

*Degree Map*  
*Harper College Associate in Arts to EU Bachelor of Science in Mathematics with  
 Secondary Licensure*

<b>Harper College</b>		<b>Elmhurst University</b>	
<b>Associate in Science Degree Requirements</b>	<b>Credits</b>		<b>Credits</b>
<b><u>General Education Core Curriculum Requirements:</u></b>	<b>40-41</b>	<b><u>Integrated Curriculum Equivalencies:</u></b>	
<b><u>Communication:</u></b>  <i>Written:</i> ENG 101 Composition ENG 102 Composition  <i>Oral:</i> SPE 101 Fundamentals of Speech Communication	<b>9</b>	<b><u>Writing &amp; Reasoning:</u></b>  ENG 105 Composition I ENG 106 Composition II  COM 213 Public Speaking	
<b><u>Mathematics:</u></b>  MTH 200 Calculus I	<b>5</b>	<b><u>Mathematics:</u></b>  MTH 151 Calculus I	
<b><u>Physical &amp; Life Sciences:</u></b>  <b><u>Life Sciences:</u></b>  <i>Biology:</i> 104, 110, 115, 116, 120, 140	<b>8-9</b>	<b><u>Physical &amp; Life Sciences:</u></b>  <b><u>Life Sciences:</u></b>  <b>Biology:</b> BIO 105 Environmental Biology, BIO 100 Principles of Biology, BIO 200 General Biology I, BIO 201 General Biology II, Life Sciences Area of Knowledge, BIO 221 Microbiology for Health Professionals	

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<p><b><u>Physical Sciences:</u></b></p> <p><b>Astronomy:</b> 112, 115</p> <p><b>Chemistry:</b> 103, 105, 110, 121</p> <p><b>Earth Science:</b> 110, 111, 121</p> <p><b>Geography:</b> 111 and 112</p> <p><b>Physics:</b> 110, 112, 121, 201</p>		<p><b><u>Physical Sciences:</u></b></p> <p><b>Astronomy:</b> All equivalent to AST 212 Introduction to Astronomy</p> <p><b>Chemistry:</b> Physical Sciences Area of Knowledge, CHM 100 Chemistry in the Natural World, CHM 101 General Chemistry, CHM 211 Chemical Principles I</p> <p><b>Earth Science:</b> Physical Sciences Area of Knowledge, GEO 102 Earth System Science, GEO 105 Intro to Atmospheric Science</p> <p><b>Geography:</b> GEO 102 Earth System Science</p> <p><b>Physics:</b> PHY 101 Physical Science, Physical Sciences Area of Knowledge, PHY-111 Introductory Physics I, PHY 121 General Physics I</p>	
<p><b><u>Humanities &amp; Fine Arts:</u></b>          Select three courses with at least being a Humanities course and at least one being a Fine Arts course.</p> <p><b>Humanities:</b></p> <p><b>History or Humanities:</b> 105</p> <p><b>Humanities:</b> 120</p> <p><b>Literature:</b> 105, 110, 115, 206, 207, 208, 210, 221, 222, 223, 224, 231, 232</p>	9	<p><b><u>Humanities &amp; Fine Arts:</u></b></p> <p><b>Any course within the Humanities discipline will fulfill a requirement for an Area of Knowledge or Tag within the Elmhurst University Integrated Curriculum.</b></p>	

