Biology Education Major (Early Adolescence-Adolescence Certification) - Bachelor of Science (BS)

Major requirements

Admission requirements for STEP Program (http://catalog.uwlax.edu/undergraduate/education/#STEP-admission)

(Teacher certification program: early adolescence-adolescence certification)

40 credits: (59-62 total credits including CHM and MTH requirements)

Each student must have a minimum of three 400 level BIO credits (excluding BIO 450, 479, 491, 495, and 499) to fulfill requirements of the major.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 105</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 203</td>
<td>Organismal Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 306</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 307</td>
<td>Ecology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 315</td>
<td>Cell Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 429</td>
<td>Evolution</td>
<td>3</td>
</tr>
<tr>
<td>BIO 469</td>
<td>Teaching and Learning Science in the Secondary School</td>
<td>4</td>
</tr>
<tr>
<td>BIO 491</td>
<td>Capstone Seminar in Biology</td>
<td>1</td>
</tr>
<tr>
<td>MIC 230</td>
<td>Fundamentals of Microbiology</td>
<td>4</td>
</tr>
</tbody>
</table>

Select nine credits of electives from the following: 1,2

1. Introduction to Biological Data Analysis and Interpretation
2. Animal Biology
3. Introductory Plant Identification
4. Vertebrate Form and Function
5. Plant Biology
6. Human Anatomy and Biology 1
7. Human Anatomy and Physiology 1
8. Ornithology
9. Economic Botany
10. Radiation Biology
11. Plant Physiology
12. Limnology
13. Curriculum and Assessment in Math and Science
14. Plant Taxonomy
15. Aquatic and Wetland Vascular Plants
16. Parasitology
17. Developmental Biology
18. Mycology
19. Medical Mycology
20. Freshwater Invertebrate Zoology
21. Quantitative Methods in Ecology

Select three semesters of chemistry, including: 15-18

<table>
<thead>
<tr>
<th>Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 103</td>
<td>General Chemistry I</td>
<td>5</td>
</tr>
<tr>
<td>CHM 104</td>
<td>General Chemistry II</td>
<td></td>
</tr>
</tbody>
</table>

And one of the following organic chemistry options:

Option 1:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 300</td>
<td>Survey of Organic Chemistry</td>
<td></td>
</tr>
</tbody>
</table>

Option 2:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 303</td>
<td>Organic Chemistry Theory I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHM 304</td>
<td>Organic Chemistry Theory II &amp; CHM 305</td>
<td></td>
</tr>
<tr>
<td>&amp; CHM 305</td>
<td>Organic Chemistry Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Math requirement 4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT 145</td>
<td>Elementary Statistics</td>
<td></td>
</tr>
</tbody>
</table>

Total Credits 59-62

1. Up to two credits of BIO 499 may count toward the major.
2. A maximum of two non-lab courses may be applied toward the biology major elective requirement, excluding BIO 490 and BIO 499.
must accomplish the following:

Candidates for the Bachelor of Arts or the Bachelor of Science degrees

Baccalaureate degree requirements

Candidates for the Bachelor of Arts or the Bachelor of Science degrees must accomplish the following:

1. Fulfill the general education requirements.
2. Complete at least one ethnic studies (diversity) course.
3. Complete the courses prescribed by the Undergraduate Curriculum Committee for the degree desired in the respective school or college. (No substitutions for graduation may be made in course requirements for a major or minor after the fourth week of the last semester of the senior year.)
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA. ¹ At least 40 credits must be earned in 300/400 (senior college) level courses. Courses earned at the 100/200 level that transferred to UWL as 300/400 level courses do not apply to this requirement nor do courses from two-year schools.
5. Complete major and minor requirements with at least a 2.00 GPA¹ in each major and minor (and concentration or emphasis, if selected).
6. A minimum of 30 semester credits in residence at UWL is required for graduation. (See undergraduate resident requirement (http://catalog.uwlaux.edu/undergraduate/undergraduate/residency-requirement/).
7. Submit an application for graduation via the “Apply for Graduation” link in the WINGS Student Center as soon as the student has registered for his or her final semester or summer term in residence. December and winter intersession graduates should apply by May 1. May and summer graduates should apply by December 1.

¹ Grade point average requirements for some programs will be considerably higher than 2.00. Re-entering students may be required to earn credits in excess of the 120 needed for graduation in any curriculum in order to replace credits earned in courses in which the content has changed substantially in recent years. Each case will be judged on its own merit.

A maximum of eight credits of BIO 303, BIO 312, BIO 313 can be applied to the major.

BIO 312 and BIO 313 are strongly recommended.

CHM 103 prerequisite includes MTH 150 or placement into MTH 151 or higher.

Teacher certification candidates must complete GEO 200 to fulfill statutory licensing requirements.

