

Secondary Education Major (with) Integrated Science Major (5-9, 7-12)
 With Emphasis in Biology
 (for Freshman beginning Fall 2023)
 Updated May 2025

This advising sheet lays out a basic 4-year plan with all of the components necessary to graduate and become certified in Secondary Integrated Science (5-9, 7-12). Candidates who wish to choose Integrated Science (5-9, 7-12) will have to add an emphasis in either Biology, Chemistry, Geology, or Physics. A candidate's actual 4-year plan should be worked out with an education advisor.

Anchor Plan (39 credits)

The Anchor Plan is required for all Hope College students and represents the general education liberal arts program. The following chart explains these requirements.

Requirement	Rule	Attribute
First Year Seminar	One IDS 100 -3 credits	FYS
Expository Writing	ENGL 113 -3 credits	EW
Health Dynamics	KIN 140 -2 credits	HD
Math and Natural Sciences *satisfied by major- no additional courses required	One math course -3/4 credits One NSL course -4 credits Any math or science course to reach 10 credits* total	MA NSL MNS
Religion	One REL 100 course -3 credits One REL 200 course -3 credits *One course must have Christian Tenets	RL1 RL2 *TEN
Social Sciences *satisfied by major- no additional courses required	Both Social Science courses will be satisfied by students taking EDUC 200/1 and EDUC 457.	SS1 SS2
Arts and Humanities	One Arts in Practice -2/3 credits One Human Creative Perspectives -3 credits One Philosophical Perspectives -3 credits One Historical Perspectives -3 credits *Prerequisite: ENGL 113 and one 100-level Arts and Humanities	ART HCP PHL HST
Human Diversities *GLP courses can also count in another area	Global Language- 3 credits of <u>second-level</u> fluency One US Diversities course (satisfied by EDUC 200/1) One Global Perspectives course -3 credits*	GL2 USD GLP
Senior Seminar	IDS 452 or IDS 492 if not taking it during student teaching -3 credits	SRS

Secondary Education Major (44 credits)

The professional sequence for all secondary education majors is listed below and is separated by level. Level 1 courses are designed to help candidates decide if education is the right career path. Once completed, candidates must choose their primary grade band, either 5-9 or 7-12. The other grade band becomes their secondary grade band. Level 2 courses are designed to have candidates learn the art of teaching. During Level 2 coursework, candidates must have 50 hours of clinical experience in their secondary grade band. Level 3 courses are taken during the student teaching semester, and placement should be in a candidate's primary grade band.

Course #	Course Title	Credits
Level 1		
EDUC 200/1	Diversity, Equity, and Inclusion/Clinical Experience	3+1
EDUC 225/6	The Exceptional Child and Adolescent/Clinical Experience	3+1
EDUC 270	Foundations of Education	3
Level 2	All candidates should apply for admission to the department during the semester when all three level 1 courses have been satisfied.	
EDUC 275	Intro to Secondary Education and Instructional Design	3
EDUC 285/6	Literacy in the Content Area/Clinical Experience	3+1
EDUC 287	Classroom Management	3
EDUC 320	Assessment for Secondary Education	3
EDUC 331/2	Teaching Secondary School Science/Clinical Experience	3+1
EDUC 360/1	Secondary Principles/Clinical Experience	3+1
Level 3	All candidates should attend an informational meeting and apply to student teach two semesters before the semester they wish to student teach in.	
EDUC 457	Student Teaching Seminar	2
EDUC 481 or EDUC 483	Student Teaching Secondary School (5-9) or Student Teaching Secondary School (7-12)	10

Secondary Education Integrated Science Major (35 Credits) 5-9/ 7-12 grade band

Course #	Course Title	Credits	Offered
BIO 105/107	General Biology I and Lab	3+1	F
BIO 106/108	General Biology II and Lab	3+1	S
CHEM 125 /127	General Chemistry I and Lab	3+1	F
CHEM 126 /128	General Chemistry II and Lab	3+1	S
PHYS 105 /141	College Physics I and Lab	3+1	F
PHYS 106 /142	College Physics II and Lab	3+1	S
GES 100 / 100L (GEMS 157/L)	Planet Earth and Lab	3+1	F, S
GES 203 /203L*	Historical Geology and Lab	3+1	S
GEMS 206	The Night Sky	3	F, S

* offered spring 2026, then every other year after that.

Secondary Education Integrated Science Major with Biology Emphasis (Grades 7-12)
(Additional 16 total credits)

Course #	Course Title	Credits	Offered
BIO 221/221L	physiology/lab	4	F, S
BIO 356/356L	genetics/lab	4	F,S
BIO 315/315L	Ecology/lab	4	F
BIO 421/421L	Evolutionary Biology/lab	4	S

Anchor Plan: 39 credits

Sec Ed: 44 credits

Integrated Science: 35 credits

Bio Concentration: 16 credits

Total: 134 credits with no electives

4-year plan Secondary Integrated Science with Biology Emphasis

This 4-year plan was intentionally constructed based on the sequential and scaffolded learning that will help candidates stay on track and be successful in the program. Any deviation from the plan should be done in conjunction with a candidate's education advisor.

	Fall – Year 1		Spring – Year 1		Summer – Year 1	
	COURSE	CREDITS	COURSE	CREDITS	COURSE	CREDITS
Education Courses Int-Sci/GES Courses Anchor Plan	EDUC 200/201	4	EDUC 225/226	4		
	BIOL 105/107 (f)	4	BIO 106/108 (s)	4		
	IDS 100 (FYS)	3	MA	3		
	ENGL 113 (EW)	3	LANG (GL2)	3		
	KIN 140 (HD)	2	ART	2/3		
		16		16/17		
	Fall – Year 2		Spring – Year 2		Summer – Year 2	
	COURSE	CREDITS	COURSE	CREDITS	COURSE	CREDITS
	EDUC 270	3	EDUC 275	3		
	CHEM 125/127 (f)	4	CHEM 126/128 (s)	4		
	GES 100/100L	4	GES 203/203L (s)	4		
	BIO 421/421L	4	PHL	3		
		15	REL 200 (RL2)	3		
				17		
	Fall – Year 3		Spring – Year 3		Summer – Year 3	
	COURSE	CREDITS	COURSE	CREDITS	COURSE	CREDITS
	BIO 221/221L	4	PHYS 106/142 (s)	4		
	PHYS 105/141 (f)	4	REL 100 (RL1)	3		
	BIO 356/356L	4	EDUC 285/286	3		
	BIO 315/315L	4	EDUC 287	3		
		16	GEMS 206	3		
				16		
	Fall – Year 4		Spring – Year 4		Summer – Year 4	
	COURSE	CREDITS	COURSE	CREDITS	COURSE	CREDITS
* IDS 492 Can be substituted if not taken during student teaching	EDUC 360/361	4	EDUC 457	2		
	EDUC 331/332	4	EDUC 483 (7-12) or	10		
	IDS 492 (SRS)	3	EDUC 481 (5-9)			
	HST	3				
	HCP	3				
		17		12		