

Physics-Mathematics, Physics 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 |
| | | | | | |
| TOTAL | | 17 | TOTAL | | 15 |

SECOND YEAR

| FIRST SEMESTER | | | SECOND SEMESTER | | |
|-----------------------|--|-----------|-----------------------|----------------------------------|-----------|
| Subj/Area/Course | Title | Crs | Subj/Area/Course | Title | Crs |
| MATH 216 | Calculus III | 4 | PHYS 229 ^b | Astronomy – Stars and Galaxies | 4 |
| PHYS 332 | University Physics III (I1) | 3 | PHYS 340 ^b | Optics | 4 |
| PHYS 226 ^a | Astronomy – Solar System | 4 | 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 324 | Linear Algebra and Matrix Theory | 4 |
| TOTAL | | 17 | TOTAL | | 17 |

THIRD YEAR

| FIRST SEMESTER – Apply for Admission to Major | | | SECOND SEMESTER | | |
|---|--|-----------|-------------------------------|--|-----------|
| Subj/Area/Course | Title | Crs | Subj/Area/Course | Title | Crs |
| PHYS 350 ^a | Electric and Electronic Circuits | 4 | Physics Elective ^c | See elective list | 3 |
| Physics Elective ^c | See elective list | 4 | Math 330 | Modern Geometry | 4 |
| MATH 345 ^a | Intro to Probability and Statistics | 4 | MATH 425 | Abstract Algebra I | 3 |
| BIOL 180 | Conservation of the Environment (R3, I1) | 3 | ES 385 | Social Foundations (R1) | 3 |
| | | | LE Core Elective | Equity, Diversity, Inclusivity with Design for Div. (R1, DD) | 3 |
| TOTAL | | 15 | TOTAL | | 16 |

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 ^a | Physics/Chemistry Methods | 2 | | | |
| SPED 300 | Special Education | 2 | | | |
| TOTAL | | 16 | TOTAL | | 15 |

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)

^aOffered only in fall semesters.

^bOffered only in spring semesters.

^cAt least thirteen credits from PHYS 226, PHYS 229, or any physics courses numbered above 325.