**MICROBIOLOGY AND MOLECULAR BIOLOGY MINORS Map Sheet**

Department of Microbiology and Molecular Biology

For students entering the minor programs during the 2012–2013 curricular year.

<table>
<thead>
<tr>
<th>MICROBIOLOGY MINOR (285102)</th>
<th>MOLECULAR BIOLOGY MINOR (285103)</th>
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<tr>
<td>(14-16 hours, plus prerequisites in coupled major)</td>
<td>(14 hours, plus prerequisites in coupled major)</td>
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**Complete the following:**

- MMBio 151 Introduction to Microbiology 4.0
- MMBio 261 Infection and Immunity 3.0

**Complete two courses from the following (at least one must have a lab component):**

- MMBio 360 Microbial Genetics 4.0
- MMBio 363 Microbial Ecology 3.0
- MMBio 364 Bacterial Pathogenesis 4.0
- MMBio 461 Advanced Bacterial Physiology 3.0
- MMBio 463 Immunology 3.0
- MMBio 465 Virology 3.0

**Complete the following:**

- MMBio 441 Advanced Molecular Biology 3.0
- MMBio 442 Advanced Molecular Biology Laboratory 2.0
- MMBio 468 Genomics 3.0

**Complete at least 6 hours from the following:**

- Bio 463 Genetics of Human Disease 3.0
- Bio 465 Bioinformatics 3.0
- Chem 463 Physical Chemistry 3.0
- Chem 468 Biophysical Chemistry 3.0
- Chem 481 Biochemistry 1 3.0
- Chem 482 Biochemistry 2. 3.0
- Chem 581 Advanced Biochemical Methodology 1 3.0
- Chem 584 Biochemistry Laboratory/Proteins 3.0
- Chem 586 Biochemistry Laboratory/Nucleic Acids 3.0
- MMBio 151 Introduction to Microbiology 4.0
- MMBio 261 Infection and Immunity 3.0
- MMBio 360 Microbial Genetics 4.0
- MMBio 364 Bacterial Pathogenesis 4.0
- MMBio 430 Advanced Cell Biology 3.0
- MMBio 463 Immunology 3.0
- MMBio 465 Virology 3.0
- MMBio 466 Virology Laboratory 1.0
- MMBio 467 Immunology Lab 1.0
- MMBio 494R Mentored Research (strongly recommended) 3.0
- MMBio 510 History of Microbiology and Molecular Biology 2.0
- MMBio 513 Philosophy of Biology 2.0
- MMBio 515 RNA-Mediated Gene Regulation 2.0
- MMBio 518 Select Pathogens 2.0
- PDBio 482 Developmental Biology 3.0
- PDBio 582 Developmental Genetics 3.0

**Note:** Be aware of prerequisites for the above courses (usually filled in a coupled major).