Secondary Chemistry Education, BA

with Concurrent[†] Major in Chemistry



University of Wyoming, 2016-17

The College of Education maintains rigorous admission standards to ensure the quality of preparation for future educators. **New, first time students** who meet the University of Wyoming's standards for admission may declare a major in elementary education, secondary or K-12 education in a specific content area, or education undecided provided they have a minimum ACT composite score of 21 and ACT math score of 21; a lower ACT math score can be replaced by a UW Math Placement Exam (MPE) score of 2 or higher. If electing to pursue education undecided, it is recommended that students decide on their teaching content area no later than the first semester of their sophomore year.

Current UW students wishing to change their major, students seeking re-admission to UW, or those transferring to UW from another institution can learn more about the specific admission requirements for these groups at www.uwyo.edu/ted/admission requirements.html.

All students must undergo and pass an initial criminal background check prior to full admission to the College of Education. Any costs associated with the background check are the responsibility of the student. A second background check is included as part of the state application process for the Wyoming Substitute Teaching Permit, which is required for admission to Phase II of UW's teacher education program. Criminal background checks are a standard for the profession.

Freshm	an Fa	all Semester	Hrs	Min Grade	Notes
		USP First-Year Seminar	3	С	FY
		USP US & Wyoming Constitutions	3		V
CHEM	1020	General Chemistry I *	4	С	PN; can substitute CHEM 1050 (Advanced Gen Chem I). **
EDST	2450	Foundations of Development and Learning ***	3	С	Н
MATH	2200	Calculus I ****	4	С	Q
		Credit hours subtotal:	<u>17</u>		
Freshm	an Sp	oring Semester	Hrs	Min Grade	Notes
CHEM	1030	General Chemistry II	4	С	Can substitute CHEM 1060 (Advanced Gen Chem II).
ENGL	1010	College Composition and Rhetoric	3	С	C1
LIFE	1010	General Biology	4	С	PN
MATH	2205	Calculus II	4	С	
		Credit hours subtotal:	<u>15</u>		
Sonhon	-	E 11 C			
Sobiion	nore I	Fall Semester	Hrs	Min Grade	Notes
СНЕМ	nore 1	Fall Semester Organic Chemistry I	Hrs 4	Min Grade C	Notes
					Notes Prerequisite of a 2.5 cumulative UW gpa.
СНЕМ	2420	Organic Chemistry I	4	С	
CHEM ITEC	2420 2360	Organic Chemistry I Teaching with Technology	4	C C	Prerequisite of a 2.5 cumulative UW gpa.
CHEM ITEC MICR	2420 2360 2021	Organic Chemistry I Teaching with Technology General Microbiology	4 3 4	C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021.
CHEM ITEC MICR PHYS	2420 2360 2021 1110	Organic Chemistry I Teaching with Technology General Microbiology General Physics I	4 3 4 4	C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021.
CHEM ITEC MICR PHYS	2420 2360 2021 1110	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal:	4 3 4 4 15	C C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I).
CHEM ITEC MICR PHYS	2420 2360 2021 1110	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal: Spring Semester	4 3 4 4 15 Hrs	C C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I).
CHEM ITEC MICR PHYS Sophon CHEM	2420 2360 2021 1110 nore \$2230	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal: Spring Semester Quantitative Analysis	4 3 4 4 15 Hrs	C C C C Min Grade	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I).
CHEM ITEC MICR PHYS Sophon CHEM CHEM	2420 2360 2021 1110 nore \$2230 2440	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal: Spring Semester Quantitative Analysis Organic Chemistry II	4 3 4 4 15 Hrs 4	C C C C Min Grade C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I). Notes Admission to Phase I of the program required. # Can substitute PHYS 1220 (Engineering Physics II - requires
CHEM ITEC MICR PHYS Sophon CHEM CHEM	2420 2360 2021 1110 nore \$2230 2440	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal: Spring Semester Quantitative Analysis Organic Chemistry II	4 3 4 4 15 Hrs 4	C C C C Min Grade C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I). Notes Admission to Phase I of the program required. #
CHEM ITEC MICR PHYS Sophon CHEM CHEM EDEX	2420 2360 2021 1110 nore 2230 2440 2484	Organic Chemistry I Teaching with Technology General Microbiology General Physics I Credit hours subtotal: Spring Semester Quantitative Analysis Organic Chemistry II Introduction to Special Education	4 3 4 4 15 Hrs 4 4 3	C C C Min Grade C C C	Prerequisite of a 2.5 cumulative UW gpa. Cross listed with MOLB 2021. Can substitute PHYS 1210 (Engineering Physics I). Notes Admission to Phase I of the program required. # Can substitute PHYS 1220 (Engineering Physics II - requires

