CMB-Approved Core and Elective Courses
Current as of November 16, 2017

*=core requirement for all CMB students
#=must take one of these courses (Ethics)
%=must take one of these courses (Genetics)

BIOC 301 General Biochemistry I  *
BIOC 302 General Biochemistry II  *
BIOC 351 Proteins I: Structure and Function
BIOC 353 Enzymology
BIOC 370 Physical Biochemistry
BIOC 372 Cancer Biology
BIOC/MMG 352 Nucleic Acids I; Protein-Nucleic Acid Interactions
BIOL 204/205 Advanced Genetics Laboratory
BIOL 263 Genetics of Cell Cycle Regulation
BIOL 265 Developmental Molecular Genetics
BIOL 371 Cell Signaling
BIOL 372 Proteomics
BSAD 395 Technology Entrepreneurship & Commercialization
CLBI 295 Principles of Lung Biology
CLBI 301 Cell Biology  *
CLBI 394 Science Communication  *
CLBI 395 Academic Career Skills: Success in Science
CLBI 395 Introduction to Flow Cytometry
CLBI 395 Viral Immunology
CLBI 395 Independent Study
CLBI 396 Short Course in Molecular Biology
CLBI 401 Critical Reading & Analysis  *
CLBI 402 Practical Statistics & Data Presentation in CMB  *
MLRS 242 Principles of Immunology
MMG 211 Prokaryotic Molecular Genetics  
MMG 223 Immunology
MMG 232 Methods in Bioinformatics
MMG 233 Genetics and Genomics  
MMG 310 The Surprisingly Complex Inner Life of Microbial Cells
MMG 312 Eukaryotic Genetics & Epigenetics  
MMG 320 Cellular Microbiology
MMG/PBIO 295 Scientific Ethics in Graduate Research  
MPBP 301 Human Physiology & Pharmacology I
MPBP 302 Human Physiology & Pharmacology II
MPBP 303 Critical Reading of Topics in Molecular Physiology & Biophysics
MPBP 310 Molecular Control of the Cell
MPBP 323 Biophysical Techniques
MPBP 395 Grant Writing Course *
NSCI 327 Responsible Conduct in Biomedical Research #
NSCI 328 Techniques in Microscopy
PATH 303 Translational Pathology
PHRM 201 Pharmacology OR PHRM 301 Summer Medical Pharmacology (not both)
PHRM 240 Molecules & Medicine
PHRM 272 Toxicology
PHRM 290 Topics in Molecular and Cellular Pharmacology
PHRM 305 Milestones in Medical Pharmacology

The following are the required courses for all CMB students:
BIOC 301 General Biochemistry I (3 credits)
BIOC 302 General Biochemistry II (3 credits)
CLBI 301 Cell Biology (3 credits)
CLBI 394 Science Communication (3 credits)
CLBI 401 Critical Reading & Analysis (2 credits)
CLBI 402 Practical Statistics & Data Presentation in CMB (2 credits)
MPBP 395 Grant Writing (2 credits)
Genetics (3 credits)
Ethics (1 credit)

The following are the required courses for each of the Advanced Training Areas:

**Biochemistry, Structural Biology & Biophysics**
BIOC 370 (Physical Biochemistry) OR MPMB 323 (Biophysical Techniques)
BIOC 351 (Proteins I: Structure & Function) OR BIOC/MMG 352 (Protein/Nucleic Acid Interactions) OR BIOC 353 (Proteins II: Enzymology)

**Genetics, Cell & Molecular Biology (students must take two of the following courses)**
MMG 312 (Eukaryotic Genetics)
MMG 232 (Bioinformatics)
MPBP 310 (Molecular Basis of Biological Motility)

**Microbiology & Immunology**
MMG 320 (Cellular Microbiology)
MLRS 242/MMG 223 (Immunology)

**Physiology & Pharmacology**
MPBP 301 (Human Physiology & Pharmacology I)
MPBP 302 (Human Physiology & Pharmacology II)