

# Microbial and Molecular Pathogenesis Track

## **FALL YEAR 1 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 601*	5	Principles of Basic Medical Sciences I
BICH 603*	3	General Biochemistry I
SGSI 601	1	Responsible Conduct of Research Lab Rotation I & II

## **SPRING YEAR 1 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MMPA 601	3	Microbial Pathogenesis of Human Disease
MSCI 610*	3	Pathogenesis of Human Disease
MSCI 691	3	Research Lab Rotation III & IV

## **SUMMER YEAR 1 (6 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
STAT 651	3	Statistics in Research
MSCI 691	3	Research

## **FALL YEAR 2 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MMPA 602	3	Immunoregulation
MPHY 624	2	Computational Systems Biology: Biostatistics
MPHY 625	2	Computational Systems Biology: Bioinformatics and Imaging
	3	Elective
MSCI 691	3	Research

## **SPRING YEAR 2 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
	6	Elective
MSCI 691	3	Research

## **SUMMER YEAR 2 (6 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	6	Research

## **FALL YEAR 3 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	9	Research

\* Courses that MD/PhD students place out of either by exam or by petitioning to have the requirement waived based on medical school coursework

**SPRING YEAR 3 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	9	Research

**SUMMER YEAR 3 (6 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	6	Research

**FALL YEAR 4 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	9	Research

**SPRING YEAR 4 (9 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	9	Research

**SUMMER YEAR 4 (6 Credit Hours)**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
MSCI 691	6	Research

**ELECTIVES**

<u>Course #</u>	<u>Hrs</u>	<u>Course Name</u>
BIOL 606	3	Microbial Genetics
BIOL 438	4	Bacterial Physiology
BIOL 454	3	Immunology
BIOL 650	3	Genomics
BIOL 651	3	Bioinformatics
VTMI 647	3	Virology
VTMI 649	3	Immunology
BICH 672	1	Biological Membranes
BICH 624	3	Enzymes, Proteins, and Nucleic Acids
BICH 625	1	Nucleic Acid-Protein Interactions
BICH 628	3	Computational Biology
BICH 631	3	Biochemical Genetics
BICH/BIOL650	3	Genomics
BIOL 601	3	Biological Clocks
BIOL 611	3	Molecular Biology of Differentiation/Development
BIOL 651	3	Bioinformatics
BIOL 670	3	The Cell Cycle
MCMD 625	1	Nucleic Acid / Protein Interactions

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MCMD 671	1	Macromolecular Folding / Design
MSCI 612	3	Current Topics in Cell Signaling
GENE 613	3	Quantitative Genetics I
GENE 614	3	Maximum Likelihood Estimation of Genetic Parameters
MMPA 663	3	Molecular Biology of Viruses
VTPP 638	3	Analysis of Genomic Signals
MMPA 665	3	Viral Vectors and Gene Therapy

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