

## Mathematics, Liberal Arts Emphasis, B.S., Major

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	Math 215	Calculus II (prereq for Math 324)	4
Writ 114 or 116	Blugold Seminar (S1)	5	LE Core Elective	Civic, Social, Environmental (R3)	3
LE Core Elective	Global Learning (R2) with (K2) or (K3) or (K4)	3	LE Core Elective	Equity, Diversity, Inclusivity (R1) with (K2) or (K3) or (K4)	3
LE Core Elective***	Social Science (K2) or Humanities (K3) or Fine Arts (K4)	3	LE Core Elective***	(K2) or (K3) or (K4)	3
			LE Core Elective*	Integrative Learning (I1)	3
<b>TOTAL</b>		<b>15</b>	<b>TOTAL</b>		<b>16</b>

### SECOND YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
Math 216	Calculus III (prereq for math 316)	4	Math 324	Linear Algebra (prereq for Math 316, 425)	4
Math Elective <sup>a</sup>		3	LE Core Elective <sup>+</sup>	Natural Science (K1)	3
LE Core Elective <sup>+</sup>	Natural Science (K1L)	4	LE Core Elective	Equity, Diversity, Inclusivity (R1+DD)	3
LE Core Elective	Communication (S1) – Foreign Language 101 if BA student	4	LE Core Elective	Foreign Language 102 if BA student (or another LE course if BS)	4
<b>TOTAL</b>		<b>15</b>	<b>TOTAL</b>		<b>14</b>

### THIRD YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
Math 316	Introduction to Real Analysis (prereq for Math 317)	3	Math 425	Abstract Algebra I (prereq for Math 426)	3
CS 145/163/170/Phil 250 <sup>b</sup>		3	Math Elective <sup>a</sup>		3
LE Core Elective*	Integrative Learning (I1)	3	LE Core Elective**	Creativity (S3)	3
LE Core Elective***	(K2) or (K3) or (K4)	3	LE Core Elective	If needed, otherwise any elective	3
Minor/Certificate		3	Minor/Certificate		3
<b>TOTAL</b>		<b>15</b>	<b>TOTAL</b>		<b>15</b>

### FOURTH YEAR

FIRST SEMESTER			SECOND SEMESTER		
Subj/Area/Course	Title	Crs	Subj/Area/Course	Title	Crs
Math 317 <sup>c</sup> /Math Elective	Real Analysis II (one of this or Math 426 is required)	3	Math 426 <sup>c</sup> /Math Elective	Abstract Algebra II (one of this or Math 317 is required)	3
Minor/Certificate		3	Math Elective <sup>a</sup>		3
Minor/Certificate		3	Minor/Electives		3
Minor/Electives		3	Minor/Electives		3
Minor/Electives		3	Minor/Electives		3
<b>TOTAL</b>		<b>15</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.

Student/faculty research – encouraged. Talk to your advisor or any faculty member about getting involved.

Study Abroad – Upper level math courses can be taken at University of Glasgow and University of Aberdeen. Math 312 and 324 can be taken during the summer at University of Glasgow. Immersion programs offer at least R2. LE requirements can be fulfilled in numerous programs.

**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)**

\*One of the two experiences required for Integrative Learning (I1) may be fulfilled with a math course with the I1 designation such as Math 307 or Math 462.

\*\*The Creativity (S3) experience can be fulfilled with a math course with the S3 designation such as Math 307 or Math 380.

\*\*\*In this 4-year plan, the experiences for (K2), (K3), and (K4) are listed together. The appropriate number of experiences from each learning outcome will be required. See LE Core above.

+We recommend satisfying the lab requirement in the K1 category.

(a)Additional Math credits from courses numbered above 305; these courses are 3 or 4 credits.

(b)Students must complete at least three credits to be selected from Phil 250, CS 145, 163, 170, or another computer science course approved by the Math department.

(c)Liberal Arts Emphasis: at least one of Math 317 or 426. Math 317 is offered fall only while Math 426 is offered spring only. The other semester one may take any math elective.