#### REQUIREMENTS FOR THE BACHELOR OF SCIENCE

#### DODGE COLLEGE OF ARTS AND SCIENCES

#### THE UNIVERSITY OF OKLAHOMA

# Academic Year For Students Entering the Oklahoma State System for Higher Education Summer 2023 through Spring 2024

General Requirements			
Minimum Total Credit Hours	120		
Minimum Upper-Division Hours	. 48		
Major Hours	33		
Minimum Retention/Graduation Grade Point Averages:			
Overall - Combined and OU	2.00		
Major - Combined and OU	2.00		

Program	
Biology	
B105	
Bachelor of Science	

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

**Minimum Total Credit Hours:** 120

Major Hours: 33

Minimum Upper-Division Hours: 48 Overall GPA - Combined and OU: 2.00 Major GPA - Combined and OU: 2.00

Program Code: B105

## **General Education and College Requirements**

Courses for fulfillment of General Education and Dodge College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at http://www.ou.edu/gened/courses. **Courses graded P/NP will not apply.** 

# UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

Code	Title	Credit Hours	
Core Area I: Symb	olic and Oral Communication		
English Composition	n (6 hours)		
ENGL 1113	Principles of English Composition	3	
ENGL 1213	Principles of English Composition	3	
or EXPO 1213	Expository Writing		
Language (0-13 hou	ırs in the same language)		
The college require	ment cannot be met by high school coursework.		
Beginning Course			
Beginning Course, continued			
Intermediate Course (2000 level) <sup>1,2</sup>			
Mathematics (3 hours)			
Choose one course from the General Education Mathematics list			
Core Area II: Natu component)	ral Science (7 hours, including one laboratory		
Biological Science			
Choose an approved General Education Natural Science course with one of the following prefixes: BIOL, HES, MBIO, or PBIO $^{\rm 1}$			
Physical Science			

Choose an approved General Education Natural Science course with

one of the following prefixes: AGSC, ASTR, CHEM, GEOG, GEOL,

Choose one course from the General Education Social Science list

American Federal Government

GPHY, METR, or PHYS 1

P SC 1113

Artistic Forms

Core Area III: Social Science (6 hours)

Core Area IV: Arts and Humanities (18 hours)

Choose one course from the General Education Artistic Forms list				
Western Culture				
HIST 1483	United States to 1865	3		
or HIST 1493	United States, 1865 to the Present			
	Choose one course from the General Education Western Culture list (excluding HIST 1483/1493)			
World Culture				
Choose one course from the General Education World Culture list				
Additional Core IV	Upper-Division Arts & Humanities courses			
Choose one course from Artistic Forms, Western Culture, or World Culture $^{1,3}$				
Choose one course from Artistic Forms, Western Culture, or World Culture <sup>1,3</sup>				
	t Vear Evnerience (3 hours)			
	Core Area V: First Year Experience (3 hours)			
Choose one course				

<sup>1</sup>College of Arts and Sciences Requirements: college requirements are not automatically fulfilled by a previous degree.

<sup>2</sup>One course at the intermediate level or demonstrated competency at that level <sup>3</sup>6 upper-division hours, 2 courses, at the 3000-4000-level. *Must be outside the major*.

#### **Free Electives**

3-4

3

3

**Total Credit Hours** 

Electives to bring total applicable hours to the minimum total required for the degree including 48 upper-division hours.

# **Major Requirements**

- Some courses required for the major may also fulfill University General Education and/or Dodge College of Arts & Sciences Requirements
- Thirty-six hours of major coursework must be completed, exclusive of BIOL 1003, BIOL 1005, BIOL 1013, BIOL 1114, BIOL 1121, BIOL 1203, BIOL 2103, BIOL 2124, BIOL 2234, and BIOL 2255.
- A grade of C or better must be earned in each course counted for major and major support credit.

Code	de Title	
Biology		Hours
BIOL 1124	Intro Biol: Molecule/Cell/Phys	4
BIOL 1134	Introductory Biology: Evolution, Ecology and Diversity	4
BIOL 3013	Evolution	3
BIOL 3333	Genetics	3
Electives		
Choose 16 hours <sup>1</sup>		16
Statistics		
Choose one of the	3	
PSY 2003	Understanding Statistics	
BIOL 2913	Intro to Quantitative Biology	
BIOL 4913	Quantitative Biology	
ECON 2843	Elements of Statistics	
<b>Total Credit Hou</b>	33	

<sup>1</sup>Electives - (16 hours) to be chosen in consultation with departmental advisor; must include two upper-division laboratory courses. (Independent study, honors reading or honors research cannot count toward laboratory course requirements.)

