

# Biology: Cellular and Molecular Biology Concentration - Master of Science

## Program requirements

### Biology graduate student requirements

All graduate students in biology must meet the following requirements:

1. Complete at least 30 credits of graduate level course work (500-level and above) of which at least 15 credits must be at the 700-level.
2. Prior to registration each semester, the student must consult with the major advisor.
3. Enroll in BIO 700 Biology Graduate Program Orientation during the first fall semester of residence. Enroll in BIO 701 Communication in the Biological Sciences and two semesters of BIO 751 Graduate Seminar during the first four semesters of residence. Nurse anesthesia students are exempt from the BIO 700 and BIO 751 requirement but are required to complete BIO 701.
4. Students may complete an appropriate graduate course (numbers 500 and above) from outside the department of biology upon approval of a student's advisory committee.
5. Submit a written thesis or seminar paper proposal to the advisory committee (ideally prior to the beginning of the second year of residence). Nurse anesthesia students are exempt from this requirement and are not required to complete a thesis or seminar paper as part of the degree program.
6. Pass a thesis proposal defense and/or an oral examination covering material determined by the advisory committee, such as the student's research area and advanced course work.
7. Not less than one semester after completion of the thesis proposal/oral examination, present an oral defense of the thesis or seminar paper. Nurse anesthesia students are exempt from this requirement.
8. Students must maintain continuous term-to-term enrollment per the university's Graduate Research, Comprehensive Exams, and Terminal Project Completion Policy (<http://catalog.uwlax.edu/graduate/academicpolicies/registrationschedules/#continuous-registration>).
9. Consult this catalog and the department's graduate student guidelines for additional policies pertaining to graduate students in a biology program.

### Master of Science in biology: cellular and molecular biology concentration requirements:

Students in this concentration must satisfy both the program requirements above and the university's degree requirements for graduate students. In addition, when completing the program requirements above,

1. The research thesis must be in an area of cellular or molecular biology, and

2. At least 15 of the 30 credits must be from the following list; remaining credits are to be selected by the student and the advisory committee.

Code	Title	Credits
MIC 516	Prokaryotic Molecular Genetics	4
BIO 532	Biology of Cancer	2
BIO 535	Molecular Biology	3
BIO 536	Molecular Biology Laboratory	1
BIO 537	Plant Growth and Development	3
BIO 543	Molecular Mechanism of Disease and Drug Action	3
BIO 558	Comparative Animal Physiology	4
BIO 583	Cell Signaling	3
BIO 714	Advanced Genetics	3
BIO 799	Research: Master's Thesis	1-6

Total credits: 30

With the approval of the student's advisory committee, other courses may be substituted for those listed.

## University requirements

### University graduate degree requirements

After being admitted to the program of one's choice, candidates for a graduate degree must:

1. Complete any preliminary course work and deficiencies.
2. Complete all courses and other program requirements, including residence requirements prescribed for the degree desired in the respective school or college within a seven-year period from the date of initial enrollment, with the exception of students enrolled in the Student Affairs Administration and Leadership Ed.D. (SAA Ed.D.) graduate program. SAA Ed.D. students must complete all degree requirements within ten years from the time of initial enrollment in the graduate program.
3. Earn a minimum of 30 credits for a master's degree; 54 credits for a doctorate or post-master's degree. Earn at least one-half of the minimum number of credits required in the program in graduate-only level courses (700, 800, 900, and non-slash 600 level courses). Some UWL graduate programs require more than 30 graduate credits. Please review the individual program requirements (<http://catalog.uwlax.edu/graduate/programrequirements/>) listed in the catalog for the exact number of credits required.
4. Earn a cumulative grade point average of at least 3.00.
5. Satisfy dissertation, thesis, seminar paper, terminal/graduate projects and internships, or comprehensive examination, where applicable. A dissertation or thesis approved by the committee must be submitted to Graduate & Extended Learning for editorial review and approval by the Dean of Graduate & Extended Learning. The recommended initial submission date for review is two weeks before commencement. Ordinarily, a seminar paper or project report does not have to be approved by the Dean of Graduate & Extended Learning. However, if the seminar paper or project report is to be archived in Murphy Library, the student must follow the same rules as they apply to the dissertation/thesis requiring approval from the Dean of Graduate & Extended Learning. For further research/dissertation/thesis guidelines (<https://www.uwlax.edu/gel/graduate-education/thesis-and-dissertation/>), see Graduate & Extended Learning.
6. File a completed "Intent to Graduate" form online via the WINGS Student Center immediately following registration for the final

semester or summer term in residence. December graduates and winter intersession should file by May 1. May and summer graduates should file by December 1.

7. Pay the graduation fee and remove all other indebtedness to the university. Payment of graduation fees does not imply readiness for graduation and does not take the place of applying for graduation.
8. Complete all requirements within 30 days after the official ending date of a term in order for a degree to be awarded for that term. (See #5 above for separate deadline for written capstone experience.)