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<p><b>Philosophy:</b> 105, 115, 160, 205, 215, 220, 232, 232</p> <p><b>Fine Arts:</b></p> <p><b>Art:</b> 105, 114, 130, 131, 132, 133</p> <p><b>Mass Communication- Multimedia:</b> 200</p> <p><b>Music:</b> 103, 104, 106, 107, 108</p> <p><b>Theater:</b> 111, 121</p>		<p><b>Fine Arts Courses:</b></p> <p><b>Art:</b> 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</p> <p><b>MCM:</b> Fine Arts Area of Knowledge</p> <p><b>Music:</b> Fine Arts Area of Knowledge Fine Arts Area of        Knowledge,        Fine Arts Area of Knowledge, Social and Political Analysis Area of        Knowledge</p> <p><b>Theater:</b> THE-227, Fine Arts Area of Knowledge, Fine Arts Area        of Knowledge</p>	
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<p><b><u>Social &amp; Behavioral Sciences:</u></b></p> <p>Select 3 courses from at least two disciplines.</p> <p><b>Anthropology:</b> 101, 202</p> <p><b>Geography:</b> 101, 103, 104</p> <p><b>History:</b> 111, 112, 121, 141, 142, 231, 232, 241, 242, 243, 245</p> <p><b>Political Science:</b> 101, 220, 250, 270, 280</p> <p><b>Psychology:</b> 101*</p> <p><b>Sociology:</b> 205, 230, 235</p> <p><b>* PSY 101 meets the prerequisite for Educational Psychology which is needed for the major. Therefore, PSY 101 is highly recommended in this category.</b></p>	<p><b>9</b></p>	<p><b><u>Social &amp; Behavioral Sciences:</u></b></p> <p>Completion of THREE courses in this category at Harper College satisfies THREE Elmhurst University Integrated Curriculum requirements.</p>	
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<p><b><u>Prescribed General Electives:</u></b>          Complete the following courses at Harper College:</p> <p>MTH 130 Mathematics for Elementary Teaching I (4)          MTH 131 Mathematics for Elementary Teaching II (4)          MTH 201 Calculus II (5)          MTH 202 Calculus III (5)          MTH 203 Linear Algebra (4)          MTH 220 Discrete Mathematics (3)</p>	<b>25</b>	<p><b><u>Prescribed General Electives Equivalencies:</u></b></p> <p>MTH 325 Mathematical Concepts for Elementary Teachers I          MTH 326 Mathematical Concepts for Elementary Teachers II          MTH 152 Calculus II          MTH 251 Calculus III          MTH 362 Linear Algebra          MTH 301 Discrete Mathematics</p>	
<p><b><u>Teacher Education Electives:</u></b></p> <p>EDU 201 Introduction to Education (3)          EDU 211 Educational Psychology (3)          EDU 219 Students with Disabilities in School (3)</p>	<b>9</b>	<p><b><u>Teacher Education Program Admission Requirement Equivalencies:</u></b></p> <p>EDU 104 Cultural Foundations of Education in the U.S.          EDU 311 Educational Psychology          EDU 223 Education of PK-12 Learners with Exceptionalities</p>	
<p><b>Total Harper College Credits</b></p>	<b>74-75</b>	<p>Please note GPA requirements and a separate Department of Education, Teacher Education Program (TEP) application found at <a href="http://elmhurst.edu/eduadmission">elmhurst.edu/eduadmission</a> is required in addition to the college application.</p>	

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	<p><b><u>Math Major Requirements:</u></b></p> <p>MTH 331 Foundations of Geometry (4)          MTH 346 Statistics for Scientists (4)          MTH 361 Abstract Algebra (4)          MTH 381 Real Analysis (4)          MTH 400 Research Methods in Mathematics (2)          MTH 451 Senior Paper (2)</p>	<b>20</b>
	<p><b><u>Licensure Requirements:</u></b></p> <p>SEC 100 Introductory Seminar Teaching as a Caring Profession (1)          SEC 300 Intermediate Seminar for teaching in Diverse &amp; 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)          SEC 421 Theory and Practice for Building Academic Literacies in K-12 Classrooms (4)          MTH 440 Teaching of Secondary School Mathematics (4)          SEC 450 Advanced Seminar in Teacher Collaboration &amp; Professional Practice (1)          SEC 455 Student Teaching in Secondary and Middle Schools (12)</p>	<b>34</b>

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	<p>**Please note – the degree map currently totals 124 to 125 credits and therefore, students will need to add extra semester hours of elective credit to meet graduation hour requirements of 128 hours.</p>	
	<b>Total Elmhurst University Credits</b>	<b>128</b>