	BIO 385	1	Biology Colloquium II
_____	BIO 440	1	Research Proposal
_____	BIO 460	1	Research Communication
_____	BIO 485	1	Biology Colloquium III

Select <u>one</u> of the following:

_____	BIO 450	5	Directed Research
_____	BIO 455^	0	Supervised Summer Research

^Departmental approval required.

Additional Major Requirements

_____	CHE 211	4	College Chemistry I
_____	CHE 212	4	College Chemistry II
_____	MAT 210	4	Introductory Statistics

Select <u>8</u> credits† from the following:

_____	CHE 311	4	Organic Chemistry I
_____	CHE 312	4	Organic Chemistry II
_____	COS 120	4	Introduction to Computational Problem Solving
_____	COS 121	4	Foundations of Computer Science
_____	ENS 383	4	Environmental Ethics
_____	MAT 311	3	Introduction to Data Science
_____	MAT 382	3	Advanced Statistical Methods
_____	NAS 370	1	Selected Topics*
_____	NAS 480	1	Seminar
_____	PHI 311	3	Medical Ethics
_____	PHY 203	4	General Physics I
_____	PHY 204	4	General Physics II
_____	SUS 231	4	Environmental Science, Society, and Sustainability

†Any additional course under the General Biology concentration not otherwise counting toward the major or concentration may count toward the <u>8</u> credits.

**Must be a course in Perspectives in Scientific Reasoning.*

Total Major Hours Required: 66-71

Concentrations – *Students must select <u>one</u> of the following concentrations:*

Anatomy and Physiology

_____	BIO 310	4	Human Anatomy and Physiology I
_____	BIO 311	4	Human Anatomy and Physiology II

Select <u>8</u> credits from the following:

_____	BIO 312	4	Cellular and Molecular Biology
_____	BIO 331	4	Comparative Anatomy
_____	BIO 360	1-4	Independent Study *(approved by advisor)*
_____	BIO 370	1-4	Selected Topics *(approved by advisor)*
_____	BIO 452	4	Animal Physiology
_____	BIO 472	4	Histology
_____	EXS 316	3	Applied Nutrition
_____	EXS 381	3	Kinesiology

Cellular and Molecular Biology

_____	BIO ____	4	*Any additional upper-division Biology course not otherwise counting toward major or concentration*

Select <u>12</u> credits from the following:

_____	BIO 312	4	Cellular and Molecular Biology
_____	BIO 360	1-4	Independent Study *(approved by advisor)*
_____	BIO 370	1-4	Selected Topics *(approved by advisor)*
_____	BIO 432	4	Developmental Biology
_____	BIO 462	4	Molecular Genetics
_____	BIO 471	4	Microbiology and Immunology
_____	CHE 410L	2	Biochemistry Lab
_____	CHE 411	3	Biochemistry I
_____	CHE 412	3	Biochemistry II

General Biology

Select <u>16</u> credits from the following:

_____	BIO 301	4	Taxonomy of Vascular Plants
_____	BIO 304	4	Field Natural History of the Black Hills
_____	BIO 307	4	Vertebrate Natural History
_____	BIO 310‡	4	Human Anatomy and Physiology I
_____	BIO 311‡	4	Human Anatomy and Physiology II
_____	BIO 312	4	Cellular and Molecular Biology
_____	BIO 331‡	4	Comparative Anatomy
_____	BIO 345	3	Evolution and the Nature of Science
_____	BIO 360	1-4	Independent Study *(approved by advisor)*
_____	BIO 370	1-4	Selected Topics *(approved by advisor)*
_____	BIO 432	4	Developmental Biology
_____	BIO 452‡	4	Animal Physiology
_____	BIO 462	4	Molecular Genetics
_____	BIO 471	4	Microbiology and Immunology
_____	BIO 472	4	Histology
_____	CHE 410L	2	Biochemistry Lab
_____	CHE 411	3	Biochemistry I
_____	CHE 412	3	Biochemistry II
_____	ENS 375	4	Systems Ecology

‡A maximum of <u>two</u> courses may be taken from BIO 310, 311, 331, 452.

Organisms and Systems Biology/Pre-veterinary Medicine

_____	BIO ____	4	*Any additional upper-division Biology course not otherwise counting toward major or concentration*

Select <u>12</u> credits from the following:

_____	BIO 301	4	Taxonomy of Vascular Plants
_____	BIO 304	4	Field Natural History of the Black Hills
_____	BIO 307	4	Vertebrate Natural History
_____	BIO 331	4	Comparative Anatomy
_____	BIO 345	3	Evolution and the Nature of Science
_____	BIO 360	1-4	Independent Study *(approved by advisor)*
_____	BIO 370	1-4	Selected Topics *(approved by advisor)*
_____	BIO 452	4	Animal Physiology
_____	ENS 375	4	Systems Ecology

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Language Requirement for BA Degree *– Complete four courses in one language option.*

☐ Spanish ☐ Hebrew ☐ Greek ☐ French ☐ Chinese ☐ Korean ☐ Other:_____

_____	____	101	4	Elementary I	_____	GRK 201	4	Elementary New Testament Greek	_____ HEB 211 3 Elementary Old Testament Hebrew I
_____	____	102	4	Elementary II	_____	GRK 202	4	Elementary New Testament Greek	_____ HEB 212 3 Elementary Old Testament Hebrew II
_____	____	201	3	Intermediate I	_____	GRK 301	3	Greek Grammar and Syntax	_____ HEB 311 3 Hebrew Syntax and Lexicography
_____	____	202	3	Intermediate II	_____	GRK 302	3	Exegesis of the Greek New Testament	_____ HEB 312 3 Hebrew Exegesis

Degree Requirements

- 128 minimum hours and 42 minimum upper-division hours (3XX/4XX course numbers).
- Fifty percent of the minimum hours must be completed at Taylor—64 hours.
- Fifty percent of the major/minor hours must be completed at Taylor.
- 22 of the last 30 hours earned must be completed at Taylor.
- Cumulative GPA of 2.0; major GPA of 2.3 (higher GPA may be required in certain curricula). (See current catalog for policy).
- All foundational core, major, minor, and proficiency requirements must be completed (including Senior Comprehensive Exam/Paper/Project).
- Two years of one foreign language is required for the BA degree.
- Candidates for 2 degrees must complete a minimum of 158 semester hours and meet all requirements for 2 different majors.