

Life Science/Childhood & Early Childhood Education (B.S.)

Degree Type

Bachelor's

This program leads to NYS certification to teach grades Birth-6 in the public schools. Students entering the program will graduate after four years with a Bachelor of Science degree in Life Sciences/Childhood & Early Childhood Education. Please see the [Childhood & Early Childhood Education \(B.S.\)](#) program page in the Catalog for a complete overview of the Academic Standards required for this academic program. [Life Science concentration = 31 credits]

Life Science Requirements

Item #	Title	Credits
BIO 101	General Biology I	4
BIO 102	General Biology II	4
BIO 110	Environmental Issues	3
BIO 207	Fundamentals of Genetics	3
BIO 359	Explorations in Research Methods	3
CHM 103	Introduction to General Chemistry	4
SCI 104	Physical and Earth Sciences	3
SCI 120	Nutrition Science	3
PHY 101	General Physics I	3
PHY 101L	General Physics I Lab	1

Education Core

Item #	Title	Credits
EDU 201	Education and Society	3
EDU 206	Educational Psychology	3
EDU 252	Learning, Language and Literacy	3
EDU 306	Inclusive Teaching Strategies	4
EDU 314	Social Studies Methods	2
EDU 323	Teaching Math, Science & Technology	4
EDU 337	Classroom Management	3
EDU 352	Advanced Learning, Language & Literacy	4
EDU 401	Student Teaching B-2	6
EDU 402	Student Teaching 3-6	6
EDU 412	Early Childhood B-2 Methods	4

Education Support Courses

Complete all of the following:

Item #	Title	Credits
ENG 268	Diverse Voices	3
	HST 105 or HST 106	3
	Language Course	3
MAT 111	Math for Teaching and Learning I	3
MAT 121	Math For Teaching & Learning II	3
PED 225	Concepts of Fitness & Wellness	3
PSY 101	Introduction to Psychology	3
	PSY Lifespan Development (PSY 202 or PSY 208)	3-4

Workshops

Complete all of the following:

Item #	Title	Credits
NCR 070	Reporting and Identifying Child Abuse and Maltreatment	0
NCR 071	School Violence Prevention	0
NCR 072	DASA: School Bullying Prevention	0
NCR 317	Health Education Standards WS	0

Academic Standards

- Cumulative GPA: to enroll in and remain in a Childhood & Early Childhood Education program, students must have and maintain an overall cumulative grade point average of 3.000 or higher.
- Major GPA: students must achieve and maintain a major GPA of 3.000 or higher in all major course requirements prior to entry into the methods courses (EDU 300 level courses).
- To be eligible for student teaching, a student must have achieved a 3.000 or higher cumulative average.
- Students must earn a grade of "C" or higher (2.000) in all courses required in the major program (including support courses and concentration courses).
- All students in education are required to subscribe to a designated portfolio system.

Middle Childhood Certification, Grades 7-9 (Optional)

Students desiring the **Middle Childhood Certification** in **Natural Science** must complete the Childhood & Early Childhood Education/Life Science requirements listed above and the following requirements:

- **EDU 325 Teaching & Learning in Middle School** (3 credits)
- **EDU 474 Reading & Writing in the Content Areas** (3 credits)

Degree Completion Notes

- Total credits required for a bachelor's degree (minimum): 120 credits
- Cumulative GPA required for graduation (minimum): 3.000
- Major GPA required for graduation (minimum): 3.000
- 1/2 of major requirements must be completed at Sage (minimum)
- Completion of all required **General Education** coursework

Suggested Course Plan

Year 1 - Fall (16 credits)

BIO 101 General Biology I with Lab
MAT 111 Math for Teaching and Learning I
PSY 101 Introduction to Psychology
RSC 101 Thriving at Sage
WRT 101 Writing in Community

Year 1 - Spring (16 credits)

BIO 102 General Biology II with Lab
EDU 201 Education and Society
MAT 121 Math For Teaching & Learning II
SCI 104 Physical and Earth Sciences
WRT 201 Researching in Community

Year 2 - Fall (16 credits)

BIO 110 Environ Issues
EDU 206 Educational Psychology
HST 105 or HST 106
Language Course or RSC 201
PHY 101 Gen Physics I with Lab

Year 2 - Spring (16 credits)

BIO 207 Genetics
CHM 103 Intro to Gen Chem with Lab
EDU 252 Learning, Lang & Lit
Language Course or RSC 201
PSY 208 Dev. Science

Year 3 - Fall (15 credits)

EDU 314 Social Studies Methods
EDU 337 Classroom Management
EDU 352 Adv Learning, Lang & Lit
PED 225 Wellness
General education course

Year 3 - Spring (15 credits)

EDU 323 Teaching Math, Science & Tech
EDU 306 Inclusive Teaching Strategies
EDU 412 Early Childhood B-2 Methods
ENG 268 Diverse Voices

Year 4 - Fall (12 credits)

EDU 401 Student Teaching B-2
EDU 402 Student Teaching 3-6

Year 4 - Spring (15 credits)
BIO 359 Research Methods
RSC 301 Innovation
SCI 120 Nutrition Science
General Education course
General/open elective

Total Credits

97-98
