

Minor in Microbiology (285102) MAP Sheet

Life Sciences, Microbiology and Molecular Biology

For students entering the degree program during the 2017-2018 curricular year.



| University Core and Graduation Requirements | Suggested Sequence of Courses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------------------------|----------|--------------------|---------|------------------------------|--|--|--|--|---|-----|-----------|---|---|-----|-----------|--------------------------------|---|-----|-----------|--------------------|---|-----|-----------|-----------------------------------|--|--|--|-------------------|-----|-------|--------------------|-------------------------------|---|-----|--------------------|---------------|--|--|--|--------------------|---|-----|--------------------|--|---|-----|--------------------|------------------------|---|---------|--------------------|--|----------|----------|--------------------|------------------------------------|--|--|--|----------------|---|-----|--------------------|----------------|---|-----|--------------------|------|---|-----|--------------------|---------|---|-----|--------------------|--------------------|---|-------|--------------------|------------------|---|-----|--------------------|----------------|---|-----|--------------------|-----------------------------------|--|--|--|--------------------|-----|-----|--------------------|----------------|----------|----------|-----------------|---------------------------------|--|--|--|----------------------------------|--|------|--|----------------------------------|--|-------|--|---|
| <p>University Core Requirements:</p> <table border="0"> <thead> <tr> <th>Requirements</th> <th>#Classes</th> <th>Hours</th> <th>Classes</th> </tr> </thead> <tbody> <tr> <td colspan="4">Religion Cornerstones</td> </tr> <tr> <td>Teachings and Doctrine of The Book of Mormon</td> <td>1</td> <td>2.0</td> <td>REL A 275</td> </tr> <tr> <td>Jesus Christ and the Everlasting Gospel</td> <td>1</td> <td>2.0</td> <td>REL A 250</td> </tr> <tr> <td>Foundations of the Restoration</td> <td>1</td> <td>2.0</td> <td>REL C 225</td> </tr> <tr> <td>The Eternal Family</td> <td>1</td> <td>2.0</td> <td>REL C 200</td> </tr> <tr> <td colspan="4">The Individual and Society</td> </tr> <tr> <td>American Heritage</td> <td>1-2</td> <td>3-6.0</td> <td>from approved list</td> </tr> <tr> <td>Global and Cultural Awareness</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td colspan="4">Skills</td> </tr> <tr> <td>First Year Writing</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Advanced Written and Oral Communications</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Quantitative Reasoning</td> <td>1</td> <td>3.0-4.0</td> <td>from approved list</td> </tr> <tr> <td>Languages of Learning (Math or Language)</td> <td>Variable</td> <td>3.0-20.0</td> <td>from approved list</td> </tr> <tr> <td colspan="4">Arts, Letters, and Sciences</td> </tr> <tr> <td>Civilization 1</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Civilization 2</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Arts</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Letters</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Biological Science</td> <td>1</td> <td>3-4.0</td> <td>from approved list</td> </tr> <tr> <td>Physical Science</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td>Social Science</td> <td>1</td> <td>3.0</td> <td>from approved list</td> </tr> <tr> <td colspan="4">Core Enrichment: Electives</td> </tr> <tr> <td>Religion Electives</td> <td>3-4</td> <td>6.0</td> <td>from approved list</td> </tr> <tr> <td>Open Electives</td> <td>Variable</td> <td>Variable</td> <td>personal choice</td> </tr> <tr> <td colspan="4">Graduation Requirements:</td> </tr> <tr> <td>Minimum residence hours required</td> <td></td> <td>30.0</td> <td></td> </tr> <tr> <td>Minimum hours needed to graduate</td> <td></td> <td>120.0</td> <td></td> </tr> </tbody> </table> | Requirements | #Classes | Hours | Classes | Religion Cornerstones | | | | Teachings and Doctrine of The Book of Mormon | 1 | 2.0 | REL A 275 | Jesus Christ and the Everlasting Gospel | 1 | 2.0 | REL A 250 | Foundations of the Restoration | 1 | 2.0 | REL C 225 | The Eternal Family | 1 | 2.0 | REL C 200 | The Individual and Society | | | | American Heritage | 1-2 | 3-6.0 | from approved list | Global and Cultural Awareness | 1 | 3.0 | from approved list | Skills | | | | First Year Writing | 1 | 3.0 | from approved list | Advanced Written and Oral Communications | 1 | 3.0 | from approved list | Quantitative Reasoning | 1 | 3.0-4.0 | from approved list | Languages of Learning (Math or Language) | Variable | 3.0-20.0 | from approved list | Arts, Letters, and Sciences | | | | Civilization 1 | 1 | 3.0 | from approved list | Civilization 2 | 1 | 3.0 | from approved list | Arts | 1 | 3.0 | from approved list | Letters | 1 | 3.0 | from approved list | Biological Science | 1 | 3-4.0 | from approved list | Physical Science | 1 | 3.0 | from approved list | Social Science | 1 | 3.0 | from approved list | Core Enrichment: Electives | | | | Religion Electives | 3-4 | 6.0 | from approved list | Open Electives | Variable | Variable | personal choice | Graduation Requirements: | | | | Minimum residence hours required | | 30.0 | | Minimum hours needed to graduate | | 120.0 | | <p>+Note: For MMBio 360, 363, and 364, lab registration is automatic and included in the course with the lecture.</p> |
| Requirements | #Classes | Hours | Classes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Religion Cornerstones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Teachings and Doctrine of The Book of Mormon | 1 | 2.0 | REL A 275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jesus Christ and the Everlasting Gospel | 1 | 2.0 | REL A 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Foundations of the Restoration | 1 | 2.0 | REL C 225 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| The Eternal Family | 1 | 2.0 | REL C 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| The Individual and Society | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| American Heritage | 1-2 | 3-6.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Global and Cultural Awareness | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Skills | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Year Writing | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Written and Oral Communications | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Quantitative Reasoning | 1 | 3.0-4.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Languages of Learning (Math or Language) | Variable | 3.0-20.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arts, Letters, and Sciences | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civilization 1 | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Civilization 2 | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arts | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Letters | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Biological Science | 1 | 3-4.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Physical Science | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Social Science | 1 | 3.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core Enrichment: Electives | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Religion Electives | 3-4 | 6.0 | from approved list | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Open Electives | Variable | Variable | personal choice | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Graduation Requirements: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum residence hours required | | 30.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum hours needed to graduate | | 120.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Minor in Microbiology (285102)
2017-2018 Program Requirements (15 - 17 Credit Hours)