Additional teacher education requirements are listed in the STEP program core (http://catalog.uwlaux.edu/undergraduate/education/#STEP-core).

No degree will be awarded unless all requirements are fulfilled and recorded within 30 days after the official ending date of each term.

Sample degree plan

Below is a sample degree plan that can be used as a guide to identify courses required to fulfill the major and other requirements needed for degree completion. A student’s actual degree plan may differ depending on the course of study selected (second major, minor, etc.). Also, this sample plan assumes readiness for each course and/or major plan, and some courses may not be offered every term. Review the course descriptions or the class timetable (http://www.uwlax.edu/Records/registration) for course offering information.

The sample degree plans represented in this catalog are intended for first-year students entering UWL in the fall term. Students should use the Advisement Report (AR) in WINGS (https://wings.uwlaux.edu/psp/csprod/?cmd=login&languageCd=ENG) and work closely with their faculty advisor(s) and college dean’s office to ensure declaration and completion of all requirements in a timely manner.

General Education Program

The general education curriculum (Gen Ed) is the common educational experience for all undergraduates at UWL. Sample degree plans include Gen Ed placeholders to ensure completion of the general education requirements. Courses may be rearranged to fit the needs or recommendations of the student’s program of study. Gen Ed courses may be taken during winter term (January between the semesters) and summer to reduce the course load during regular terms (fall and spring). Students should consult with their advisor and/or the assistant to the dean of their college for assistance with course and schedule planning. Refer to the general education requirements (http://catalog.uwlaux.edu/undergraduate/undergraduate/undergraduate/education/) for more specific details.

Note: at least 40 credits of the 120 credits required must be earned at the 300/400 level.

This sample degree plan does not establish a contractual agreement. It identifies the minimum requirements a student must successfully complete, to qualify for a degree, in a format intended to assist the student plan their academic career. Actual degree plans may differ.

Two samples plans are provided. These are merely samples and should be discussed with your adviser to determine the best route for you.

Sample Plan 1

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIO 105 (Gen Ed Natural Lab Science)</td>
<td>4</td>
<td>BIO 203</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>MTH 150 (Gen Ed Lang/Logical Systems)</td>
<td>4</td>
<td>CHM 103</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>EDS 203 (Gen Ed Self &amp; Society)</td>
<td>3</td>
<td>ENG 110 or 112 (Gen Ed Literacy-Written)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CST 110 (Gen Ed Literacy-Oral)</td>
<td>3</td>
<td>EDS 206 (Gen Ed Minority Cultures)</td>
<td>3</td>
</tr>
<tr>
<td>Gen Ed Arts</td>
<td>2-3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16 15
Sample Plan 2

Year 1

Fall Credits Spring Credits
BIO 105 (Gen Ed Natural Lab Science) 4 BIO 203 4
CHM 103 (Gen Ed Natural Lab Science) 5 CHM 104 5
ENG 110 (Gen Ed Literacy-Written) 3 MTH 151 4
(Gen Ed Math)
EDS 203 (Gen Ed Self & Society) 3 CST 110 (Gen Ed Literacy Oral) 3

15 16

Year 2

Fall Credits Spring Credits
BIO 306 4 Apply for admission to the STEP Program by 4th Monday of the semester.¹
CHM 104 5 CHM 300 5
STAT 145 (Gen Ed Lang/Logical Systems) 4 MIC 230 4
Gen Ed Arts 2-3 EDS 309 2
HIS 101 or 102 (Gen Ed World Hist) 3 GEO 200 (Gen Ed Global Studies) 3
PSY 212 3

18 17

Year 3

Fall Credits Spring Credits
BIO 315 4 BIO 429 3
BIO Elective (BIO 312 recommended) 3-4 BIO Elective (BIO 313 recommended) 3-4
EDS 319 2 EDS 351 4
Gen Ed Hum-Lit 3 PSY 370 3
Gen Ed Health & Well Being 3 Gen Ed Elective

14 14

Fall Credits Spring Credits
BIO 307 3 BIO 491 1
GEO 200 (Gen Ed Global Studies) 3 BIO 469 4
PSY 370 3 SPE 401 3
EDS 351 4 EDS 494 3
BIO Elective to total 40 credits in BIO 1-3

14 11

Additional year

Fall Credits
Pre-requisite for student teaching includes GPA of 2.75 in each: combined cumulative, major, minor, and professional education sequence; and a passing score on the Praxis II content test.²
EDS 494 3-15
EDS 492 1

13

Total Credits: 124

¹ See the STEP admissions (http://www.uwlax.edu/Secondary-Teacher-Education-Preparation/Admission) website for details.
² See the Office of Field Experience (https://www.uwlax.edu/educational-studies/field-experience) for details about applying to student teaching.