



Teacher Licensing Program
 Center for Educator Preparation
 111 Education Building
 (970) 491-5292
<https://www.chhs.colostate.edu/soe/center-for-educator-preparation/>

Student's Name: _____

Email Address: _____

CSU ID Number: _____

**SCIENCE EDUCATION – Physics Concentration
 Curriculum Check-sheet
 120 Credits**

Note to the Student: This check-sheet describes the curricular requirements for both the Bachelor of Science in Natural Sciences with a concentration in Physics Education and for the teacher licensing program in science. The courses listed are courses in both areas. All curricular requirements on this check-sheet, along with other programmatic requirements, must be met in order to receive the institutional recommendation for the teaching endorsement. A minimum of 42 credits must be completed in upper-division coursework. **The Teacher Licensing Program is a non-degree program; bachelor degrees in education are not awarded.**

Professional Education Courses – 33 credits

____ EDUC 275* Schooling in the US	3	
____ EDUC 340 Literacy & the Learner	3	
____ EDUC 350 Instruction I	3	
____ EDUC 386 Practicum-Instruction I	1	
____ EDUC 461A ^Ω Science Methods I	3	
____ EDUC 450 Instruction II	4	
____ EDUC 486E Practicum-Instruction II	1	
____ EDUC 461B ^Σ Science Methods II	3	
____ EDUC 485B Student Teaching-Secondary 11		
____ EDUC 493A Seminar: Prof Relations	1	

All University Core Curriculum – 18 credits

____ Written Communication (1A)	3	____ CO150
---------------------------------	---	------------

Mathematics**:

____ MATH160* Calculus-Physical Sci I (1B)	4	
____ Advanced Writing (2B)	3	

Biological/Physical Sciences (3A)

____ LIFE 102* Attributes of Living Systems	4	
-AND-		
____ CHEM 111* General Chemistry I	4	
-AND-		
____ CHEM 112* General Chemistry I Lab	1	

____ Arts and Humanities (3B)	3	
____ Addtl Arts and Humanities (3B)	3	
____ Social/Behavioral Sciences (3C)	3	____ EDUC275
____ Historical Perspectives (3D)	3	
____ Global & Cultural Awareness (3E)	3	

Depth & Integration (4A, 4B, 4C)

____ EDUC 485B Student Teaching-Sec	11	
____ EDUC 493A Seminar: Prof Relations	1	

**Prerequisites for calculus could account for 5 additional credits.

General Science Content Courses – 34 credits

____ AA 100* Intro to Astronomy	3	
____ AA101* Astronomy Laboratory	1	
-OR-		
____ GEOL 120* Physical Geology	3	
____ GEOL 121* Physical Geology Lab	1	
____ LIFE 102* Attributes of Living Systems	4	
____ LIFE 103* Bio Organisms-Animal/Plant	4	
____ CHEM 111* General Chemistry I	4	
____ CHEM 112* General Chemistry I Lab	1	
____ CHEM 113* General Chemistry II	3	
____ CHEM 114* General Chemistry II Lab	1	
____ PH141* Physics for Sci & Eng I	5	
____ PH 142 Physics for Sci & Eng II	5	
____ STAT 301* Intro to Statistical Methods	3	

Physics Concentration Content Courses – 35 credits

____ CS 150* Coding & Culture	3	
____ PH 245 ^Ω Intro to Electronics	3	
____ PH 314 ^Σ Intro to Modern Physics	4	
____ PH 315 ^Σ Modern Physics Lab	2	
____ PH 353 ^Ω Optics & Waves	4	
____ PH 361 ^Σ Physical Thermodynamics	3	
____ MATH 160* Calculus-Physical Sci I	4	
____ MATH 161* Calculus-Physical Sci II	4	
____ MATH 261* Calculus-Physical Sci III	4	

Need 4 credits of general science/mathematics electives:

____ Science Elective		
____ Science Elective		

*Offered Summer Semester
^ΩOffered only Fall Semester
^ΣOffered only Spring Semester

See the back of this check-sheet for important course requirements and advising reminders. → → →

Important Coursework Requirements:

- 1) To enroll in EDUC 275 and EDUC 340, students must have completed 30 credits of post-secondary coursework and plan to pursue completion of the Licensure Program at CSU.
- 2) Students must be admitted to the Licensure Program to enroll in Phase II courses, EDUC 350, EDUC 386 and EDUC461A.
- 3) Because the coursework content and field experiences build upon previous courses, the phases cannot be taken concurrently or out of sequence.
- 4) Grades in ALL education courses and teaching content courses must be C or above.
- 5) Students cannot advance to the next phase of the program with incomplete grades or grades of C- or below in professional education courses.

