Harper College		Elmhurst University	
Associate of Science Degree Requirements	Credits		Credits
General Education Core Curriculum Requirements:	34	Integrated Curriculum Equivalencies:	
Communication:	9	Writing & Reasoning:	
Written: ENG 101 Composition ENG 102 Composition Oral: SPE 101 Fundamentals of Speech Communication		ENG 105 Composition I ENG 106 Composition II COM 213 Public Speaking	
Mathematics:	5	Mathematics:	
MTH 200 Calculus I		MTH 151 Calculus I	
Physical & Life Sciences:	8	Physical & Life Sciences:	
<u>Life Science:</u> BIO 115 Fundamentals of Cellular Biology		<u>Life Science:</u> Biology: BIO 200 General Biology I	
<u>Physical Science:</u> GEO 111 + 112 Physical Geography + Physical Geo. Lab		Physical Science: GEO 102 Earth System Science	

Humanities & Fine Arts:	6	Humanities & Fine Arts:
Select one Humanities course and one Fine Arts course.		
Humanities:		
History or Humanities: 105		Any course within the Humanities discipline listed will fulfill a requirement for an Area of Knowledge or Tag within the Elmhurst University Integrated Curriculum.
Humanities: 120		Eliminarst Oniversity integrated Curriculum.
Literature: 105, 110, 115, 206, 207, 208, 210, 221, 222, 223, 224, 231, 232		Fine Arts Courses:
Philosophy: 105, 115, 160, 205, 215, 220, 232, 232		Art: Fine Arts Area of Knowledge, Fine Arts Area of Knowledge ART-341 Survey History of Western Art, ART-342 Survey History of Modern Art, Fine Arts Area of Knowledge
Fine Arts:		MCM: Fine Arts Area of Knowledge
Art: 105, 114, 130, 131, 132, 133		Music: Fine Arts Area of Knowledge Fine Arts Area of Knowledge,
Mass Communication- Multimedia: 200		Fine Arts Area of Knowledge, Social and Political Analysis Area of Knowledge
Music: 103, 104, 106, 107, 108		
Theater: 111, 121		Theater: THE-227, Fine Arts Area of Knowledge, Fine Arts Area of Knowledge

Harper College Associate in Science to EU Bachelor of Science in Chemistry with Licensure

Select 2 courses from at least two disciplines.

Anthropology: 101, 202

Geography: 101, 103, 104

History: 111, 112, 121, 141, 142, 231, 232, 241, 242, 243,

245

Political Science: 101, 220, 250, 270, 280

Psychology: 101*

Sociology: 205, 230, 235

* PSY 101 meets the perquisite for Educational Psychology which is needed for the major. Therefore, PSY 101 is highly recommended in this category.

6 Social & Behavioral Sciences:

Completion of TWO courses in this category at Harper College satisfies Elmhurst University Integrated Curriculum requirements.

Prescribed General Electives:	29	Prescribed General Electives:	
Complete the following courses at Harper College:			
BIO 116 Fundamentals of Organismal Biology (4)		BIO 201 General Biology II	
CHM 121 General Chemistry I (5)		CHM 211 Chemical Principles I	
CHM 122 General Chemistry II (5)		CHM 212 Chemical Principles II	
CHM 204 Organic Chemistry I (5)		CHM 311 Organic Chemistry I	
CHM 205 Organic Chemistry II (5)		CHM 312 Organic Chemistry II	
MTH 201 Calculus II (5)		MTH 152 Calculus II	
Prescribed Licensure Electives:	9	Teacher Education Program Admission	
		Requirements:	
EDU 201 Introduction to Education (3)			
EDU 211 Educational Psychology (3)		EDU 104 Cultural Foundations of Education in the U.S.	
EDU 219 Students with Disabilities in School (3)		EDU/SEC 311 Educational Psychology	
		EDU/SEC 223 Education of PK-12 Learners with Exceptionalities	
Total Harper College Credits	72	Please note GPA requirements and a separate Department of	
		Education application found at elmhurst.edu/eduadmission is	
		required in addition to the college application.	

Chemistry Major Requirements: CHM 221 Analytical Chemistry (4) CHM 412 Physical Chemistry: Quantum Mechanics & Spectroscopy (4) CHM 413 Physical Chemistry: Thermodynamics, Kinetics, & Statistical Mechanics (4) CHM 420 Chemical Instrumentation I (3) CHM 421 Chemical Instrumentation II (2) CHM 494 Chemistry Research (2) CHM 496 Chemistry Research Seminar I (1) CHM 497 Chemistry Literature Seminar I (1) CHM 498 Chemistry Literature Seminar II (1) CHM 499 Chemistry Research Seminar II (1) CHM 3XX/4XX Upper Level Chemistry Elective (4) CHM 3XX/4XX Upper Level Chemistry Elective (4) CHM 3XX/4XX Upper Level Chemistry Elective (4)	43
Licensure Requirements: PHY 121 General Physics I (4) PHY 122 General Physics II (4) SEC 100 Introductory Seminar Teaching as a Caring Profession (1) SEC 300 Intermediate Seminar for teaching in Diverse & Inclusive Schools (1) SEC 310 Methods and Best Practices in Secondary Education (4) TEL 317 Methods and Materials for Teaching ESL (3) SEC 360 The Middle School: History, Philosophy, Organizational Structures, and Best Practices (4)	42

Degree Map nce to FU Bachelor of Science in Chemis

Total Elmhurst University Credits	157
Science (4) SEC 455 Student Teaching in Secondary and Middle Schools (12)	
Professional Practice (1) SEC 440/441 The Teaching of Middle School Science/Secondary	
SEC 421 Theory and Practice for Building Academic Literacies in K- 12 Classrooms (4) SEC 450 Advanced Seminar in Teacher Collaboration &	