

MASTER OF SCIENCE GUIDELINES
Cancer Biology Graduate Program
Department of Oncology
(updated 10-16-2023)

Program Description

The Master of Science (MS) program in Cancer Biology offers a strong didactic and laboratory curriculum in cancer biology with a major focus on molecular oncology. Our goal is to provide intensive research training for students who are interested in a career in academia, medicine, industry, or related careers in which first-hand research experience is an asset. Research interests in the Department of Oncology are diverse, allowing students to choose from a broad spectrum of topics for their research thesis. Students are encouraged to attend monthly research seminars, along with Karmanos Cancer Institute-sponsored research meetings and symposia. These regular interactions between students and faculty help our students develop oral communication and collaboration skills for future success.

Degree Requirements

The master's degree in Cancer Biology is offered under Plan A only. A minimum of 30 credits (eight of which must be from thesis research) and the completion of an original research project including a written Master's thesis are required to complete the requirements for the MS degree in Cancer Biology. The coursework includes 17 credits of compulsory courses and 5 credits of elective courses (below). A minimum GPA of 3.0 must be maintained throughout the MS program. Students are required to complete two laboratory rotations by the second semester of year 1 of study in order to have a thesis advisor in place for beginning full time thesis research. The student and mentor should identify two additional faculty members to serve on the thesis committee. Students should strive to publish one peer-reviewed paper in connection with the MS research.

Plan A Curriculum (Total 30 cr.)

Required courses (17 cr.):

MGG 7010 Molecular Biology & Genetics (4 cr.) Fall semester.

BIO 6000 Molecular Cell Biology I (3 cr.) Fall semester.

CB 7210 Fundamentals of Cancer Biology (3 cr.) Winter semester.

CB 7500 MS Biostatistics (2 cr.) Winter semester.

CB 7510 – Journal Club/Seminar MS, Winter semester only (1 cr./ winter semester). Total of 2 cr. over the course of the program.

CB 7710 Rotation (2 cr.) Fall semester

CB 7800 Ethics (1 cr.) Winter semester

CB 8999 Master's thesis research (8 cr)

Elective courses (5 cr.): In addition to the courses listed above, students are allowed to select appropriate courses from other departments/programs across the campus.

CB 7300 Special Topics (1-4 topics, 1 cr.)

PHC 7650 (1-4 topics, 1 cr.)

PSL 7880 Special Problems (1 cr.)

Admission Requirements

Admission to the MS program is contingent upon admission to the Graduate School and the graduate programs of the School of Medicine. Qualified applicants must have a BS or BA degree from an accredited college or university, preferably with a major in biology, chemistry, physics, or a closely related discipline. A complete application includes the basic application form, personal statement, official transcripts from previous institutions, and three letters of reference. International students must be proficient in English (as determined by satisfactory performance on the Test of English as a Foreign Language (TOEFL) examination). TOEFL scores should be reported to Wayne State University using institution code 1898. Applications must be submitted online by April 1st. Graduate School Admissions policies can be found at the [Office of Graduate Admissions](#).

Contact Information

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