# B.S. in Microbiology Graduation Checklist
## Effective Summer 2019

### Microbiology Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMB 3100</td>
<td>Intro Biochemistry and Molecular Biology</td>
</tr>
<tr>
<td>or BCMB 4020</td>
<td>Biochemistry and Molecular Biology II</td>
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<tr>
<td>MIBO 3500</td>
<td>Introductory Microbiology</td>
</tr>
<tr>
<td>MIBO 3510L</td>
<td>Introductory Microbiology Laboratory</td>
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<tr>
<td>MIBO 4090</td>
<td>Prokaryotic Biology</td>
</tr>
<tr>
<td>(POPH)(MIBO)(IDIS) 4450-4450L</td>
<td>Microbial Genetics and Genomics or GENE 3200 (4 hrs) Genetics</td>
</tr>
</tbody>
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### MAJOR REQUIRED I (Intensive MIBO Lab) – Choose one

- MIBO 4600L (4 hr) – Experimental Microbiology Lab
- MIBO 4970R (4 hr) – Honors Research
- MIBO 4970L (4 hr) – Directed Research

### MAJOR REQUIRED II - Choose three

- CBIO(MIBO)(IDIS) 4100 (3 hr) – Immunology
- EHSC(FDST)(MIBO) 4310-4310L (4 hr) – Environmental Microbiology
- FDST(MIBO) 4120-4120L (3 hr) – Food Fermentations
- MARS(MIBO) 4620 (3 hr) – Microbial Ecology
- MIBO(POPH) 4220 or 4220S (3 hr) – Pathogenic Bacteriology
- MIBO 4500 (3 hr) – Bacterial Symbioses
- MIBO 4600L (4 hr) – Experimental Microbiology Lab*
- MIBO 4680 (4 hr) – Industrial Microbiology and Biotechnology
- MIBO 4700 (3 hr) – Medical Mycology
- POPH(MIBO)(IDIS) 4650 (3 hr) – Introduction to Virology

* Only if not used for Major Required I or III
** Only if not used for Major Requirements

### MAJOR REQUIRED III (Upper level science elective) – Choose one

- CRSS(MIBO) 4610-4610L (3 hr) – Soil Microbiology
- MIBO 4500 (3 hr) – Bacterial Symbioses***
- EHSC(FDST)(MIBO) 4310-4310L (4 hr) – Environmental Microbiology
- MARS(MIBO) 4620 (3 hr) – Microbial Ecology

*** Only if not used for Major Requirement II
**** Only if not used for Major Required I or II
***** Only if not used for Major Requirements or Major Required II

### Computer Science • Math • Statistics – Choose one

- BINF(BCMB) 4005 (2 hr) – Essential Computing Skills for Biologists
- BIOS 2010-2010L (4 hr) – Elementary Biostatistics
- CSCI 1210 (3 hr) – Computer Modeling and Science
- CSCI 1301/1301L (4 hr) – Introduction to Computing and Programming
- BIOE 8110 (3 hr) – Biological Engineering
- GENE 4220L (3 hr) – Bioinformatics Laboratory
- BINF(PBIO) 4550 (3 hr) – Concepts in Bioinformatics and Omics
- MATH 2260 (4 hr) – Calculus II for Science and Engineering
- MATH(BINF) 4780 (3 hr) – Mathematical Biology
- STAT 2000 or 2100H (4 hr) – Introductory Statistics
- STAT 3110 (3 hr) – Intro to Statistics for Life Sciences
- STAT 3120 (3 hr) – Intro to Probability for Life Sciences

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