Clinical Laboratory Science - Bachelor of Science (BS)

Major requirements
(College of Science and Health)

Clinical Laboratory Science admission policy

Admission to the clinical laboratory science major is on a competitive basis. Students apply for admission early in the spring semester of the academic year just prior to the beginning of their professional studies, typically in the sophomore year. Formal acceptance into the major, effective at the beginning of the fall semester is based on the submission of an application for admission to the major, personal recommendations, review of academic performance, and an interview with the program admission committee. A minimum cumulative grade point average of 2.75 is strongly recommended.

Admission to clinical requirement

The application process for the clinical year in the hospital-sponsored program is similar to the process required for acceptance to the clinical laboratory science major. Acceptance into the hospital program is not guaranteed by the university. The hospital programs affiliated with UWL are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

During the clinical component, in an accredited hospital program, students will register for (or be allowed to transfer in from Mayo’s CLS program) the equivalent of, at minimum, 31 UWL credits. The clinical phase routinely begins in late August with anticipated graduation the following spring. Graduates of the program are eligible to sit for national certification examinations offered by national certification agencies.

NAACLS accredited hospital affiliates of UWL:

- Hennepin County Medical Center, Minneapolis, Minn.
- Saint Joseph’s Hospital/Marshfield Laboratories, Marshfield, Wis.
- Aspirus Wausau Hospital, Wausau, Wis.
- Affinity Health, Appleton, Wis.
- Mayo Clinic, College of Medicine, School of Health Sciences, Rochester, Minn.

UWL is affiliated with the University of North Dakota, an accredited program, which provides access to many other hospital affiliates throughout the upper Midwest.

Clinical laboratory science students who select to complete the required year-long clinical at the Mayo School of Health Sciences (MSHS) enroll at MSHS rather than at UW-La Crosse. The courses taken during the year-long clinical at MSHS meet UW-La Crosse CLI program requirements. The student must request an official transcript be sent to UW-La Crosse from MSHS. Upon successful completion of the clinical and all other graduation requirements, the students are awarded the Bachelor of Science degree from UW-La Crosse. The Mayo School of Health Sciences (MSHS) grants a Certificate of Completion in Clinical Laboratory Science.

Graduation requirements

Core courses in the pre-professional curriculum must be completed with a grade of "C" or above. UWL students must meet all university graduation requirements including those for general education, college core, and university degree requirements. However, students in the clinical laboratory science major are exempt from the College of Science and Health core requirements.

Curriculum

93-105 credits including clinical phase

Pre-professional curriculum (39-46 credits)

All pre-clinical lab science program majors are strongly encouraged to take CLI 120 Introduction to Clinical Laboratory Science.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO 105</td>
<td>General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 306</td>
<td>Genetics</td>
<td>4</td>
</tr>
<tr>
<td>BIO 312</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 313</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry core:</td>
<td></td>
<td></td>
</tr>
<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>5</td>
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<tr>
<td>Select one of the following:</td>
<td>5-8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHM 300 Survey of Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHM 303 Organic Chemistry Theory I</td>
<td></td>
</tr>
<tr>
<td>&amp; CHM 304 and Organic Chemistry Theory II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; CHM 305 and Organic Chemistry Laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microbiology core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIC 230</td>
<td>Fundamentals of Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>Math core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 150</td>
<td>College Algebra (or placement above MTH 150)</td>
<td>4-8</td>
</tr>
<tr>
<td>STAT 145</td>
<td>Elementary Statistics</td>
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</tr>
</tbody>
</table>

Total Credits 39-46

Pre-clinical lab science program students must have completed a substantial portion of these requirements in the semester that they apply for formal admission to the clinical lab science program major. Students who lack only a few credits are encouraged to consult the clinical lab science program advisor to determine when they should apply.

Professional curriculum (54-59 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preclinical phase (on campus):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLI 395</td>
<td>Urinalysis and Body Fluids</td>
<td>2</td>
</tr>
<tr>
<td>CLI 410</td>
<td>Clinical Hematology</td>
<td>3</td>
</tr>
<tr>
<td>CLI 420</td>
<td>Immunohematology</td>
<td>3</td>
</tr>
<tr>
<td>CLI 440</td>
<td>Clinical Parasitology</td>
<td>1-4</td>
</tr>
<tr>
<td>or BIO 406</td>
<td>Parasitology</td>
<td></td>
</tr>
<tr>
<td>CLI 461</td>
<td>Capstone in Clinical Laboratory Science</td>
<td>1</td>
</tr>
<tr>
<td>MIC 310</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>MIC 407</td>
<td>Pathogenic Bacteriology</td>
<td>4</td>
</tr>
<tr>
<td>MIC 410</td>
<td>Immunology Laboratory</td>
<td>2</td>
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<tr>
<td>Select one of the following:</td>
<td>4-6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHM 325 Fundamental Biochemistry</td>
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</tr>
</tbody>
</table>

