

# DIAGNOSTIC MOLECULAR SCIENCE

## Department of Clinical Laboratory Sciences University of Mississippi Medical Center

### DIAGNOSTIC MOLECULAR SCIENCES

The diagnostic molecular sciences program is a three semester, upper division curriculum that includes lecture and laboratory study followed by clinical rotations in selected research and clinical laboratories.



### ACCREDITATION STATUS

The diagnostic molecular sciences program is in the process of obtaining accreditation by the National Accrediting Agency for Clinical Laboratory Sciences, P.O. Box 75634 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60675-5634 60631-3415, Phone (773)-714-8880. The NAACLS web site is at <http://www.naacls.org>.

### ADMISSION REQUIREMENTS

To be eligible for admission, candidates must:

1. have a Baccalaureate degree in a biological, natural, or physical science from an accredited institution of higher learning;
2. have a minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale, and
3. complete the following minimum prerequisite requirements with a grade of "C" or better:

REQUIRED COURSES*	Number of Courses**
Biological Science with Laboratory	2
Anatomy and Physiology	2
Cell Biology	1
Microbiology with Laboratory	1
General Chemistry with Laboratory	2
Organic Chemistry with Laboratory	2
College Algebra	1
English Composition	2
Humanities	2
Fine Arts	1
Social/Behavioral Science	1

### ELECTIVES\*\*

Remaining credit hours should be selected from a broad range of academic courses which may include anatomy and physiology, cell biology, genetics, embryology, calculus, management, or computer applications

\* Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.

\*\* Students enrolled in a quarter academic calendar must complete the required sequence of courses which are equivalent to University of Mississippi courses.

### DEGREE AND CERTIFICATION

Students are awarded a post-baccalaureate Certificate in Molecular Diagnostics upon successful completion of the Diagnostic Molecular Science program. Upon completion of the certificate program, the student is qualified for the national certification examination as a Clinical Laboratory Specialist in Molecular Biology (CLSpMB) by the National Credentialing Agency for Laboratory Personnel (NCA) and as a Technologist in Molecular Pathology MP(ASCP) by the American Society for Clinical Pathology.

### EXPENSES

In addition to tuition, students should be prepared to spend approximately \$800 per year for textbooks, instrumentation, supplies, and uniforms. Students are responsible for living expenses.

### CURRICULUM

#### Summer

CLS 405 Introduction to Molecular Diagnostics	3
CLS 327 Laboratory Operations	<u>3</u>
	6

#### Fall

CT 323 Medical Genetics	2
CLS 417 Management and Education	2



CLS 312 Hematology I	3
CLS 418 Current Topics in Molecular Diagnostics	1
CLS 401 Basic Laboratory Techniques	1
CLS 431 Special Topics in CLS	<u>3</u>
	12
Spring	
CLS 416 Advanced Molecular Diagnostics	3
CLS 427 Clinical Molecular Laboratory I	7
CLS 428 Clinical Molecular Laboratory II	<u>5</u>
	15

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