

## Physics-Mathematics, Mathematics Emphasis, B.S., Comprehensive Major - Teaching

The following is a hypothetical schedule, based on the 2018-2019 catalog. It assumes no transferred credits, no requirements waived by placement tests, and no courses taken in the summer. UW-Eau Claire cannot guarantee all courses will be offered as shown, but will provide a range of courses that will enable prepared students to fulfill their requirements in a timely period. This is just a guide. Please consult your advisor, the catalog, and your degree audit for specific requirements.

### FIRST YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
MATH 114	Calculus I (S2)	4	POLS 110	American National Politics (K2)	3
PHYS 231	University Physics I (K1)	5	MATH 215	Calculus II	4
WRIT 114/116	Blugold Seminar (S1)	5	PHYS 232	University Physics II (K1)	5
LE Core Elective	Fine Arts (K4)	3	LE Core Elective	Humanities (K3)	3
<b>TOTAL</b>		<b>17</b>	<b>TOTAL</b>		<b>15</b>

### SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
MATH 216	Calculus III	4	MATH 324	Linear Algebra & Matrix Theory	4
PHYS 332	University Physics III (I1)	3	PHYS 340 <sup>b</sup>	Optics	4
Math Elective <sup>c</sup>	See elective list	3	ES 212	Teacher Observation	2
CJ 202	Fundamentals of Speech (S1)	3	PSYC 260	Educational Psychology (K2)	3
LE Core Elective	Humanities (K3) and Global Learning (R2)	3	Math Elective <sup>c</sup>	See elective list	4
<b>TOTAL</b>		<b>16</b>	<b>TOTAL</b>		<b>17</b>

### THIRD YEAR

FIRST SEMESTER – Apply for Admission to Major			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
PHYS 350 <sup>a</sup>	Electric and Electronic Circuits	4	Math Elective <sup>c</sup>	See elective list	3
Math 330	Modern Geometry	4	Physics Elective <sup>d</sup>	See elective list	4
MATH 345 <sup>c</sup>	Intro to Probability and Statistics	3	MATH 425	Abstract Algebra I	3
Physics Elective <sup>d</sup>	See elective list	4	ES 385	Social Foundations (R1)	3
BIOL 180	Conservation of the Environment (R3, I1)	3	LE Core Elective	Equity, Diversity, Inclusivity with Design for Div. (R1, DD)	3
<b>TOTAL</b>		<b>18</b>	<b>TOTAL</b>		<b>16</b>

### FOURTH YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
ES 312/317/318/328	Block (Teacher Assisting)	7	ES 445/470 or 446 or 475	Professional Semester	14
ES 490	Foundations of Education	3	ES 497	Senior Seminar (S3)	1
ES 357	Math Methods	2			
ES 359 <sup>a</sup>	Physics/Chemistry Methods	2			
SPED 300	Special Education	2			
<b>TOTAL</b>		<b>16</b>	<b>TOTAL</b>		<b>15</b>

## RECOMMENDATIONS FOR OPTIONAL HIGH IMPACT PRACTICES (HIPs)

The University of Wisconsin-Eau Claire encourages all students to participate in High Impact Practices. The following information identifies any specific recommendations that faculty in this major have concerning which HIPs might be most beneficial to students, and any recommendations about when those HIPs best fit into the degree plan. Students should also consult their faculty advisor for information on HIPs.

Required: Students must complete a student teaching semester (the Professional Semester). In addition, students are encouraged to explore a collaborative research projects with faculty members, teaching internships, or other independent research projects.

## NOTES

### Liberal Education Core (LE Core)

The LE Core comprises 17 learning experiences across 11 learning outcomes. Students must complete a minimum of 36 credits in courses approved for the LE Core.

- K1 – Natural Sciences; two experiences (one lab science experience is required in K1 or K2).
- K2 – Social Sciences; two experiences (one lab science experience is required in K1 or K2).
- K3 – Humanities; two experiences.
- K4 – Fine Arts; one experience.
- S1 – Written and Oral Communication; two experiences (one experience must satisfy the University writing requirement).
- S2 – Mathematics; one experience (must satisfy the University math competency requirement).
- S3 – Creativity; one experience (can be fulfilled in a student's major).
- R1 – Equity, Diversity, and Inclusivity; two experiences (one experience must meet the UW System Design for Diversity (DD) requirement).
- R2 – Global Perspectives; one experience.
- R3 – Civic and Environmental Issues; one experience.
- I1 – Integration; two experiences (one experience can be fulfilled in a student's major).

### Additional LE Core Information

- Most LE Core learning experiences are course based, and many courses meet more than one learning outcome (e.g., K3 and R2 or K1 and R3).
- Some learning experiences can also be met outside of a traditional course (e.g., undergraduate research (S3), study abroad (I1)).
- S1 – An English placement score that fulfills the University writing requirement fulfills one S1 experience.
- S1 – A foreign Language placement score that qualifies the student to enter the 102 level satisfies one S1 experience.
- S1, R2 – A foreign language placement score that qualifies the student to enter the 202 level satisfies one experience in S1 and the R2 experience.
- S2 – A math placement score that qualifies the student to enter Math 111, 112, 113 or 114 fulfills the S2 experience.
- S3 – Completion of two credits from any approved music ensemble fulfills the S3 experience.
- I1 – Any semester long study abroad program can fulfill one I1 experience.

### Course Suggestions (if applicable)

<sup>a</sup>Offered only in fall semesters.

<sup>b</sup>Offered only in spring semesters.

<sup>c</sup>At least ten credits selected from mathematics courses numbered above 305. At least one course in a computer programming language is recommended.

<sup>d</sup>A minimum of two courses from PHYS 226, PHYS 229, or any physics courses numbered above 325.