

**Bachelor of Science: Comprehensive Major: Physics-Mathematics Teaching  
Code 210-004 – based on 2009-2010 Catalogue**

This major is restricted to students in the College of Education and Human Sciences –  
Curriculum and instruction: Option B:EA-A (Secondary Education)

This leads to licensure to teach Mathematics in Early Adolescence through Adolescence classrooms.

<p><b>Math Core (25 credits):</b>          ___ (4) 114 - Calc I          ___ (4) 215 - Calc II          ___ (4) 216 - Calc III          ___ (3) 324 - Lin Algebra/Matrix          ___ (3) 330 - Modern Geometry          ___ (4) 345 Probability/Statistics          ___ (3) 425 - Abstract Algebra I</p> <p><b>Additional Math:</b>          ___ (1) 493 - Capstone Seminar          ___ at least 9 additional credits          from courses numbered          above 310 in Mathematics:          ___ ( ) _____          ___ ( ) _____          ___ ( ) _____          ___ ( ) _____          ___ ( ) _____</p> <p><b>Physics Core (24 credits):</b>          ___ (5) 231- University Phys I          ___ (5) 232 - University Phys II          ___ (3) 332 - University Phys III          ___ (3) 333 - Quantum Physics          ___ (4) 340 - Optics          ___ (4) 350 - Electr/Elec. Circuit</p> <p><b>Additional Physics:</b>          ___ a minimum of 1 additional          physics course from:          ___ (4) 226 – Astronomy Solar Sys          ___ (4) 229 - Astronomy Stars, Gal          ___ course numbered          above 325.</p> <p><b>Additional Courses recommended:</b>          ___ at least 1 course in          computer programming          language recommended</p>	<p>___ Be working on 15 of the 30 Service-Learning hours needed.</p> <p><b>Pre-Program:</b>          ___ Pass English 110, C or above          ___ Pass PPST – Freshman Year          ___ Complete min. 14 credits          ___ Have 2.75 or higher GPA</p> <p>___ Psych 261 prior to BLOCK</p> <p><b>Complete together:</b>          ___ (1) CI 210 Teach Exp HS          ___ (1) CI 211 Teach Middle</p> <p><b>Then:</b>          ___ (3) FED 385 Soc. Found          (Requires 15 of SL hrs.          to be completed prior.)</p> <p>___ <b>APPLY to Admission</b> to          Program with 3 semesters          remaining – including student          teaching.</p> <ul style="list-style-type: none"> <li>• Completed CI 210/211 with a B- or better</li> <li>• Has seven (7) or fewer mathematics credits remaining after the current semester</li> <li>• Plans to take block courses (CI 312, 318, 317, 328, 357) next semester</li> </ul>	<p><b>BLOCK-</b> complete together:          ___ (2) CI 312 General Methods          ___ (1) CI 318 Teach Assist          ___ (2) CI 328 Content Read          ___ (2) CI 317 Middle Methods          ___ (2) CI 357sp Math Methods</p> <ul style="list-style-type: none"> <li>• At most one semester between block and student teaching.</li> </ul> <p>Along with BLOCK or immediately after:          ___ (3) FED 490 Foundations          ___ (2) SPED 300 Spec. Ed          ___ (2) CI 359 f Physical Sci Meth          *Methods may need to be switched depending on the semester one takes Methods.</p> <p>___ Pass Praxis II before student teaching. ETS 10061 - Math          ___ Pass the PRAXIS II ETS 10435          General Science Exam</p> <p><b>Professional Semester:</b>          ___ (1) Fed 497 Student Teaching          ___ (14) One of the following:          ___ CI 445 / 470          teaching          ___ CI 446 / 475          internship</p>
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Additional coursework is required to fulfill the University Graduation Requirements – see other side.

