South Dakota State University

Bachelor of Science
Major: Physics
Specialization: Science Teaching
2026-2027 Sample 4-Year Plan
Total Degree Requirements: 120 credits

Student _____ **Student ID#** _____ **Student Phone #** _____

Advisor _____ **Minimum GPA** 2.00 **Minor/Career Interest(s)** _____

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the Undergraduate Catalog.

*FIRST YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 112/112L	General Chemistry I and Lab	c. MATH 114 or higher	4	F	
MATH 123	Calculus I (SGR #5)	p. Placement Grade of C or higher required.	4		
PHYS 119	First Year Seminar in Physics		1	F	
PHYS 185/185L	Solar System Astronomy and Lab	Suggested Physics Technical Elective (other option PHYS 187/187L in S)	3	F	
SGR #1	Written Communication	ENGL 101 Recommended Grade of C or higher required.	3		
		Total Credit Hours	15		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
CHEM 114/114L	General Chemistry II and Lab	p. CHEM 112/112L	4	S	
EDFN 102	Introduction to Education		3	F/S	
MATH 125	Calculus II	p. MATH 123	4		
SGR #2	Oral Communication	CMST 101 Recommended Grade of C or higher required.	3		
SGR #3	Social Sciences - Civics Requirement	Choose 1: HIST 151, HIST 152, POLS 100, POLS 210, or CIV 100	3		
		Total Credit Hours	17		

SECOND YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
MATH 225	Calculus III	p. MATH 125	4		
MATH 321	Differential Equations	p. MATH 125	3		
*PHYS 211/211L	University Physics I and Lab (SGR #6)	p. MATH 123	5	F	
SGR #4	Arts and Humanities (from two different disciplines or a sequence of a foreign language)	See list in catalog	3		
		Total Credit Hours	15		

Students are eligible to petition for a MATH 123 and PHYS 211/L concurrent enrollment if they qualify for MATH 123 placement and want to take PHYS 211/L in the first year rather than the second year

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
EDFN 340	Adolescent Development in Educational Contexts	p. Teaching, Learning and Leadership department consent required.	3		
EDFN 351	Teaching and Learning I	p. Teaching, Learning and Leadership department consent required.	1		
EE 216/216L	Linear Circuits I and Lab	c. MATH 125	4	S	
PHYS 213/213L	University Physics II and Lab (SGR #6)	p. PHYS 211/L	5	S	
SGR #1	Written Communication	ENGL 201 OR ENGL 277 Recommended p. ENGL 101 and PHYS 119	3		

Information Subject to Change. This is not a contract.

p. = Course Prerequisite c. = Course Corequisite
Semester: F = Fall, S = Spring, SU = Summer
odd (even) = odd (even) year only

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
		Total Credit Hours	16		

THIRD YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
AIS 211	South Dakota American Indian Culture and Education (SGR#3)		3		
PHYS 316/316L	Measurement Theory and Lab	p. PHYS 213/L or PHYS 113/L	2	F	
PHYS 331	Introduction to Modern Physics	p. PHYS 213/L or PHYS 113/L	3	F	
PHYS 341	Thermodynamics	p. MATH 225	2	F	
PHYS 343	Statistical Physics	p. MATH 321	2	F	
PHYS 451	Classical Mechanics	p. MATH 321 and 225	4	F	
		Total Credit Hours	16		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
EDFN 352	Teaching and Learning II	p. EDFN 351	3		
PHYS 421	Electromagnetism	p. MATH 321 and 225	4	S	
PHYS 437	Foundations of Health Physics	p. MATH 123 and PHYS 213	3	S(even)	
SGR #4	Arts and Humanities (from two different disciplines or a sequence of a foreign language)	See list in catalog	3		
SPED 100	Introduction to Persons with Exceptionalities		3	F/S	
		Total Credit Hours	16		

FOURTH YEAR

Fall

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
EDFN 453	Teaching and Learning III		3		
EDFN 453L	Teaching and Learning III Lab		4		
SEED 413	Science Methods		3		
SEED 450	Reading and Content Literacy		2		
General Elective	Taken as needed to reach 120 credits and 33 upper division credits		1		
		Total Credit Hours	13		

Spring

Prefix + Number	Course Title	Prerequisites/Comments	Credits	Semester	Grade
EDFN 454	Teaching and Learning IV	p. EDFN 453	11		
SEED 456	Capstone/Action Research	c. EDFN 454	1		
		Total Credit Hours	12		

COMMENTS/NOTES

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the Honors program requirements.

Teacher Education Program Progression Requirements

Acceptance into Teacher Education

- A grade of "C" or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA in the academic major of 2.6 is required.
- Completion of **program application and professional licensure location form.**

Acceptance into Residency I

- A grade of "C" or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA of 2.7 is required in both major and education courses.
- The teacher candidate must take the Praxis content exam.
- The teacher candidate is also required to complete a criminal background check with field placements, a TB test with negative reading, and CPR and first aid certification.

Acceptance into Residency II

- A grade of "C" or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.

Information Subject to Change. This is not a contract.

p. = Course Prerequisite c. = Course Corequisite
Semester: F = Fall, S = Spring, SU = Summer
odd (even) = odd (even) year only

- A GPA of 2.7 is required in both major and education courses.
- The teacher candidate must take the Praxis PLT exam.

Academic Requirements

- The program requires a cumulative GPA of 2.0 or above for all physics courses and a GPA 2.0 or above in PHYS 211-213 (or PHYS 111-113) and PHYS 331.
- A grade of "C" or better is required in education coursework (classes with AIS, EDFN, SPED, or SEED prefixes).
- An overall GPA of 2.5 is required.
- A GPA of 2.7 is required in both major and education courses.

As part of this program, students must complete:

- a minimum of 33 upper division credits (300-400 level courses)
- a capstone course in the major (SEED 456)

Certification and Licensure

- Completion of an approved teacher preparation program.
- Completion of an approved South Dakota Indian studies course.
- Pass the state designated content knowledge test or 2.7 GPA in content major coursework.
- Pass the state designated pedagogy test.
- Apply online with the South Dakota Department of Education.
- Written recommendation from institution of higher education (SDSU) verifying program completion.