Note: Prerequisites for the following courses are required. They should be filled for students in a coupled major.

REQUIREMENT 1 Complete 3 courses

| | |
|--|-----|
| MMBIO 151 - Introduction to Microbiology | 4.0 |
| MMBIO 240 - Molecular Biology | 3.0 |
| MMBIO 261 - Infection and Immunity | 3.0 |

REQUIREMENT 2 Complete 2 courses

NOTE: AT LEAST ONE COURSE MUST HAVE A LAB COMPONENT.

| | |
|---|-----|
| MMBIO 360 - Microbial Genetics | 4.0 |
| MMBIO 363 - Microbial Ecology | 3.0 |
| MMBIO 364 - Bacterial Pathogenesis | 3.0 |
| MMBIO 418 - Medical Parasitology | 2.0 |
| MMBIO 461 - Advanced Bacterial Physiology | 3.0 |
| MMBIO 463 - Immunology | 3.0 |
| MMBIO 465 - Virology | 3.0 |

MAP DISCLAIMER

While every reasonable effort is made to ensure accuracy, there are some student populations that could have exceptions to listed requirements. Please refer to the university catalog and your college advisement center/department for complete guidelines.

DEPARTMENT INFORMATION

Department of Microbiology and Molecular Biology

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4007 Life Sciences Building
Provo, UT 84602
Telephone: (801) 422-1102

ADVISEMENT CENTER INFORMATION

Life Science Student Services

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