



Twin Cities Campus

Integrative Biology and Physiology M.S.

Integrative Biology and Physiology

Medical School

Link to a [list of faculty](#) for this program.

Contact Information:

Department of Integrative Biology and Physiology, Jackson Hall 6-125, 321 Church Street S.E., Minneapolis, MN 55455 (612-625-5902; fax: 612-625-5149)

Email: ibpdept@umn.edu

Website: <http://physiology.med.umn.edu/graduate-program/>

- Program Type: Master's
- Requirements for this program are current for Fall 2017
- Length of program in credits: 30
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

Note: Students enter the Twin Cities M.S. program in integrative biology and physiology only for exceptional reasons. Most Twin Cities graduate work is performed at the Ph.D. level. See the Integrative Biology and Physiology Ph.D. program for more information.

The graduate programs in the Twin Cities have a cardiovascular emphasis, although other areas of specialization are represented.

On the Duluth campus, students can enroll in coursework and participate in research in several basic areas.

The program includes faculty and corresponding research laboratories from the Department of Integrative Biology and Physiology and also the Departments of Medicine; Surgery; Neuroscience; Neurosurgery; Biochemistry, Molecular Biology, and Biophysics; Pharmacology; Physical Medicine and Rehabilitation; Kinesiology; and Animal Science.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 79
 - Internet Based - Writing Score: 21
 - Internet Based - Reading Score: 19
 - Paper Based - Total Score: 550
- IELTS
 - Total Score: 6.5
- MELAB
 - Final score: 80

Key to [test abbreviations](#)(TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan A: Plan A requires 14 major credits, 6 credits outside the major, and 10 thesis credits. The final exam is written and oral.

Plan B: Plan B requires 14 major credits and 6 credits outside the major. The final exam is oral. A capstone project is required.



Capstone Project: The Plan B project focuses on some aspect of Physiology. Plan B students complete a project under the direction of a faculty member and present the work to their faculty committee in an oral exam.

This program may be completed with a minor.

Use of 4xxx courses toward program requirements is permitted under certain conditions with adviser approval.

A minimum GPA of 3.00 is required for students to remain in good standing.

Duluth campus: All course requirements for the M.S. degree can be completed on the Duluth campus. Students are expected to fulfill all degree requirements over a period of two to three calendar years. The program includes at least 20 credits in physiology and 6 credits in a minor or related field of study. Incoming students are encouraged to undertake at least two laboratory rotations in faculty research laboratories of their choice. Fulfillment of degree requirements also includes the presentation and defense of a thesis (Plan A). The final written examination and oral defense of the thesis takes place with participation of faculty from both campuses.

Twin Cities campus: Plan A or B degrees are awarded only in exceptional circumstances. A Plan A M.S. degree requires 14 credits in physiology and 6 credits outside of physiology. The degree is based on laboratory research off or on campus, and requires a written thesis or written project and an oral presentation of the work for the final exam. The M.S. degree is Plan A, unless there are special circumstances requiring a Plan B. For Plan B, the final exam is oral.