Undergraduate-Level Teacher Certification Checklist
(Undergrad-level Post-Baccalaureate)
SECONDARY CHEMISTRY (Grades 9-12)

Columbia College established 1851

Education department

POST BACCALAUREATE STUDENTS ARE ONLY ELIGIBLE TO TAKE COURSES REQUIRED FOR CERTIFICATION. NON-CERTIFICATION COURSES ARE NOT COVERED BY FINANCIAL AID.

CONTENT AREA COURSEWORK FOR CHEMISTRY **35 hrs minimum**

Grade	Course #	Course Title	Cr Hrs
	History/Philosophy of Science and Technology (3 hrs min)		
	Choose one:	HIST 303 – Science, Technology, and Humanity: A History or BIOL/CHEM/ENVS 105 – Essentials of Science	3
	Twenty (20) hours in Chemistry coursework which must include:		
	CHEM 322	Inorganic Chemistry *(Inorganic Chemistry)*	3
	CHEM 335	Quantitative Analysis *(Analytical Chemistry)*	3
	CHEM 310	Organic Chemistry I *(Organic Chemistry)*	3
	CHEM 401	Introduction to Physical Chemistry/Chemical Physics *(Physical Chemistry)*	3
	CHEM 420	Biochemistry *(Biochemistry)*	3
	Electives:	Chemistry Electives to complete the 20-hr minimum (Contact the Education Department for options)	5
	Twelve (12) hours of additional Science coursework which must include:		
	BIOL 110	Principles of Biology I *(Biology)*	3
	PHYS 111	College Physics *(Physics)*	3
	GEOL 111	Applied Geology *(Earth Science)*	4
	ENVS 115	Introduction to Environmental Science *(Environmental Science)*	3

Professional Education Coursework

Grade	Course #	Course Title	Cr Hrs	Field Experience (observation hrs) included
	SOCI 270	Diversity and Society	3	none
	EDUC 200	Law, Ethics, and Education	3	15 hrs
	EDUC 220	Methods of Teaching English Learners	3	none
	EDUC 230	Educational Psychology	3	none
	EDUC 300	Techniques of Teaching	3	15 hrs
	EDUC 390	Education & Psychology of the Exceptional Child	3	none
	Choose option	EDUC 396 – Child and Adolescent Development; **or** EDUC 391 – Child Psychology **and** EDUC 392 – Adolescent Psychology	3	none
		Admission to the Teacher Certification Program (See Teacher Certification Program checklist)		

	EDUC 311	Classroom Management Techniques	3	15 hrs
	EDUC 322	Educational Measurement and Assessment	3	none
	EDUC 338W	Content Reading and Writing	3	15 hrs
	EDUC 365	Teaching Middle School and Secondary Science	3	15 hrs
	EDUC 376	Adolescent Literacy	3	15 hrs
	EDUC 400	Senior Seminar	3	none
		Approval for Student Teaching (See Student Teaching Checklist)		
	EDUC 425	Undergraduate Student Teaching	12	16 weeks
		Total Credit Hours	51	
		Approval for DESE certification recommendation (See DESE Certification checklist)		

Retention Criteria:

- Complete at least 6 hours of professional education each year
- Complete Field Experiences and receive favorable evaluations from cooperating teachers and college supervisors
- Maintain a cumulative GPA of 3.0 or above in professional education courses and GPA of 2.5 or above in content area courses

Other requirements that must be completed prior to certification:

- Successful completion/passing of appropriate Content Area Assessment – Praxis
- Successful completion of program certification performance assessment – MEES

Other Requirements:

Post-Baccalaureate certification students completing the FAFSA to receive financial aid for certification must complete the following questions on the 2026-27 FAFSA accordingly:

Section 4 – Student College or Career School Plans:

- "When the student begins the 2026-27 school year, what will their college grade level be?" – Answer "Other undergraduate (junior year and beyond)"
- "When the student begins the 2026-27 school year, will they already have their first bachelor's degree?" – Answer "Yes"
- "Will the student be pursuing an initial teaching certification at the elementary or secondary level?" – Answer "Yes"

https://studentaid.gov/h/apply-for-aid/fafsa

Graduate Post-Bacc and the MAT degree

If you are planning to reapply to the college for the Graduate Post-Baccalaureate program (in order to take some of your certification courses at the graduate level), note that you may want to delay some courses until after you're admitted to the Graduate Post-Bacc program. For example, the graduate equivalent for SOCI 270 and EDUC 230 (EDUC 555 and EDUC 560) are core courses for the MAT (Master of Arts in Teaching) degree.

Rev. 8/2026