

REQUIREMENTS FOR THE BACHELOR OF SCIENCE
DODGE FAMILY COLLEGE OF ARTS AND SCIENCES
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education Summer 2024 through Spring 2025	Minimum Total Credit Hours 120 Minimum Upper-Division Hours 48 Major Hours 35 Minimum Retention/Graduation Grade Point Averages: Overall - Combined and OU 2.00 Major - Combined and OU 2.00	Astronomy B080 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: 35
Minimum Upper-Division Hours: 48

Overall GPA - Combined and OU: 2.00
Major GPA - Combined and OU: 2.00

Program Code: B080

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)		

Artistic Forms

Choose one course from the General Education Artistic Forms list 3

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) 3

World Culture

Choose one course from the General Education World Culture list 3

Additional Core IV Upper-Division Arts & Humanities courses

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

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

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

³ 6 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.

- A grade of C or better must be earned in each required Astronomy and Physics course and in the required Mathematics courses.

Major Requirements

- Some courses required for the major may also fulfill University General Education and/or Dodge College of Arts & Sciences Requirements.

Code	Title	Credit Hours
Astronomy		
ASTR 2513	Introductory Astrophysics	3
ASTR 3103	Stars	3
ASTR 3113	Galaxies and Cosmology	3
Physics		
PHYS 1205	Introductory Physics I for Physics Majors	5
PHYS 1215	Introductory Physics II for Physics Majors	5
PHYS 2203	Introductory Physics III: Modern Physics	3
PHYS 3043	Physical Mechanics I	3
PHYS 3053	Physical Mechanics II	3
PHYS 4310	Senior Research Project I	2
PHYS 4320	Senior Research Project II	2
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	
PHYSICS course at the 3000-level or higher		
Total Credit Hours		35

Major Support Requirements

Code	Title	Credit Hours
CHEM 1315	General Chemistry	5
MATH 1914	Differential and Integral Calculus I ¹	4
MATH 2924	Differential and Integral Calculus II ¹	4
MATH 2934	Differential and Integral Calculus III ¹	4
MATH 3413	Physical Mathematics I	3
Total Credit Hours		20

¹ MATH 1823, MATH 2423, MATH 2433, and MATH 2443 may also be used to meet the Calculus sequence requirement.

More information in the catalog: (<http://ou-public.courseleaf.com/dodge-arts-sciences/dodge-physics-astronomy/astronomy-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 checklist for official requirements. Students must consult with Dodge College of Arts and Sciences and/or Department of Physics and Astronomy academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy University, College of Arts and Sciences, and Astronomy major requirements.

Year	FIRST SEMESTER		Hours	SECOND SEMESTER		Hours
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1914	Differential and Integral Calculus I ¹	4	MATH 2924	Differential and Integral Calculus II ¹	4
		First Year Experience (Core V)	3	PHYS 1215	Introductory Physics II for Physics Majors	5
	PHYS 1205	Introductory Physics I for Physics Majors	5		Beginning Language (Core I)	5
	CREDIT HOURS		15	CREDIT HOURS		17
SOPHOMORE	ASTR 2513	Introductory Astrophysics	3	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3
	MATH 2934	Differential and Integral Calculus III ¹	4	P SC 1113	American Federal Government (Core III)	3
	PHYS 2203	Introductory Physics III: Modern Physics	3	MATH 3413	Physical Mathematics I	3
		Beginning Language (Continued) (Core I)	5	PHYS 3043	Physical Mechanics I	3
	CREDIT HOURS		15	CREDIT HOURS		15
JUNIOR	ASTR 3103	Stars	3	ASTR 3113	Galaxies and Cosmology	3
	PHYS 3053	Physical Mechanics II	3		Choose one of the following:	3
	CHEM 1315	General Chemistry	5		PHYS Major Elective, upper-division (3000-4000-level)	
		Social Science (Core III) ²	3	HSTM 3013	History of Science to the Age of Newton	
		Artistic Forms (Core IV) ²	3	HSTM 3023	History of Science Since the Seventeenth Century	
					Western Culture (Core IV) ²	3
	CREDIT HOURS		17	CREDIT HOURS		15
SENIOR	PHYS 4310	Senior Research Project I	2	PHYS 4320	Senior Research Project II	2
		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3
		World Culture (Core IV) ²	3		Free Elective, upper-division (3000-4000-level)	3
		Free Elective, upper-division (3000-4000-level)	3		Free Elective, upper-division (3000-4000-level)	3
		Free Elective, upper-division (3000-4000-level)	3		Free Elective, upper-division (3000-4000-level)	1
	CREDIT HOURS		14	CREDIT HOURS		12

¹ Students may substitute MATH 1823, MATH 2423, MATH 2433 and MATH 2443 calculus sequence instead of MATH 1914, MATH 2924, and MATH 2934.

² Additional upper-division General Education may be required to complete the 48 hour upper-division requirement.