

Medical Laboratory Science

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Program Description	Type	Degree
M.S. in Medical Laboratory Science (https://coursecat.isu.edu/graduate/pharmacy-healthprofessions/health-professions/medicallaboratoryscience/msmedlabscience/)	Degree	M.S.

Master of Science in Medical Laboratory Science

Medical Laboratory Scientists are vital healthcare detectives, uncovering and providing key medical information from laboratory analyses that assist physicians in patient diagnosis and treatment, as well as in disease monitoring or prevention.

Laboratory testing encompasses such disciplines as clinical chemistry, hematology, immunology, transfusion medicine, microbiology, and molecular biology.

The Medical Laboratory Science program is located in the Kasiska Division of Health Sciences, College of Health, with campuses in Pocatello, Meridian, and Idaho Falls.

The Master of Science in Medical Laboratory Science degree is designed for either the practicing medical laboratory scientist (certified lab professional) or those students who wish to become certified and then go into leadership positions in administration, education, or specialize in a certain area of pathology/laboratory medicine. Graduates are ideally suited for positions involving teaching, laboratory management, and research. Full-time and part-time options are available, and many courses are available online. A curriculum of coursework and research project is designed and personalized for each student, depending on his/her area of interest and experience.

The Master of Science program in Clinical Laboratory Science requires an original research project that culminates in a thesis or a capstone project, a minimum of 32 credits earned in graduate courses (including research and thesis or capstone project), and expertise in core conceptual areas of Medical Laboratory Science (scientific, administrative, or educational).

Program Level Student Outcomes:

Upon completion of the ISU Medical Laboratory Science program, students should be able to:

1. Develop, establish, oversee and perform the pre-analytical, analytical, and post-analytical phases of testing on body fluids, cells and other specimens.
2. Ensure appropriate laboratory utilization to optimize full value patient outcomes.
3. Apply statistical analysis of data for use in laboratory epidemiology, examining the relationships of tests to treatment decisions, and to health care outcomes.
4. Establish and use quality assurance and performance measurements to develop solutions to problems and to assure the validity and accuracy of information concerning laboratory data, generated both within and external to the laboratory.
5. Advocate for patients by utilizing the results of laboratory diagnostic procedures and employing algorithms to achieve optimal, full-value patient outcomes.
6. Comply with regulations and guidelines of relevant governmental and non-governmental agencies.
7. Implement laws, regulations and accrediting standards within the operating requirements of the organization to minimize risks and maximize patient outcomes.