

CHEMISTRY & SECONDARY EDUCATION (B.A.S.)

The goal of the Salve B.A.S. in Chemistry and Secondary Education is to provide a curriculum that, in four years, gives students a solid foundation in chemistry and also the coursework necessary for certification to teach chemistry at the secondary level. To earn the double major in Chemistry and Secondary education, students complete the courses required for a B.A. in Chemistry and must also meet the requirements for secondary education. It is considered crucial that graduates be fully-trained chemists, capable of working in a range of technical positions outside of secondary education. The curriculum also seeks to expand the scientific background/perspective of graduates by requiring courses in other general scientific disciplines including Math and Physics.

Chemistry & Secondary Education (B.A.S.) majors complete 49–51 credits of core courses (<https://catalog.salve.edu/undergraduate/curriculum-degree-programs/>), 51 credits of chemistry courses, and 43 credits of secondary education courses. See Education Department (<https://catalog.salve.edu/undergraduate/academic-programs/education/>) for requirements of the Secondary Education (B.A.S.) major.

Code	Title	Credits
Required Courses		
CHM-113	General Chemistry I	4
CHM-114	General Chemistry II	4
CHM-205	Organic Chemistry I	4
CHM-206	Organic Chemistry II	4
CHM-301	Analytical Chemistry	4
CHM-305	Physical Chemistry I	4
CHM-408	Inorganic Chemistry	4
CHM-410	Topics in Chemistry and Research Capstone	3
Select one elective course:		4
BCH-403	Biochemistry	
CHM-306	Physical Chemistry II	
CHM-309	Instrumental Analysis	
CHM-407	Advanced Organic Chemistry	
Mathematics		
MTH-195	Calculus I	4
MTH-196	Calculus II	4
Physics		
PHY-205	Principles of Physics I	4
PHY-206	Principles of Physics II	4
Total Credits		51

Degree Plan for Chemistry & Secondary Education (B.S.)

Course	Title	Credits
First Year		
Fall		
UNV-101 & FYT-101	University Seminar and First Year Studio	4
CHM-113	General Chemistry I	4
MTH-195	Calculus I	4
Core Course		3
Core Course		3
Credits		18

Spring		
Core Course		3
UNV-102	University Seminar II	3
CHM-114	General Chemistry II	4
MTH-196	Calculus II	4
EDC-120	Introduction to Race and Inequity in American Education	3
Credits		17

Second Year		
Fall		
Core Course		3
SCD-298	Secondary Field Experience in a Multicultural Society I	1
CHM-205	Organic Chemistry I	4
PHY-205	Principles of Physics I	4
SCD-212	Teaching Literacy in the Content Area	3
SCD-220	Child and Adolescent Development and the Theories of Learning	3
Credits		18

Spring		
Core Course		3
Core Course		3
CHM-206	Organic Chemistry II	4
PHY-206	Principles of Physics II	4
SED-211	Introduction to the Characteristics of Students with Exceptionalities	3
SCD-299	Secondary Field Experience in a Multicultural Society II	1
Credits		18

Third Year		
Fall		
Core Course		3
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions ¹ or Quest for the Good Life	3
CHM-301	Analytical Chemistry	4
CHM Elective		4
SCD-320	Curriculum, Instruction and Assessment in the Secondary School I	3
SCD-321	Practicum I for Curriculum, Instruction and Assessment in the Secondary School I	1
Credits		18

Spring		
Core Course		3
RTS-225 or PHL-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions ¹ or Quest for the Good Life	3
CHM-408	Inorganic Chemistry	4
SCD-323	Curriculum Instruction and Assessment In the Secondary School II	3
SCD-322	Practicum II for Curriculum, Instruction and Assessment in Secondary School II	1
SCD-310	Strategies for Teaching Secondary English Learners	2
Credits		16

Fourth Year		
Fall		
Core Course		3
CHM-305	Physical Chemistry I	4
CHM-410	Topics in Chemistry and Research Capstone	3
SCD-440	Practicum in Secondary Education	3
SCD-410	Classroom Management	3
Credits		16

Spring		
SCD-432	Student Teaching Seminar Capstone	1

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SCD-441	Secondary Student Teaching	12
	Credits	13
	Total Credits	134

¹ One each semester.