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Junior l	Fall S	emester	Hrs	Min Grade	Notes
CHEM	3550	Physical Chemistry for Life Sciences	3	С	Can substitute CHEM 4507 (Physical Chemistry I).
CHEM	4100	Inorganic Chemistry Laboratory	2	С	
CHEM	4110	Introductory Inorganic Chemistry	3	С	
EDST	2480	Diversity and the Politics of Schooling	4	С	H; admission to Phase I of the program required. #
		Upper Division Elective	3		
		Credit hours subtotal:	<u>15</u>		
Junior S	Sprin	g Semester	Hrs	Min Grade	Notes
CHEM	4400	Biological Chemistry	3	С	Can substitute MOLB 3610 (Prin of Biochemistry).
EDST	3000	Teacher as Practitioner	6	С	C2; admission to Phase II of the program required. #
EDST	3550	Educational Assessment	2	С	Prerequisite of a 2.75 cumulative UW gpa.
STAT	2050	Fundamentals of Statistics	4	С	
		Credit hours subtotal:	<u>15</u>		
Senior	Fall S	Semester	Hrs	Min Grade	Notes
EDSE	3275	Methods I: Secondary Science Education	3	С	Admission to Phase IIIa of the program required. #
EDSE	4275	Methods II: Secondary Science Education	4	С	C3; admission to Phase IIIa of the program required. #
		LIFE/MOLB Upper Division Electives	6	С	
		Upper Division Elective	3		
		Credit hours subtotal:	<u>16</u>		
Senior	Sprin	g Semester	Hrs	Min Grade	Notes
EDSE	4500	Residency in Teaching	15	S	Admission to Phase IIIb of the program required; offered S/U only. $\#$
		Credit hours subtotal:	<u>15</u>		
		TOTAL CREDIT HOURS:	<u>126</u>		

This is a guide for course work in the major; actual course sequence may vary by student. Please refer to the online student degree evaluation, and consult with an academic advisor. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the *University Catalog* and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Education requirements:

This plan assumes student college readiness. Students should be able to start taking 1000-level courses the first semester of college. • All professional education courses must be completed with a grade of C or higher. Grades of C- or lower will not satisfy this requirement.

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† Concurrent Majors. Students may pursue a concurrent major in one or more colleges. Only one degree (BA, BS, etc.) will be awarded from the college of the primary major. All university curricular requirements, including the University Studies Program requirements, must be met only once. Requirements for secondary major/s will be established by the academic departments and may include college requirements, in addition to all major requirements. An academic advisor in each major is required and each adviser must review requirements. The degree will be granted on one date only and only one diploma will be awarded. Both majors will be indicated on the academic transcript and diploma.

The Wyoming Teacher Education Program operates in a series of phases: Phase I, Phase II, Phase IIIa, and Phase IIIb. Continuation in the program in any content area is dependent upon the successful completion of prerequisites for each phase. Specific information about these requirements can be found on the program sheets for each content area that are located at www.uwyo.edu/ted/majors-and-program-sheets.

Secondary Chemistry Education Program Notes:

- A minimum 2.5 gpa is required in major content. All major content courses must be completed with a grade of C or higher. Grades of C- or lower will not satisfy this requirement.
- * Requires MATH ACT \geq 23, MATH SAT \geq 600, Math Placement Exam \geq 3, or concurrent enrollment in MATH 1400, 1405, or 1450. (University standard)
- ** Requires one year of high school chemistry and MATH ACT \geq 27, MATH SAT \geq 600, or concurrent enrollment in MATH 2200. (University standard)
- *** The prerequisite of a 2.50 cumulative UW gpa is waived for new, incoming freshmen who have declared education as their major.
- **** Requires MATH ACT \geq 27, MATH SAT \geq 600, Math Placement Exam \geq 5, or \geq C in MATH 1405 or MATH 1450. (University Standard)