Secondary Education Major (with) Integrated Science Major (5-9, 7-12)
With Emphasis in Chemistry
(for Freshman beginning Fall 2023)
Updated September 2026

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 492-3 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 331/2	Teaching Secondary School Science/Clinical Experience **(only offered Fall of odd years)**	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 130 /130L*	Intro to Environmental Science	3+1	F, S
GEMS 206	The Night Sky	3	F, S

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

Secondary Education Integrated Science Major with Chemistry Emphasis (Grades 7-12)
(Additional 13 total credits)

Course #	Course Title	Credits	Offered
CHEM 221/255	organic chemistry I/lab	5	F
CHEM 322/324	Inorganic chem/lab	4	S
CHEM 331/332	Analytical chem/lab	4	F, S

Anchor Plan: 39 credits
Sec Ed: 44 credits
Integrated Science: 35 credits
Chem Concentration: 13 credits
Total: 131 credits with no electives

4-year plan Secondary Integrated Science with Chemistry 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	
	EDUC 270	3	**EDUC 275**	3		
	CHEM 125/127 (f)	4	**CHEM 126/128 (s)**	4		
	GES 100/100L	4	**GES 130/130L (s)**	4		
	CHEM 221/255	4	**PHL**	3		
			REL 200 (RL2)	3		
		15		**17**		
	Fall – Year 3		Spring – Year 3		Summer – Year 3	
	REL 100 (RL1)	4	**PHYS 106/142 (s)**	4		
	PHYS 105/141 (f)	4	**CHEM 322/324**	4		
	CHEM 331/332	4	**EDUC 287**	3		
	EDUC 285/286	4	**GEMS 206**	3		
		16		**14**		
	Fall – Year 4		Spring – Year 4		Summer – Year 4	
*__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**		