<p align="center"><b>College of Education and Human Sciences Requirements for BS Comprehensive Physics/Math Teaching – Math emphasis</b></p>	<p><b>General Education Requirements (min. 39 credits):</b></p>
<p><b>Credits:</b></p> <ul style="list-style-type: none"> <li>- Minimum 120 total credits</li> <li>- Minimum of 39 at 300-level or higher</li> <li>- Minimum of 90 credits of A&amp;S courses</li> <li>- Minimum of 60 unique credits between major-minor concentration</li> <li>- Minimum of 23 credits senior year</li> <li>- Resident, total, major, and minor GPAs of 2.75</li> <li>- Minimum of 21 credits upper division</li> </ul>	<p>I. <u>Communications</u> (minimum of 6 credits)</p> <ul style="list-style-type: none"> <li>__ (3) Language Skills - met by CJ 202</li> <li>__ (3 min) Analytical Skills - must complete by end of sophomore year; met by Math 114 or 215 with C or above; if tested out of 215, then must complete 1 GE course from Math, CS, Phil (logic)</li> </ul>
<p><b>Competencies:</b></p> <p><u>English Competency:</u></p> <ul style="list-style-type: none"> <li>- Engl 110 or Engl 112 or Hnrs 101 - with C or above</li> </ul> <p><u>Mathematics/Statistics Competency:</u></p> <ul style="list-style-type: none"> <li>- <b>Met</b> by placing into /completing Math 114</li> </ul> <p><u>Foreign Language/Foreign Culture:</u> (one of the following)</p> <ul style="list-style-type: none"> <li>- Place into 201-level course of foreign lang. or earning at least C or S in 102-level foreign language course (or AIS 112 or CSD 103)</li> <li>- Earn credit in a full semester (equivalent) of study abroad or approved internship abroad</li> <li>- Earn a minimum of 9 credits in FC courses</li> <li>- Earn credit in 101- or 102- level (or equivalent) course AND at least 6 credits in FC courses</li> </ul>	<p>II. <u>Natural Sciences</u> (max 12 applied to GE II)</p> <ul style="list-style-type: none"> <li>__ (10) met by Phys 231, 232</li> <li>__ (3) Biol 180 – Conservation of Environment</li> </ul> <p>III. <u>Social Sciences</u> ( 9 to 12 credits, 2 categories)</p> <ul style="list-style-type: none"> <li>__ (4) PSYC 261 - Development &amp; Classroom Proc</li> <li>__ (3) POLS 110 - Amer. National Politics</li> <li>__ **1 or more courses from: anthropology, economics, geography (cultural), political science, psychology (not 100), sociology, IDIS</li> <li>__ **(_)</li> </ul>
<p><b>Other Requirements</b></p> <p><u>Cultural Diversity: met</u> by FED 385</p> <ul style="list-style-type: none"> <li>- 3 credits of content in a course or courses dealing with African Americans, Hispanics, American Indians, or Asian Americans</li> </ul> <p><u>Service-Learning: met</u> in FED 385</p> <ul style="list-style-type: none"> <li>- 30 hours or more of service/learning</li> </ul> <p><u>Wellness Theory and Physical Activity:</u></p> <ul style="list-style-type: none"> <li>- 1 credit of Wellness Theory</li> <li>- 1 credit of Physical Activity</li> </ul>	<p>IV. <u>Humanities</u> (9 to 12 credits, 2 categories)</p> <ul style="list-style-type: none"> <li>__ 1 English or Foreign Language literature course</li> <li>__ ( )</li> <li>__ 1 course from Fine Arts: Art, Art History, Dance, Music, Music Therapy, Theatre Arts.</li> <li>__ ( )</li> <li>__ **1 or more courses from: Fine Arts, Philosophy (excluding Logic), Religious Studies, History, English or Foreign Language Literature, IDIS: AIS 102, Humanities, Interdisciplinary Studies, International Studies, Latin American Studies, Women’s Studies</li> <li>__ ( )</li> <li>__ ( )</li> </ul> <p>V. <u>University-wide GE</u> (up to 6 credits).</p> <ul style="list-style-type: none"> <li>__ (3) FED 385</li> </ul> <p>** Western/Non-Western: One course in Western History/contemporary culture AND one course in non-Western history/contemporary culture from GE III or IV. (See options available at: <a href="http://www.uwec.edu/advising/Students/">http://www.uwec.edu/advising/Students/</a>)</p> <p>CAUTION: If one switches later to a non-teaching math major, 9 credits of GE coursework must be at the 300 level and from 2 different GE areas. In the teaching program, only FED 385 is a required 300 level.</p>