1 Clinical laboratory science students who select to complete the required year-long clinical at the Mayo School of Health Sciences (MSHS) enroll at MSHS rather than at UW-La Crosse. The courses taken during the year-long clinical at MSHS meet UW-La Crosse CLI program requirements. The student must request an official transcript be sent to UW-La Crosse from MSHS. Upon successful completion of the clinical and all other graduation requirements, the students are awarded the Bachelor of Science degree from UW-La Crosse. The Mayo School of Health Sciences (MSHS) grants a Certificate of Completion in Clinical Laboratory Science.
Candidates must accomplish the following:

1. Fulfill the general education requirements.
2. Complete at least one ethnic studies (diversity) course.
3. Compete at least one ethnic studies (diversity) course.
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA. 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 GPA 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.uwlax.edu/undergraduate/academicpolicies/graduation/#undergraduate-residence-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.

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.uwlax.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.uwlax.edu/undergraduate/generaleducation) 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 sample plans are provided below. The first plan is for students who have placed into MTH 151 Precalculus, and the second example is for students who need MTH 150 College Algebra in their first semester.
### Sample Plan 1 - students who placed into MTH 151

#### Year 1

<table>
<thead>
<tr>
<th>Term</th>
<th>Credits</th>
<th>Spring Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>CHM 103 (if math placement&gt;MTH 150; Gen Ed Natural Lab Science)</td>
<td>5</td>
<td>CHM 104</td>
</tr>
<tr>
<td>STAT 145 (Gen Ed Math)</td>
<td>4</td>
<td>BIO 105 (Gen Ed Natural Lab Science)</td>
</tr>
<tr>
<td>CST 110 (Gen Ed Literacy-Oral)</td>
<td>3</td>
<td>CLI 120</td>
</tr>
<tr>
<td>Gen Ed Global Studies</td>
<td>3</td>
<td>ENG 110 or 112 (Gen Ed Literacy-Written)</td>
</tr>
<tr>
<td>Gen Ed Arts</td>
<td>2-3</td>
<td></td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
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<table>
<thead>
<tr>
<th>Term</th>
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</tr>
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<tbody>
<tr>
<td>Fall</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>BIO 105 (Gen Ed Natural Lab Science)</td>
<td>4</td>
<td>Apply for admission to Clinical Lab Science Program</td>
</tr>
<tr>
<td>MIC 230</td>
<td>4</td>
<td>MIC 310</td>
</tr>
<tr>
<td>HIS 101, 102, or ARC 200 (Gen Ed World Hist)</td>
<td>3</td>
<td>BIO 313</td>
</tr>
<tr>
<td>Gen Ed Arts</td>
<td>2-3</td>
<td>CHM 300</td>
</tr>
<tr>
<td>MTH 151 (Gen Ed Math)</td>
<td>4</td>
<td>Gen Ed Minority Cultures</td>
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#### Year 2

<table>
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</thead>
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<tr>
<td>Fall</td>
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<td></td>
</tr>
<tr>
<td>BIO 312</td>
<td>4</td>
<td>MIC 407</td>
</tr>
<tr>
<td>MIC 410</td>
<td>2</td>
<td>CLI 395</td>
</tr>
<tr>
<td>CHM 325</td>
<td>4</td>
<td>BIO 306</td>
</tr>
<tr>
<td>Gen Ed Hum-Lit</td>
<td>3</td>
<td>CLI 440</td>
</tr>
<tr>
<td>Gen Ed Health &amp; Well Being</td>
<td>3</td>
<td>Gen Ed Self &amp; Society</td>
</tr>
<tr>
<td>Gen Ed Elective</td>
<td>3</td>
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<tr>
<td><strong>Total Credits:</strong></td>
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### Sample Plan 2 - students taking MTH 150 in first semester

#### Year 1

<table>
<thead>
<tr>
<th>Term</th>
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<tbody>
<tr>
<td>Fall</td>
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<tr>
<td>BIO 105 (Gen Ed Natural Lab Science)</td>
<td>4</td>
<td>CHM 103 (Gen Ed Natural Lab Science)</td>
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<td>Gen Ed Arts</td>
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<td><strong>15</strong></td>
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<thead>
<tr>
<th>Term</th>
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<th>Spring Credits</th>
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</thead>
<tbody>
<tr>
<td>Fall</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>CHM 104</td>
<td>5</td>
<td>Apply for admission to Clinical Lab Science Program</td>
</tr>
<tr>
<td><strong>Total Credits:</strong></td>
<td><strong>15</strong></td>
<td><strong>15</strong></td>
</tr>
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**Total Credits: 129**