School of Health Professions, Science & Wellness

Medical Laboratory Science Program

PROGRAM OFFERED

- **Bachelor of Science** | Medical Laboratory Science

Information about the program

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Faculty

Washington Adventist University
Melinda Ekkens-Villanueva | **Education Coordinator**
Glen Bennett
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Andrews University
Marcia Kilsby | **Chair, Department of Medical Laboratory Sciences**
Monica Constable | **Coordinator**
Aileen Hyde
Timothy A. Newkirk
Karen Reiner
Richard Show

Mission Statement

The mission of the Medical Laboratory Science program is to provide a foundation for training moral and ethical individuals who are committed to life-long learning and personal excellence.

Introduction

The four-year program in medical laboratory science is designed to prepare medical laboratory scientists for responsible positions in management and specialty areas with an in-depth understanding of diseases and their identification in the medical laboratory. This program also provides a clinically oriented baccalaureate degree program for students desiring to meet pre-medicine, pre-dental, and graduate school requirements.

The Medical Laboratory Science program consists of three years of study at Washington Adventist University, followed by a 12- or 13-month senior year in a hospital-based medical laboratory science program.

The hospital program affiliated with Washington Adventist University is Andrews University, which is accredited by the National Accrediting Agency for Clinical Laboratory Sciences.

The Washington Adventist University degree is awarded after satisfactory completion of all Washington Adventist University prerequisites, and the clinical year under the auspices of Andrews University, subject to receipt of an official transcript from Andrews University and the transfer of the courses to Washington Adventist University.

Upon completion of the program, the student is eligible to sit for the appropriate national certifying examination. Completion of the senior year in another hospital-based accredited program requires prior university approval.

Career Opportunities

Medical laboratory scientists/medical technologists may find employment in hospital laboratories, doctor's offices, or commercial laboratories. Additional opportunities exist in research and industrial laboratories, sales, and teaching.

Because of the increased importance of laboratory tests in medical diagnosis and the initiation of new government health care programs, an increased need exists for medical laboratory scientists/medical technologists.

The Medical Laboratory Science program is also designed to meet pre-professional program requirements for medicine, dentistry, and graduate school.

Admission Information

Freshmen Admission

Freshmen are admitted according to the general university policy as outlined in the Academic Bulletin section entitled Admissions on Page 44.

Secondary school subjects in biology, chemistry, physics, and mathematics are advisable in order to perform satisfactorily in mathematics and science courses needed at the collegiate level. Placement examinations in mathematics and English are given in order to advise the student.

Admission to the Medical Laboratory Science Program at Andrews University

Admission to the senior year clinical courses requires:

a. Successful completion of all prerequisite course work, including general education and cognate science; successful completion of summer pre-clinical courses at Andrews University.

b. An overall college GPA of 2.50 or above.

c. A GPA of 2.50 or above in all cognate science and medical laboratory science content courses.

d. Submission of a Clinical Year Application directly to the Department of Medical Laboratory Sciences at Andrews University. The application, which is available from the Andrews University MLS department, includes two references, and may include a personal interview. Students should submit the application by January 31 prior to their anticipated clinical-study year.

Departmental Requirements

Washington Adventist University Progression Requirements:

The Medical Laboratory Science program reserves the right to ask a student to withdraw from the program if at any time the student's scholastic achievement, ability to work with others, emotional stability, or patient contact proves unsatisfactory. Scholastic achievement will be considered unsatisfactory any time the student's cumulative grade point average falls below 2.50 for any two consecutive semesters

Immediate dismissal will result if a student receives:

1. A grade of "D" in any major or cognate course that is being repeated.
2. A grade of "D" in any two major or cognate courses (cumulative throughout the program).
3. A grade of "F" in any one course in the major or cognate area.

Andrews University Requirements:

Information about the Andrews University progression requirements can be obtained from the Andrews University bulletin and the medical laboratory science adviser.

Bachelor of Science in Medical Laboratory Science

The bachelor of science program in medical laboratory science is designed for students seeking employment in medical laboratories. The Washington Adventist University degree is awarded after satisfactory completion of all Washington Adventist University prerequisites and the clinical year under the auspices of Andrews University, subject to receipt of an official transcript from Andrews University and the transfer of the courses to Washington Adventist University. Upon completion of the program, the student is eligible to sit for the appropriate national certifying examination.

Required Cognates **40 hours**

BIOL 161	College Biology	4
BIOL162	College Biology	4
BIOL 330	Animal Physiology	4
BIOL 415	Immunology	3
BIOL 416	Immunology Lab	1
CHEM 151	College Chemistry	4
CHEM 152	College Chemistry	4
CHEM 221	Organic Chemistry	4
CHEM 222	Organic Chemistry	4
HLSC 101	Introduction to Health Care	2
HLSC 175	Medical Terminology	2
MATH 126	Pre-calculus	4

Recommended Cognates

CPTR 105	Introduction to Computers	4
MATH 110	Probability and Statistics	4
PHYS 271	College Physics	4
PHYS 272	College Physics	4

General Education **40 hours**

See details of General Education Program, Page 33. *Computer proficiency is required.*

ENGL 101	Composition	3
ENGL 102	Research and Literature	3
COMM 105	Introduction to Human Communication	3
INTD 105	First Year Experience	1
RELB/RELT	Religion electives	6
*RELB/RELT	Religion electives (upper division)	6
PSYC 105	Introduction to Psychology (3)	
– or –		
SOCI 105	General Sociology (3)	3
*HIST	History elective (upper division)	3
	Social Science elective	3
LITR	Literature elective	3
	Humanities elective	3
PEAC	Physical Education Activity Elective	1
	Health elective	2

Clinical Year (Andrews University) **56 hours**

MLSC 210	Fundamentals of Hematology & Hemostasis	2
MLSC 230	Fundamentals of Clinical Microbiology	3
MLSC 240	Fundamentals of Immunohematology	1
MLSC 350	Fundamentals of Clinical Chemistry	3
MLSC 400	Specimen Procurement and Processing	1
MLSC 401	Clinical Year Seminar I	0
MLSC 402	Clinical Year Seminar II	0
MLSC 411	Hematology	3
MLSC 412	Hemostasis	1

MLSC 413	Clinical Hematology and Hemostasis Practicum	4
MLSC 421	Clinical Immunology & Molecular Diagnosis	2
MLSC 423	Clinical Immunology Practicum	1
MLSC 431	Clinical Bacteriology & Virology	4
MLSC 432	Clinical Mycology & Parasitology	2
MLSC 433	Clinical Microbiology Practicum	5
MLSC 441	Immunohematology	3
MLSC 442	Transfusion Medicine	1
MLSC 443	Clinical Immunohematology Practicum	4
MLSC 451	Clinical Chemistry I	4
MLSC 452	Clinical Chemistry II	2
MLSC 453	Clinical Chemistry Practicum	4
MLSC 461	Body Fluids	1
MLSC 463	Body Fluids Practicum	1
MLSC 470	Laboratory Information Systems	1
MLSC 475	Medical Laboratory Management Concepts	2
MLSC 493	Practicum Project	1

TOTAL **136 HOURS**

NOTE: Upper division courses must total at least 36 hours.