Mathematics Education (8-12) Certification
Curriculum Ladder - TOTAL DEGREE REQUIREMENTS: 122 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNV 101</td>
<td>University Orientation</td>
<td>3</td>
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</table>

I. GENERAL STUDIES (46 credit hours)
(ENG 101, ENG 102 & MAT 131 with a Grade of “C” or Higher)

<table>
<thead>
<tr>
<th>Language and Reasoning</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENG 102</td>
<td>English Composition II</td>
</tr>
<tr>
<td>SPE 103</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>MAT 131</td>
<td>Calculus &amp; Analytic Geometry I</td>
</tr>
<tr>
<td>Foreign Language I</td>
<td></td>
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<tr>
<td>Foreign Language II</td>
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Fine Arts and Letters (Select One)

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>ART 130</td>
<td>Introduction to Art</td>
<td></td>
</tr>
<tr>
<td>THE 130</td>
<td>Introduction to Theatre</td>
<td></td>
</tr>
<tr>
<td>ENG 211</td>
<td>Introduction to Literature</td>
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Social and Behavioral Science (Select Two Courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>POS 101</td>
<td>American Government</td>
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</tr>
<tr>
<td>FIN 101</td>
<td>Financial Literacy</td>
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</tr>
<tr>
<td>HIS 103</td>
<td>Western Civilization</td>
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<tr>
<td>ECO 200</td>
<td>Survey of Economics</td>
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<tr>
<td>PSY 200</td>
<td>General Psychology</td>
<td></td>
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<tr>
<td>SOC 203</td>
<td>Principles of Sociology</td>
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Natural Sciences (Select One Course)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>BIO 101</td>
<td>Life Science</td>
<td></td>
</tr>
<tr>
<td>CHE 109</td>
<td>Chemistry in Context</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
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Select ONE COURSE from Below (PHY 211 REQUIRED FOR MATH EDUCATION MAJORS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>Life Science</td>
<td></td>
</tr>
<tr>
<td>BIO 103</td>
<td>Environmental Biology</td>
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<tr>
<td>BIO 112</td>
<td>Exploration of Modern Topics in Biology</td>
<td></td>
</tr>
<tr>
<td>CHE 109</td>
<td>Chemistry in Context</td>
<td></td>
</tr>
<tr>
<td>PHS 201</td>
<td>Physical Science I</td>
<td></td>
</tr>
<tr>
<td>PHS 202</td>
<td>Physical Science II</td>
<td></td>
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<tr>
<td>PHS 211</td>
<td>Earth and Environmental Science</td>
<td></td>
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<tr>
<td>PHS 221</td>
<td>Introduction to Weather Studies</td>
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<tr>
<td>PHS 231</td>
<td>Introduction to Astronomy</td>
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</tr>
<tr>
<td>PHY 130</td>
<td>Physics and Society</td>
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<tr>
<td>PHY 211</td>
<td>General Physics</td>
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Integrative Studies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>IGS 200</td>
<td>Foundations of Cultures</td>
<td>3</td>
</tr>
<tr>
<td>IGS 201</td>
<td>Convergence of Cultures</td>
<td>3</td>
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</tbody>
</table>

Select ONE COURSE from Below (MAT 304 REQUIRED FOR MATH EDUCATION MAJORS)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>IGS 300</td>
<td>Search for New Forms of Culture</td>
<td></td>
</tr>
<tr>
<td>IGS 301</td>
<td>Studies in African Cultures</td>
<td></td>
</tr>
<tr>
<td>IGS 302</td>
<td>Studies in Asian Cultures</td>
<td></td>
</tr>
<tr>
<td>IGS 303</td>
<td>Studies in Latin American Cultures</td>
<td></td>
</tr>
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</table>

Updated 7/22/2013
### IGS 304 The African-American Experience OR
### IGS 305 The Latino Experience OR
### COS 303 Human Perspective on Computing OR
### ENG 413 Non-Western Literature OR
### ENG/AAS 409 Literature of African-Americans OR
### MAT 304 Perspectives on Mathematics OR
### MUS/AAS 323 African-American Music OR
### MUS/AAS 325 Jazz History and Literature OR
### MUS 333 Music of Africa and Asia

**Total** 9

### II. PROFESSIONAL EDUCATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDU 202</td>
<td>Foundation of Teaching and Education</td>
<td>3</td>
</tr>
<tr>
<td>EDU 203</td>
<td>Microcomputers/Media in Classroom</td>
<td>3</td>
</tr>
<tr>
<td>EDU 309</td>
<td>Test Prep</td>
<td>1</td>
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<tr>
<td>EDU 302</td>
<td>Child and Adolescent Development</td>
<td>3</td>
</tr>
<tr>
<td>EDU 303</td>
<td>Educational Assessment and Evaluation</td>
<td>3</td>
</tr>
<tr>
<td>EDU 304</td>
<td>Classroom/Learning Management</td>
<td>3</td>
</tr>
<tr>
<td>EDU 310</td>
<td>Introduction to Exceptional Children</td>
<td>3</td>
</tr>
<tr>
<td>EDU 411</td>
<td>Methods in Teaching HS Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>EDU 430</td>
<td>Organization and Administration in Public Schools</td>
<td>3</td>
</tr>
<tr>
<td>EDU 445</td>
<td>Teaching HS Reading in the Content Areas</td>
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</tr>
<tr>
<td>EDU 494</td>
<td>Supervised Teaching</td>
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**Total** 40

### III. CONCENTRATION/SPECIALIZATION

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MAT 132</td>
<td>Calculus &amp; Analytic Geometry II</td>
<td>5</td>
</tr>
<tr>
<td>MAT 231</td>
<td>Multivariate Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MAT 300</td>
<td>Introduction to Advanced Math</td>
<td>3</td>
</tr>
<tr>
<td>MAT 307</td>
<td>Linear Algebra</td>
<td>3</td>
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<tr>
<td>MAT 312</td>
<td>Mathematical Programming</td>
<td>3</td>
</tr>
<tr>
<td>MAT 321</td>
<td>Probability and Statistics I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 326</td>
<td>Modern Geometry</td>
<td>3</td>
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<tr>
<td>MAT 401</td>
<td>Modern Algebra I</td>
<td>3</td>
</tr>
<tr>
<td>COS 108</td>
<td>Principles of Comp. Science I</td>
<td>4</td>
</tr>
<tr>
<td>COS 310</td>
<td>Discrete Computing Structures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 33