Coursework Model of the Teacher Licensure Program – Secondary and K-12 Endorsements (Revised for Fall 2019) Colorado State University

PHASE I		PHASE II		PHASE III	PHASE IV
<u>EDUC 275</u> <i>Schooling in the United States</i> 3 credits (Course includes field experiences in the P-12 school system) <u>EDUC 340</u> <i>Literacy and the Learner</i> 3 credits (Course includes field experiences in the school system)	Admission Required to Enroll in PHASE II EDUC Courses	<u>EDUC 350</u> <i>Instruction I: Individualization and Management</i> 3 credits (Course is a Professional Development School (PDS) at the public middle schools) <u>EDUC 386</u> <i>Practicum: Instruction I</i> 1 credit (Course includes field experiences aligned with EDUC 350) <u>EDUC 461A</u> <i>Methods & Materials in Teaching Science I</i> 3 credits (Course is a Fall only class)	Passing Score on PRAXIS II (5435) Exam Required to Begin Student Teaching	<u>EDUC 450</u> <i>Instruction II: Standards and Assessment</i> 4 credits (Course is a Professional Development School (PDS) at the public high schools) <u>EDUC 486E</u> <i>Practicum II: Instruction II</i> 1 credit (Course includes field experiences aligned with EDUC 450) <u>EDUC 461B</u> <i>Methods & Materials in Teaching Science II</i> 3 credits (Course is a Spring only class)	<u>EDUC 485B</u> <i>Student Teaching</i> 11 credits (Course entails 15-16 weeks of full-time experience at a cooperating school site) <u>EDUC 493A</u> <i>Seminar: Professional Relations</i> 1 credit (Course is taken concurrently with EDUC 485B) Successful completion of program coursework, field experiences and other requirements leads to an: Institutional Recommendation for a Colorado Initial Educator License in Secondary Science

Substitution Approval:

Student _____

Date _____

BSNS Advisor _____

Date _____

Director, Teacher Preparation Program _____

Date _____

Mission of the Teacher Licensure Program

To teach and model best educational practice in order to prepare emerging professionals to facilitate student success.

Professional Program Accreditation

The Program is accredited by the Teacher Education Accreditation Council, the Colorado Commission on Higher Education, and the Colorado Department of Education.

It is recommended that students take the required courses in the following sequence in order to avoid time conflicts. In some cases, the section number that will work is noted or the time that a class is offered if there is only one section.

Freshman Fall Semester (15 credits)

CHEM 111 & CHEM 112
CO 150
Historical Perspectives (AUCC 3D)
MATH 160

Freshman Spring Semester (16 credits)

Arts & Humanities (AUCC 3B)
CHEM 113 & CHEM 114
MATH 161
PH 141

Sophomore Fall Semester (16 credits)

AA 100 & AA 101 or GEOL 120 & GEOL 121
EDUC 275 (AUCC 3C)
LIFE 102
PH 142 (Section 2)

Sophomore Spring Semester (15 credits)

EDUC 340
LIFE 103 (Section 1)
MATH 261
PH 314 (MTWF 11 – 11:50 am – Spring ONLY)

Junior Fall Semester (16 credits)

CS 150 (TR 2 – 2:50 pm)
EDUC 350 & EDUC 386 (Section 4)
EDUC 461A (MW 9 – 10:40 am – Fall ONLY)
PH245 (T 10 – 10:50 am & W 2 – 4:50 pm – Fall ONLY)

Junior Spring Semester (15 credits)

EDUC 461B (MW 10 – 11:40 am – Spring ONLY)
PH 315 (T, W, R or F 2 – 5:15 pm – Spring ONLY)
PH 361 (MWF 9 – 9:50 am – Spring ONLY)
STAT 301
Science Elective (4 credits)

Senior Fall Semester (15 credits)

Arts & Humanities (AUCC 3B)
Diversity & Global Awareness (AUCC 3E)
EDUC 450 & EDUC 486 (TR 8 – 11:50 am)
PH 353 (MWF 11 – 11:50 am plus lab time – Fall ONLY)

Senior Spring Semester (12 credits)

EDUC 485B
EDUC 493A