

# **DEPARTMENT OF MEDICAL & MOLECULAR SCIENCES**

## **MISSION STATEMENT**

In accordance with the goals set forth by the University of Delaware and the College of Health Sciences, it is the mission of the Department of Medical & Molecular Sciences to:

- The Department of Medical & Molecular Sciences is committed to providing skilled, critically-thinking practitioners equipped to be future leaders in health sciences. In this pursuit, the Department is committed to active engagement of undergraduate and graduate students in experiential learning, to forming collaborative partnerships with educational, clinical, industrial and research experts locally and globally, to discovering innovative breakthroughs in research that contribute to the health and basic sciences body of knowledge, and to functioning as an expert resource regarding all issues related to Medical & Molecular Science.

## **OUTCOME EXPECTATION FOR STUDENTS**

### **BASED ON UNIVERSITY, PROGRAM AND COURSE LEARNING GOALS**

The student learning goals and objectives, as stated for each medical laboratory science course, provide the foundation for student achievement of the Medical Laboratory Science Program's student learning goals and objectives. Achievement of the Program's combined goals and objectives is necessary for students to gain the knowledge needed to be successful entry-level medical laboratory scientists, as well as successful on passing the ASCP Board of Certification national examination. Additionally, the Medical Laboratory Science Program's student learning goals and objectives support student accomplishment of the University's general education goals for undergraduate students. The University's general education goals support a comprehensive understanding of the liberal arts and sciences. The synergy for this collaborative effort is expressed in the table entitled "**University and MLS Program Goals and Objectives**".

# UNIVERSITY AND MLS PROGRAM GOALS AND OBJECTIVES

MEDICAL LABORATORY SCIENCE PROGRAM EDUCATIONAL GOALS	MLS PROGRAM EDUCATIONAL OBJECTIVES SUPPORT MLS PROGRAM EDUCATIONAL GOALS	MEDICAL LABORATORY SCIENCE PROGRAM EDUCATION OBJECTIVES	MLS PROGRAM EDUCATIONAL OBJECTIVES SUPPORT UD GEN. ED. GOALS	UNIVERSITY GENERAL EDUCATION GOALS
1. To provide students with an excellent comprehensive education in medical laboratory science leading to a baccalaureate degree.	MLS PROGRAM EDUC. OBJ. # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16	1. Demonstrate proper procedures for the collection of safe handling & analysis of biological specimens.	UD GENERAL EDUCATION GOAL #5	1. Read critically, analyze arguments & information, & engage in constructive ideation.
2. To prepare students to function in career-entry, professional positions as medical laboratory science practitioners for the healthcare environment of the 21st century.	MLS PROGRAM EDUC. OBJ. # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16	2. Utilize scientific principles (e.g. physiology, immunology, biochemistry, molecular biology, genetics, microbiology, etc.), laboratory principles and methodologies for the clinical setting.	UD GENERAL EDUCATION GOAL #5	2. Communicate effectively in writing, orally, & through creative expression.
3. To prepare students to be life-long learners so as to remain current with advances in medical laboratory science	MLS PROGRAM EDUC. OBJ. # 12, 13, 14, 15, 16, 17	3. Perform laboratory testing with accuracy.	UD GENERAL EDUCATION GOAL #5	3. Work collaboratively & independently within & across a variety of cultural contexts and a spectrum of differences.
4. To prepare students to function in a culturally diverse, global society that demonstrates variations in intellectual expression and human creativity	MLS PROGRAM EDUC. OBJ. # 18, 19, 20	4. Evaluate problems that impact on laboratory services and take corrective action.	UD GENERAL EDUCATION GOALS #1, 3	4. Critically evaluate the ethical implications of what they say and do.
		5. Operate equipment properly, troubleshoot, and perform preventive and corrective maintenance.	UD GENERAL EDUCATION GOALS #1, 5	5. Reason quantitatively, computationally, and scientifically.
		6. Utilize proper technique in the performance of all laboratory testing.	UD GENERAL EDUCATION GOAL #5	
		7. Interpret clinical significance, clinical procedures, & laboratory test data accurately.	UD GENERAL EDUCATION GOALS #1, 5	
		8. Evaluate laboratory data using statistical analysis.	UD GENERAL EDUCATION GOAL #5	
		9. Apply principles of continuous assessment to all laboratory services.	UD GENERAL EDUCATION GOALS #1, 5	
		10. Utilize principles of quality assurance and quality improvement for all phase of laboratory services (i.e. pre-analytical, analytical, & post-analytical).	UD GENERAL EDUCATION GOALS #1, 2, 5	
		11. Comply with established laboratory safety regulations & regulations governing regulatory compliance related to laboratory practice.	UD GENERAL EDUCATION GOALS #2, 4	
		12. Communicate through oral and written skills effectively & professionally	UD GENERAL EDUCATION GOALS #2, 3	

		to enable consultative & educational interactions with healthcare personnel, the public, & patients in order to function successfully as a member of the healthcare team.		
		13. Demonstrate ethical behavior & professionalism, maintain confidentiality of patient information, & participate in continuing education for one's own professional career development.	UD GENERAL EDUCATION GOAL #4	
		14. Apply principles of educational methodology to educate providers & users of laboratory services.	UD GENERAL EDUCATION GOALS #2, 3	
		15. Evaluate published scientific studies utilizing knowledge of research design.	UD GENERAL EDUCATION GOALS #1, 5	
		16. Apply principles & concepts of laboratory operations to critical pathways and clinical decision making, performance improvement dynamics of healthcare delivery systems in relationship to laboratory services, human resource management & financial management.	UD GENERAL EDUCATION GOALS #1, 2, 3, 5	
		17. Demonstrate a commitment to the future of the medical laboratory profession through involvement in a national professional society.	UD GENERAL EDUCATION GOALS #1, 3	
		18. Demonstrate an understanding of human creativity & of various types of aesthetic & intellectual expression through study of the liberal arts.	UD GENERAL EDUCATION GOALS #1, 2, 3	
		19. Demonstrate an understanding of the significance of cultural diversity as exhibited within the United States through study of the liberal arts including completion of a multicultural course.	UD GENERAL EDUCATION GOALS #1, 3	
		20. Demonstrate an understanding of the impact of globalization on society through study of the liberal arts.	UD GENERAL EDUCATION GOALS #1, 3	