

# College of Biomedical Sciences - Larkin University

## Program Description

The Master's in Biomedical Sciences Program has been designed to prepare students to advance as biomedical scientists or health care professionals. Specifically, the curriculum has been designed to educate students through rigorous, graduate level science courses to strengthen their application for graduate and professional school. The core basic science courses are like those found in the first year of health professions school or graduate school. The Master's Degree in Biomedical Sciences consists of a total of 33 credit hours taken over a one-year period. The curriculum is designed as 21 credit hours of core curriculum plus 12 credit hours specific to the field the student plans to pursue. This allows a more individualized and focused preparation program designed to meet specific needs of students. Electives are selected from the program concentrations. These include medicine, dentistry, pharmacy, physician assistant, anesthesiology assistant, cellular & molecular medicine, research, clinical medicine, addiction medicine, and clinical and translational research

Master's Degree in Biomedical Sciences: The program consists of 33 credit hours of didactic instruction plus, a comprehensive final exam.

- Health Professions Concentration (Medicine, Dentistry, Pharmacy, Naturopathic Medicine Physician Assistant, and Anesthesiologist Assistant)
- Cellular & Molecular Medicine Concentration
- Research Concentration ( Laboratory Research, Clinical & Translational Research)
- Cellular & Molecular Medicine Concentration
- Clinical Medicine Concentration
- Addiction Medicine Concentration

The total program consists of 33 credit hours of didactic, laboratory or clinical instruction (21 core credit hours plus 12 credit hours from the above list) as well as professional development and research to prepare for your future career.

## Course of Study

### Curriculum Outline

\*Core Curriculum (21 Credit Hours)

Course Number	Course Titles	Credit Hours
MSB 503	Biochemistry	4
MSB 591	Research 1	4

MSB 513	Immunology	3
MSB 514	Medical Microbiology	3
MSB 520	Molecular Genetics	3
MSB 525	Standardized Test Preparation	2
MSB 589	Professional Development Seminar	1
MSB 590	Clinical & Scientific Presentation	1
<b>Total</b>		<b>21</b>

*\*Required or Core Courses may be substituted for other courses offered within the program, only after review by the Academic Coordinator and approval by the Dean of competency and equivalency in the course content.*

In addition to the 21 core credit hours, the following electives are available to provide a focused concentration area of study (minimum of 12 credit hours) which align with the student career goal.

#### **Concentration Electives**

<b>Course Number</b>	<b>Course Titles</b>	<b>Credit Hours</b>
CMB 505	Laboratory Techniques & Equipment	3
CMB 520	DNA,RNA, Immunological Methods	3
CMB 530	Molecular Biology of Cancer	3
CMB 540	Hematology & Histology	3
MSB 505	Frontiers in Medicine	1
MSB 540	Pathophysiology	4
MSB 550	Human Anatomy	4
MSB 560	Human Physiology	4
MSB 530	Neuroscience and Neuroanatomy	4
MSB 592	Research 2	4
MSB 595	Biostatistics	4
MSBC 581	Applications of Medical Science in Diagnosis, Treatment & Documentation of Diseases	4

MSBC 582	Clinical Applications of Medical Science	4
MSBC 583	US Healthcare System	2
MSBC 584	Medical Spanish	2
MSBC 680	Fundamentals of Addiction	3
MSBC 681	Neurobiology of Addiction	3
MSBC 682	Clinical Aspects of Addiction	3
MSBC 683	Addiction Treatment & Clinical Management	3
<b>Total</b>		<b>61</b>

**Program Total Hours 33**

