

# B.S. IN MICROBIOLOGY - STUDENT/ADVISOR WORKSHEET

## Core Courses (23 hours):

- \_\_\_\_\_ BIO/MBI 115 Biological Concepts I (4) **-or-** MBI 121 Microbial World (3) and MBI 123 (1) **-or-**  
 \_\_\_\_\_ MBI 161 Elementary Medical Microbiology (4)  
 \_\_\_\_\_ BIO/MBI 116 Biological Concepts II (4)  
 \_\_\_\_\_ MBI 201 General Microbiology (4)  
 \_\_\_\_\_ MBI 365 Molecular and Cell Biology (3)  
 \_\_\_\_\_ MBI 425 Microbial Physiology (4)  
 \_\_\_\_\_ MBI 445 Microbial Genetics (3)  
 \_\_\_\_\_ MBI 490 Undergraduate Seminar (1)

## Focus Courses (14 hours minimum):

*Lab requirement:*

*Select at least 2 of these courses:*

- \_\_\_\_\_ MBI 405 Medical Bacteriology (4)  
 \_\_\_\_\_ MBI 415 Immunology Principles and Practice (4)  
 \_\_\_\_\_ MBI 435 Medical Mycology (3)  
 \_\_\_\_\_ MBI 475 Microbial Ecology (4)  
 \_\_\_\_\_ MBI 485 Principles of Bioinformatics (3)

*Research requirement:*

*Select at least one of these courses:*

- \_\_\_\_\_ MBI 424 Structural Genomics (4)  
 \_\_\_\_\_ MBI 465 Microbial and Molecular Genetics Laboratory (2)  
 \_\_\_\_\_ MBI 477R Independent Study (2)

*Select additional Focus Courses, including:*

- \_\_\_\_\_ MBI 361 Epidemiology (3)  
 \_\_\_\_\_ MBI 414 Immunology Principles (3)  
 \_\_\_\_\_ MBI 464 Human Viruses (3)  
 \_\_\_\_\_ MBI 495 Bacterial Cell Biology (3)

*Total credits in all Focus Courses (14 hour minimum):*

*(Note: Credit not given for both MBI 414 and MBI 415)*

## Elective Courses:

*Select from additional Focus Courses or from the following (MBI 200-level and higher) to complete the 40 required hours:*

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| _____ MBI 223 Bacteriophage Biology (1)<br>_____ MBI 224 Bacteriophage Genomics (1)<br>_____ MBI 250/350/450 Topics in Microbiology (1-4)<br>_____ MBI 256 Programming in Life Sciences (3)<br>_____ MBI 333 Field Ecology (3)<br>_____ GLG 402 Geomicrobiology (3) | _____ MBI 410 Senior Internship (2-4)<br>_____ MBI 440 Research Problems (1-4)<br>_____ MBI 466 Bioinformatics Computing Skills (3)<br>_____ MBI 477 Independent Study (1-4)<br>_____ MBI 480 Departmental Honors (1-3) |
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*Total credits in all Elective Courses:*

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## Total Credit Hours in Core, Focus and Elective Courses:

*Must total at least 40 hours (related hours do not count towards the total)*

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## Related Hours (24-29 hours):

*Chemistry:*

- \_\_\_\_\_ CHM 231 Fundamentals of Organic Chemistry (4) **and** CHM 332 Outlines of Biochemistry (3)  
**-or-** CHM 241, 242 Organic Chemistry (3, 3) **and** CHM 244, 245 Organic Chemistry Laboratory (2, 2)

*Math:*

*Both of these:*

- \_\_\_\_\_ MTH 151 Calculus (5)  
 \_\_\_\_\_ STA 261 Statistics (4)

*Physics:*

- \_\_\_\_\_ PHY 161, 162 Physics for Life Sciences (4, 4) [formerly PHY 171/173 and PHY 172/174]  
**-or-** PHY 191, 192 General Physics (5,5) [formerly PHY 181/183 and PHY 182/184]

total