

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.

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: Symbolic and Oral Communication		
<i>English Composition (6 hours)</i>		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
<i>Language (0-13 hours in the same language)</i>		
The college requirement cannot be met by high school coursework.		
	Beginning Course	0-5
	Beginning Course, continued	0-5
	Intermediate Course (2000 level) ^{1,2}	0-3
<i>Mathematics (3 hours)</i>		
Choose one course from the General Education Mathematics list		
		3
Core Area II: Natural Science (7 hours, including one laboratory component)		
<i>Biological Science</i>		
Choose an approved General Education Natural Science course with one of the following prefixes: BIOL, HES, MBIO, or PBIO ¹		
		3-4
<i>Physical Science</i>		
Choose an approved General Education Natural Science course with one of the following prefixes: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS ¹		
		3-4
Core Area III: Social Science (6 hours)		
P SC 1113	American Federal Government	3
Choose one course from the General Education Social Science list		
		3
Core Area IV: Arts and Humanities (18 hours)		
<i>Artistic Forms</i>		
Choose one course from the General Education Artistic Forms list		
		3
<i>Western Culture</i>		
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)		
		3
<i>World Culture</i>		
Choose one course from the General Education World Culture list		
		3
<i>Additional Core IV Upper-Division Arts & Humanities courses</i>		
Choose one course from Artistic Forms, Western Culture, or World Culture ^{1,3}		
		3
Choose one course from Artistic Forms, Western Culture, or World Culture ^{1,3}		
		3
Core Area V: First Year Experience (3 hours)		
Choose one course		
		3
Total Credit Hours		56

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

²One course at the intermediate level or demonstrated competency at that level

³6 upper-division hours, 2 courses, at the 3000- 4000-level. **Must be outside the major.**

FREE ELECTIVES

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	Title	Credit Hours
Biology		
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 ¹		
		16
Statistics		
Choose one of the following:		
		3
PSY 2003	Understanding Statistics	
BIOL 2913	Intro to Quantitative Biology	
BIOL 4913	Quantitative Biology	
ECON 2843	Elements of Statistics	
Total Credit Hours		33

¹Electives - (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 following:		
		3
HSTM 3013	History of Science to the Age of Newton	
HSTM 3023	History of Science Since the Seventeenth Century	
An approved HSTM course chosen from the list maintained by the Department of Biology		
Physics		
Choose one of the following:		
		8
PHYS 2414 & PHYS 2424	General Physics for Life Science Oriented Majors and General Physics for Life Science Oriented Majors	
PHYS 2514 & PHYS 2524	General Physics for Engineering and Science Majors and General Physics for Engineering and Science Majors	
Math		
MATH 1743	Calculus I for Business, Life and Social Sciences	3
or MATH 1823	Calculus and Analytic Geometry I	
Total Credit Hours		32

¹Fulfills 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 HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1523	Precalculus and Trigonometry (Core I)	3	MATH 1743 or MATH 1823	Calculus I for Business, Life and Social Sciences or Calculus and Analytic Geometry I	3
	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
SOPHOMORE	CHEM 1415	General Chemistry (Continued)	5	CHEM 3053	Organic Chemistry I: Biological Emphasis	3
	PHYS 2414 or PHYS 2514	General Physics for Life Science Oriented Majors or General Physics for Engineering and Science Majors	4	PHYS 2424 or PHYS 2524	General Physics for Life Science Oriented Majors or General Physics for Engineering and Science Majors	4
	BIOL 3013	Evolution	3		Statistics Requirement	3
	P SC 1113	American Federal Government (Core III)	3		Beginning Language (Core I)	5
		CREDIT HOURS		15	CREDIT HOURS	
JUNIOR	CHEM 3153 or CHEM 3653	Organic Chemistry II: Biological Emphasis or Introduction to Biochemistry	3	HSTM 3013 or HSTM 3023	History of Science to the Age of Newton or History of Science Since the Seventeenth Century	3
	CHEM 3152	Organic Chemistry Laboratory: Biological Emphasis	2		Intermediate Language	3
	BIOL 3333	Genetics	3		World Culture (Core IV)	3
		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
SENIOR		BIOL Major Group Requirement, upper-division (3000-4000-level)	3		Major Group Requirement, upper-division (3000-4000-level)	3
		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