# **Major Support Requirements**

Code	Title	Credit Hours
Chemistry		
CHEM 1315	General Chemistry	5
CHEM 1415	General Chemistry (Continued)	5
CHEM 3053	Organic Chemistry I: Biological Emphasis	3
CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	2
CHEM 3153	Organic Chemistry II: Biological Emphasis	3
or CHEM 3653	Introduction to Biochemistry	
History of Science,	Technology & Medicine	
Choose one of the f	following:	3
HSTM 3013	History of Science to the Age of Newton	
HSTM 3023	History of Science Since the Seventeenth Century	
An approved HS the Department	TM course chosen from the list maintained by of Biology	
Physics		
Choose one of the f	following:	8

Total Credit Hours		
or MATH 1823	Calculus and Analytic Geometry I	
MATH 1743	Calculus I for Business, Life and Social Sciences	3
Math		
PHYS 2514 & PHYS 2524	General Physics for Engineering and Science Majors and General Physics for Engineering and Science Majors	
PHYS 2414 & PHYS 2424	General Physics for Life Science Oriented Majors and General Physics for Life Science Oriented Majors	

<sup>1</sup>Fulfills 1 of the 2 upper-division Gen Ed Humanities required by the College of Arts & Sciences

More information in the catalog: (http://ou-public.courseleaf.com/dodge-arts-sciences/biological-sciences/biology-bachelor-science/).

### Information Concerning General Rules, Regulations and Minimum Requirements

Arts and Sciences Hours: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.

Pass/No Pass Enrollment: A maximum of 16 semester hours of free elective credit may be attempted under this option.

Individual Studies (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation, excluding Honors Reading and Honors Research.

P.E. Courses: No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.

Senior Institution Hours: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.

#### Residency

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are *not* considered resident credit.

Grade Point Averages: Students must earn a minimum over all 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

## **Suggested Semester Plan of Study**

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with Dodge College of Arts and Sciences and/or Department of Biology academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy University, College of Arts and Sciences, and Biology major requirements.

Year		FIRST SEMESTER	Hours		SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113	Principles of English Composition ( Core I )	3	CHEM 1315	General Chemistry	5
	HIST 1483 or	United States to 1865 ( Core IV ) or United States, 1865	3	ENGL 1213 or	Principles of English Composition ( Core I ) or	3
	HIST 1493	to the Present		EXPO 1213	Expository Writing	
	MATH 1523	Precalculus and Trigonometry ( Core I )	3	MATH 1743 or	Calculus I for Business, Life and Social Sciences or	3
				MATH 1823	Calculus and Analytic Geometry I	
	BIOL 1124	Intro Biol: Molecule/Cell/Phys	4	BIOL 1134	Introductory Biology: Evolution, Ecology and Diversity	4
		First Year Experience (Core V)	3			
		CREDIT HOURS	16		CREDIT HOURS	15
RE	CHEM 1415	General Chemistry (Continued)	5	CHEM 3053	Organic Chemistry I: Biological Emphasis	3
	PHYS 2414 or	General Physics for Life Science Oriented Majors or	4	PHYS 2424 or	General Physics for Life Science Oriented Majors or	4
MO	PHYS 2514	General Physics for Engineering and Science Majors		PHYS 2524	General Physics for Engineering and Science Majors	
НО	BIOL 3013	Evolution	3		Statistics Requirement	3
SOPHOMORE	P SC 1113	American Federal Government ( Core III )	3		Beginning Language (Core I)	5
· · ·		CREDIT HOURS	15		CREDIT HOURS	15
	CHEM 3153 or	Organic Chemistry II: Biological Emphasis or	3	HSTM 3013 or	History of Science to the Age of Newton or History of	3
	CHEM 3653	Introduction to Biochemistry		HSTM 3023	Science Since the Seventeenth Century	
	CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	2		Intermediate Language	3
H.	BIOL 3333	Genetics	3		World Culture (Core IV)	3
JUNIOR		Beginning Language continued (Core I)	5		BIOL Major Group Requirement, upper-division (3000-4000-level)	3
		Free Elective, upper-division (3000-4000-level)	3		BIOL Major Group Requirement with Lab, upper- division (3000-4000-level)	4
		CREDIT HOURS	16		CREDIT HOURS	16
		BIOL Major Group Requirement, upper-division (3000-4000-level)	3		Major Group Requirement, upper-division (3000-4000-level)	3
SENIOR		BIOL Major Group Requirement with Lab, upper- division (3000-4000-level)	3		Artistic Forms (Core IV)	3
		Arts & Humanities, upper-division (3000-4000-level) outside major (Gen.Ed.)	3		Social Science (Core III)	3
		Western Culture (Core IV)	3		Free Electives, upper-division (3000-4000-level)	3
		Free Elective, upper-division (3000-4000-level)	3			
		CREDIT HOURS	15		CREDIT HOURS	12