

**EDUCATION CERTIFICATION PROGRAM
SECONDARY CHECKLIST
GENERAL SCIENCE (Grades 9-12)**



Education department

GENERAL EDUCATION

38 – 47 hrs

The general education component is to be completed according to Columbia College degree requirements. (Please refer to your entrance year catalog for specific degree requirements.)

LIBERAL ARTS AND SCIENCE DEGREE

40 – 63 hrs

It is recommended that students seeking this certification choose a major that has similar course requirements in the degree. Your academic advisor can help you with your choice of major.

Students must complete the degree requirements as set forth by Columbia College. Hours required for completion will vary depending on area chosen. (Please refer to your entrance year catalog for specific degree requirements.)

**35 hrs
minimum**

CONTENT AREA COURSEWORK FOR GENERAL SCIENCE

Grade	Course#	Course Title	Cr Hrs
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History/Philosophy of Science and Technology (3 hours)

	HIST 303 or BIOL/CHEM/ENVS 105	History and Philosophy of Modern Science or Essentials in Science	3
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Science Coursework - Minimum of 32 semester hours which must include:

Chemistry

	CHEM 109 or 110	Chemistry for Biological and Health-Related Sciences or Chemistry I	3
	CHEM 111L	Introductory Chemistry Laboratory	2

Biology

	BIOL 110	Principles of Biology	3
	BIOL 110L	Principles of Biology Laboratory	2

Physics

	PHYS 111	College Physics I	3
	PHYS 111L	Physics I Laboratory	2

Earth Science

	GEOL 110	Introduction to Physical Geology	3
	GEOL 110L	Introduction to Physical Geology Laboratory	2

Astronomy

	ASTR 108	Introduction to Astronomy	3
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Environmental Science

	ENVS 115	Introduction to Environmental Science	3
	ENVS 115L	Introduction to Environmental Science Lab	2

Electives

	Any Science	Any Science Electives (if hours needed to fulfill 32 hours minimum)	4
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[The College reserves the right to alter at any time requirements to meet state certification regulations.]

PROFESSIONAL EDUCATION COURSEWORK
57 hrs

Grade	Course #	Course Title	Cr Hrs	Field Experience (observation hrs) included
	SOCI 270	Diversity and Society	3	none
	EDUC 100	Introduction to Education	3	15 hrs
	EDUC 200	Law, Ethics, and Education	3	none
	EDUC 220	Methods of Teaching English Learners	3	none
	EDUC 230	Educational Psychology	3	none
	EDUC 300	Techniques of Teaching	3	15 hrs
	EDUC 311	Classroom Management Techniques	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 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 375	Advanced Content Methods	3	15 hrs
	EDUC 376	Adolescent Literacy	3	
	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	57	
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 for certification that must be completed prior to graduation:

- Successful completion/passing of appropriate content assessment (must be passed prior to student teaching)
- Successful completion of program certification performance assessment - MEES

*This is not a degree checklist
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